Guide to the Martin Gardner Papers SC0647

Daniel Hartwig & Jenny Johnson
Department of Special Collections and University Archives
October 2008
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Language of Material: English
Contributing Institution: Department of Special Collections and University Archives
Title: Martin Gardner papers
creator: Gardner, Martin
Identifier/Call Number: SC0647
Physical Description: 61.5 Linear Feet
Date (inclusive): 1957-1997
Immediate Source of Acquisition note
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Cite As
Martin Gardner Papers (SC0647). Dept. of Special Collections and University Archives, Stanford University Libraries, Stanford, Calif.
Biographical/Historical Sketch
Martin Gardner was the Mathematical Games columnist for SCIENTIFIC AMERICAN from its inception in 1956 until 1986. He earned his B.A. in philosophy at the University of Chicago in 1936; after his service in the Navy during World War II, he became a writer. He is the author of more than 65 books in the fields of science, mathematics, philosophy, literature, and conjuring.
Description of the Collection
These papers pertain to his interest in mathematics and consist of files relating to his SCIENTIFIC AMERICAN mathematical games column (1957-1986) and subject files on recreational mathematics. Papers include correspondence, notes, clippings, and articles, with some examples of puzzle toys. Correspondents include Dmitri A. Borgmann, John H. Conway, H. S. M Coxeter, Persi Diaconis, Solomon W Golomb, Richard K.Guy, David A. Klarner, Donald Ervin Knuth, Harry Lindgren, Doris Schattschneider, Jerry Slocum, Charles W.Trigg, Stanislaw M. Ulam, and Samuel Yates.
Subjects and Indexing Terms
Mathematical recreations.
Guy, Richard K.
Diaconis, Persi
Gardner, Martin
Knuth, Donald Ervin, 1938-
Gardner, Martin
Golomb, Solomon W. (Solomon Wo
Coxeter, H. S. M. (Harold Scott Macdonald)
Conway, John Horton.
Borgmann, Dmitri A.
Ulam, Stanislaw M.
Yates, Samuel.
Slocum, Jerry.
Trigg, Charles W.
Lindgren, Harry.
Schattschneider, Doris.
Klarner, David A.

**Game files** Series 1

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**1/F Music**  
Physical Description: 3 folder(s)

* box 44, folder 2  
Scope and Contents note  
MG notes.  
"Two Styles in Visual Arts: The Finitely Scaled and the Self Similar", by Benoit Mandelbrot (typescript)  
"Physical Systems with Variability on all Time Scales: Flicker Noises", by William Press (typescript)  
Correspondents:  
Sanders, David

* box 44, folder 3  
Scope and Contents note  
Correspondents:  
Smith, Cyril  
Mandelbrot, Benoit

* box 44, folder 4  
**Papers by Voss 1984**  
Scope and Contents note  
MG notes.  
Voss articles and some others

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**24 Cubes & Austin’s Dog**

* box 24, folder 18  
**1971, December 1971-1998**  
Scope and Contents note  
Incomplete article  
Correspondents:  
Salmon, Wesley  
Klamkin, Murray  
Golomb, Solomon  
Bankoff, Leon  
Naranan, S.
3-D Objects

Physical Description: 20 folder(s)

3-D Objects: From Box 1 Folder 3: Flexigons undated
Scope and Contents note
6 hexaflexigon models (one with intertwined tie.)
1 plastic bag with instructions to "Fortune Teller"
1 "Meeba Teaser" (folding puzzle)

3-D Objects: From Box 2 Folder 2: Tower of Hanoi undated
Scope and Contents note
Model "The Great pyramid", 9 nesting colorful pyramids.

3-D Objects: From Box 7 Folder 10: Bridg-it & Twist undated
Scope and Contents note
Playing layouts and instructions for The Game of Gale (as season’s greetings from the Hatchers.)

3-D Objects: From Box 8 Folder 14: Spirals undated
Scope and Contents note
Models of spirals

3-D Objects: From Box 8 Folder 14: Spirals undated
Scope and Contents note
Spiral drawing device - cardboard (goes with letter from Roger Hayward.)

3-D Objects: From Box 10 Folder 10: Topology undated
Scope and Contents note
Two triangular handkerchiefs, from letter of Michael A. Pitzel. Tri-Mobius Brand.

3-D Objects: From Box 11 Folder 6: Bouncing Ball in Tetrahedron undated
Scope and Contents note
Original of drawing by Roger Heyword of Stereo pair of helical chain of tetrahedra.

3-D Objects: From Box 12 Folder 2: Sliding Blocks undated
Scope and Contents note
"Twice" Sliding Block Puzzle. Description: Square, 3x3, numbered sliding sub-squares: 1, 2a, 2b, 3-7, A.
Base has pegs sticking up in 4 corner squares;
pieces have grooves in back: 2a, 4: vertical; 2b, A,: horizontal; 1, 5: both (crossing); 3, 6: none
(The grooves in back restrict sliding over the corner squares.)

3-D Objects: From Box 12 Folder 10: Sliding Block Puzzles undated
Scope and Contents note
Nutzy Puzzle - plastic sliding block puzzle, 7 circle counters in figure-8 slides (slides are like a square with a horizontal line across the middle.)

3-D Objects: From Box 13 Folder 18: Hexiamonds undated
Scope and Contents note
1 set hixiamonds, cardboard, sealed, possibly from Niels Gottleb.
box 55, folder 11  
**3-D Objects: From Box 16 Folder 4: M. C. Escher undated**  
Scope and Contents note  
13 Escher bookmarks.

box 55, folder 12  
**3-D Objects: From Box 17 Folder 20: Pascal Triangle undated**  
Scope and Contents note  
Hexstat: small beads sliding in a triangular array of hexagons, to show various statistical and other relationships, from Science Materials Center. With teachers manual.

box 55, folder 13  
**3-D Objects: From Box 20 Folder 13: The 24 Color Triangles undated**  
Scope and Contents note  
Try-Angle Puzzle, by Ora & Theo Coster. Set of 16 edge-colored triangles, 5 colors. (Jewish New Years text in colors, for Tishri 5730/Sept. 1969), plus sheet of shapes to make.

box 56, folder 1  
**3-D Objects: From Box 20 Folder 20: Crossed Moebius Bands undated**  
Scope and Contents note  
4 velcro and zipper strips to experiment with crossed moebius band, from Jean Pedersen.

box 56, folder 2  
**3-D Objects: From Box 24 Folder 5: Pedersen's Strip Solids, Gurule's Work undated**  
Scope and Contents note  
GeoCube Tree Ornaments (6 fun-to-assemble ornaments), from "The Puzzle Works" (scored cardboard models.)

box 56, folder 3  
**3-D Objects: From Box 26 Folder 7: Napiers Bones undated**  
Scope and Contents note  
Paper set of "bones" - Abaco Neperiano Perfeccionada (see letter from Luis Benito Quintana.)

box 56, folder 4  
**3-D Objects: From Box 30 Folder 16: Non-Transitive Paradoxes undated**  
Scope and Contents note  
"Jen-Ken'Pon Chips", by Max Maven (a magic trick/game.)

box 56, folder 5  
**3-D Objects: From Box 39 Folder 4: Penrose Tiles undated**  
Scope and Contents note  
2 sets of non-periodic tiles (cardboard.)

box 56, folder 6  
**3-D Objects: From Box 46 Folder 7: Minimal Sculpture, Folded Card Paradox 1985**  
Scope and Contents note  
The Ultracard Puzzle - fancy hypercard, form Gordon Jeppesen, 1985 (puzzle and magic trick.)

box 56, folder 7  
**3-D Objects: From Box 52 Folder 3: Short Problems undated**  
Scope and Contents note  
15 1-yen coins (for measurement problem)

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**Abacus**

box 22, folder 10  
### Accidental Patterns in Pi (& Prose Verse)

**Physical Description:** 4 folder(s)

**box 49, folder 1**

**1979, September undated**

Scope and Contents note

Just article, plus 1 page notes on "e" curiosity.

**box 49, folder 2**

**Accidental Verse 1965-1979**

Scope and Contents note

Correspondents:

Starbuck, George

**box 49, folder 3**

**Intentionally Concealed Poetry in Prose undated**

Scope and Contents note

A few newspaper articles.

**box 49, folder 4**

**Accidental Meanings 1967-1994**

Scope and Contents note

Correspondents:

Lindgren, Harry

### Advertising Premiums

**Physical Description:** 3 folder(s)

**box 24, folder 15**

**1971, November undated**

Scope and Contents note

Article & Pony puzzle & Several copies of summation

**box 24, folder 16**

**The T-Puzzle 1971**

Scope and Contents note

Several advertising premiums (T, L, Square) - but some are missing.

**box 24, folder 17**

**The Square Puzzle undated**

### Alephs II & Supertasks

**box 23, folder 15**

**1971, March 1971-1987**

Scope and Contents note

No article.

Discussion of details of MG article by Gillman (1982)

Correspondents:

Gillman, Leonard

Golomb, Solomon

### Anamorphic Art

**Physical Description:** 7 folder(s)
1975, January 1974-1993
Scope and Contents note
"On conformal Transformation and it's use in Painting", by Enrique Castro-Cid (typescript)
Anamorphic pictures of M.G., by Antonio Peticov
Correspondents:
Castro-Cid, Enrique
Cerf, Genevieve

Slant Art 1975
Scope and Contents note
Various examples and reproductions

Amsterdam Exhibit 1975-1976
Scope and Contents note
Correspondents:
Elffers, Joost

Kelly Houle 1975-2000
Scope and Contents note
Article, by Houle, on Anamorphic Art
(Herman letters & photocopies look as if they are from another folder!)
Correspondents:
Houle, Kelly
Herman, Richard

Cylinders & Cones [1 of 2] 1972-1975
Scope and Contents note
Many (rather poor) photocopies of anamorphic art, and notes on phoning dealers & museums.

Scope and Contents note
More photocopies, etc, of anamorphic art.
Description of method for cylindrical anamorphic projection, by Charles Kluepfel
(Also some rep-tiles, from Jack Giles)
Slides: 6 anamorphic drawings, J. Leupold (1674-1727)
4 of fancy cylinders and cones.
Mention of Scott Kim in letter to Lillian Silver (1975)
Correspondents:
Kluepfel, Charles
Giles, Jack
Silver, Lillian
<table>
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<th>Folder</th>
<th>Title</th>
<th>Date</th>
<th>Description</th>
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| box 31, folder 19 | Bibliog, References 1976 | | Scope and Contents note
Also some articles
Amateur Scientist article, by Jearl Walker, SA, July, 1981 (cut-out pages)
"On Brunelleschi's Perspective "Experiments" or Demonstrations", by Nicholas Pastore (preprint), It. Journal of Psychology, 1975
"Adolf Liebig's Anamorphic Art" (news release)
"des rebus optiques Les Anamorphoses" (photocopy) L'Estampille, Apr. 1971
Anamorphosis: In Morphology and the Visual Arts", by Roy Behrens (photocopy) from Worm Runner's Digest, Dec. 1972
"Anamorphoscopes: a Visual Aid for Circle INversion", by Philip Kuchel (pages) - Mathematical Gazette

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<table>
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<th>Folder</th>
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| box 32, folder 11 | April Fool Column | | Physical Description: 7 folder(s)

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<th>Folder</th>
<th>Title</th>
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<th>Description</th>
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| box 32, folder 12 | Ripoff Rotor 1975-1976 | | Scope and Contents note
Lots of humorous & serious correspondance

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<th>Folder</th>
<th>Title</th>
<th>Date</th>
<th>Description</th>
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| box 32, folder 13 | Da Vinci & Crapper 1975-1978 | | Much correspondence on the existence of Thomas Crapper, newspaper articles, etc.
Correspondents:
Heath, Peter
Reng, Peter
Oliver, Barney
McCabe, Charles
Burnam, Tom

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| box 32, folder 15 | Lorentz-Contraction Paradox 1975 | | Articles explaining "paradox"
e to pi times square root of 163 power 1975-1991

Scope and Contents note
Some proofs it is transcendental, & other examples of near integers

Correspondents:
Devlin, Keith
Good, Jack
Shallit, Jeffrey
Golomb, Solomon
Wrench, John

The Map 1974-1977

Scope and Contents note
Original letter and map (William McGregor)
Suggestions on how to color maps (Bernhart)

Correspondents:
McGregor, William
Bernhart, Frank
Coxeter, H.S.M.

Bacon's Biliteral Cipher

1972, November 1972-1973

Scope and Contents note
MG notes.

Ball Bouncing Problems

Physical Description: 4 folder(s)

1963, September 1963

Scope and Contents note
Cube, Tetra, etc.
"Periodic Omnihedral Billiards in Regular Polyhedra and Polytopes", by Mathew Hudelson (typescript)

Correspondents:
Draper, Theodore
Knuth, Donald
Hudelson, Matthew

Bouncing Ball in Tetrahedron 1960-1963

Scope and Contents note
much Roger Hayward correspondance
Correspondents:
Conway, John
Hayward, Roger
box 11, folder 6  **Bouncing Ball in Cube and Hypercube 1960-1963**
Scope and Contents note
Correspondents:
Oliver, Barney
Hayward, Roger
Gordon, Jack
De Jong

box 11, folder 7  **Liquid Pouring (B. Ball as Computer) 1963-1964**
Scope and Contents note
Correspondents:
O’Beirne, Thomas
Mattson, H.F.

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**Bells**
Physical Description: 8 folder(s)

box 44, folder 5  **1978, May 1978-1999**
Scope and Contents note
MG notes.
Mathematica Monongaliae #12 (May, 1971), with bibliographies of Bell & Cataan numbers
Correspondents:
De Camp, L. Sprague

box 44, folder 6  **Murasaki Diagrams 1978**
Scope and Contents note
Correspondents:
Gould, Henry
Hitotumatu, Sin
Unger, J. Marshall

box 44, folder 7  **Bell Shuffles 1978-1982**
Scope and Contents note
Correspondents:
Bolker, Ethan

box 44, folder 8  **Readers on Bells 1978-1991**
Scope and Contents note
Correspondents:
Pratt, Vaughan
Shallit, Jeffrey
Good, I.J.
Sutcliffe, Alan
James, Leigh
Bethe, Henry
Lenard, Andrew
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<th>Box Number</th>
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<th>Title</th>
<th>Scope and Contents Notes</th>
<th>Correspondents</th>
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<tr>
<td>box 44, folder 12</td>
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<td>Grouney &amp; Rogers 1976-1977</td>
<td>Scope and Contents note</td>
<td>Singmaster, David, Growney, Jo Anne, Rogers, Douglass</td>
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<td>Bennett on Chaitin's Omega</td>
<td>Physical Description: 3 folder(s)</td>
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<td>box 49, folder 15</td>
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<td>1979, November 1979</td>
<td>Scope and Contents note</td>
<td>Knuth's Trivialization of Chaitin's Number as Problem Solver&quot; (typescript)</td>
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<td>Correspondents:</td>
<td>Bennett, Charles, Knuth, Donald, Asimov, Dan</td>
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<td>box 49, folder 16</td>
<td></td>
<td>Turing Machine Def. of &quot;Randomness&quot; (Chaitin) 1968-1977</td>
<td>Scope and Contents note</td>
<td>Several Chaitin articles.</td>
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<td>Correspondents:</td>
<td>Huber, Peter, Chaitin, Greg</td>
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<td>box 49, folder 17</td>
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<td>Chaitin's Ext. of Godel 1987</td>
<td>Scope and Contents note</td>
<td>Chaitin's articles, with reviews, commentary, &amp; editorials about them.</td>
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**Binary**

**Guide to the Martin Gardner Papers SC0647**

**SC0647**
box 6, folder 20  

1960, December 1959-1968
Scope and Contents note
Binary number system

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Block Packing
Physical Description: 4 folder(s)

box 35, folder 9  

Scope and Contents note
Quadron puzzle description, by J. Hanny
Correspondents:
Foregger, Thomas
Conway, John
O'Beirne, Thomas

box 35, folder 10  

Scope and Contents note
"Brick Tiling and Monotone Boolean Functions", by Jonathan King (typescript)
Correspondents:
Klarner, David
Brooke, Maxey
Barnes, Frank
Cutler, William
Beeler, Michael
Knuth, Donald

box 35, folder 11  

Ammann's and Barnes solution to all Odd Cubes 1976
Scope and Contents note
Correspondents:
Ammann, Robert
Lagarias, Jeff

box 35, folder 12  

Proofs of 7-cube Impossibility 1976
Scope and Contents note
Correspondents:
Lagarias, Jeff
Klarner, David
Patrice, Maupou
Barnes, Frank

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Board Games
Physical Description: 7 folder(s)

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Guide to the Martin Gardner  
Papers SC0647  

SC0647  

12
box 6, folder 2

1960, April 1960
Scope and Contents note
Shogi
Maharajah winning strategies
Chess variants, incl. Japan, China, Korea, Mars
Correspondents:
Rudge, William
Smith, Wallace
Blue, Richard
Kien, Dennis
Knight, William
Golomb, Solomon

box 6, folder 3

Reversi 1960-1994
Scope and Contents note
(Also called Othello)
Newspaper article in envelope
References, analyses, computer programs
Knuth letter to Woodger re Bell on Reversi
Michaelsen letter contains history
Correspondents:
Bell, Alex
Knuth, Donald
Michaelsen, Peter
Carlson, Robert
Morgan, Chris
Brodsky, Daniel
Peregrine, D.
Petersen, Jon
Ondrejka, Rudolf
Hewlett, Clarence

box 11, folder 8

1963, October 1963
Scope and Contents note
Correspondents:
Abbott, Robert

box 11, folder 9

Games of Black; Pathfinder 1957-1969
Scope and Contents note
Original game and solution in Berlekamp letter
Game of Black on a hexagonal board
Description of “Reversal” game
Correspondents:
Smith, Donovan
Berlekamp, Elwyn
Eisner, Milton
Hosken, Wesley
box 11, folder 10  **Tablut 1960, 1970**
Scope and Contents note
Correspondents:
Berthelsen, Ingmar
Abbott, Robert
Smith, Anthony

box 11, folder 11  **The Military Game 1960-1970**
Scope and Contents note
Richard Site's solution (via D. Knuth)
... and others
Correspondents:
Berlekamp, Elwyn
Van der Poel, Willem
Gosling, John
Simmons, Webb
Silver, Roland
Knuth, Donald

box 11, folder 12  **Focus 1963-1967**
Scope and Contents note
Booklet of Focus instructions, copyright Sid Sackson
Proof first player cannot win (Yearout)
Correspondents:
Yearout, Paul

---

**Boolean Algebra**
Physical Description: 4 folder(s)

box 21, folder 2  **1969, February 1971**
Scope and Contents note
several articles and errata

box 21, folder 3  **Boolean Algebra as a Lattice 1971**
box 21, folder 4  **Factors of 30, of 210, etc undated**
Scope and Contents note
MG notes

box 21, folder 5  **Circuits 1960-1970**
Scope and Contents note
Article on Telephone Switching, by Feder & Spencer
"Logical Loops", by Edward Horvath (Article) (note by Don Knuth)
Correspondents:
Givoli, Nachman

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**Braids**
1959, December 1959-1998
Scope and Contents note
Group Theory
Correspondents:
Fox, Ralph
Papazian, Haig
Turner, Roseline

Brain Teasers - 1
Physical Description: 4 folder(s)

1957, February 1957
Scope and Contents note
"An assortment of maddening puzzles. Warning: The solutions will not be given until March"

Logician and Forked Road 1957-1990
Scope and Contents note
Correspondents:
Singmaster, David
Stover, Mel
Conway, John
Gummere, John
Sciame, Dennis
Wade, Carleton
Janzen, H.
Laster, Clayton
Roubicek, Juan
Fischer, W.
Polakilwicz, A.
Konikow, Robert
Givson, Robert
Weigle, Oscar
Haggstrom, Warren
Burman, S.
Rector, Charles
Vandegrift, Neil
Henrickson, Patric
Kriegsman, Edwin
Domínguez, Loreto
Oxaal, Gunnar
Lewis, C.I.
Stiles, Sam
Morgan, John
Goldberg, Norton
Game files Series 1
Brain Teasers - 1

<table>
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<tr>
<th>Box Folder</th>
<th>Description</th>
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| box 1, folder 10 | **Cutting the Cube 1957-1958**  
Scope and Contents note  
"On the Optimum Method of Cutting a Rectangular Box into Unit Cubes", by Eugene J. Putzer and R.W. Lowen |
| box 1, folder 11 | **Commuter and Wife 1957-1960**  
Scope and Contents note  
Correspondents:  
many |

**Brain Teasers - 2**

Physical Description: 7 folder(s)

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<th>Box Folder</th>
<th>Description</th>
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| box 2, folder 10 | **1957, November 1957-1958**  
Scope and Contents note  
Nine titillating puzzles (November, 1957)  
Also: Matematycne lamiglowki, by Martin Gardner (in Polish) |
| box 2, folder 11 | **The 6 cigarettes 1957-1992**  
Scope and Contents note  
Correspondents:  
Shifman, Jerrald  
Rybicki, George & John Reynolds  
Shoemaker, David  
Burling, Robbins  
McCoy, Donald  
Gray, John  
Ceave, Hewitt  
Wierum, Carl  
Alt, Franz  
Nelson, Harry  
Klee, Victor  
... and many more |
| box 2, folder 12 | **Sam Loyd's Ferry Boats 1957**  
Scope and Contents note  
Correspondents:  
Kayser, R.  
Parkinson, Percy  
Stevenson, W.S. |
box 2, folder 13  **Electrician and Wire Puzzle 1957**
Scope and Contents note
Correspondents:
Gannett, Danforth
Fletcher, John
Hernandez, Rogelio
Burton, J.
Sammel, Goodwin
Katz, Louis
Stein, Phil
Deich, Herbert
Lebau, Louis
Williamson, Donald
Kassel, Louis
Brady, Bryce
Knowlton, Kenneth
... and many more

box 2, folder 14  **The 12 Matches 1957-1965**
Scope and Contents note
Correspondents:
Hejl, William
Stover, Mel
Putzer, Eugene
Metz, Hugh
Hoefer, H. Carl
Haynes, L.B.
... and many more

box 2, folder 15  **6 Inch Hole in Sphere 1957-1960**
Scope and Contents note
Correspondents:
Edwards, Bernard
Roubicek, Juan
Bethany, David
Job, G. Curtiss
Rappaport, Sigmund
Richards, Irving
Brooke, William
Pratt, John
John, Brother H.
Sholander, Marlow
Buchanan, James
Caffrey, John
box 2, folder 16  **Ford's Problem of the Children and House Number 1957**
Scope and Contents note
Correspondents:
Dubner, Harvey
Card, William
Hartwell, Robert

box 4, folder 2  **1958, August 1958-1973**
Scope and Contents note
Correspondents:
Carter, Geraldine
Card, L.E.

box 4, folder 3  **Cork Plug 1958-1966**
Scope and Contents note
alternate solutions and problems
Correspondents:
Cleveland, Forrest
Hoard, Charles
Klees, G.W.
Leary, James
Carey, Graham
Robertson, J.S.

box 4, folder 4  **The 3 planes 1958-1991**
Scope and Contents note
Correspondents:
Schlosser, Jon
Drews, P.
Phillips, J. and Kesterson, r.
Fineberg, Mark
Lerner, Lawrence
Corbato, F.
Moruzzi, Hugo

box 4, folder 5  **Triangle Duel (3-way duel) 1958-1997**
Scope and Contents note
also: Truel, Triel
Correspondents:
Schoenfeld, Gerald (also 3 planes)
Ford, John
Funkenbusch, W.
Kean, Lee
Schonblom, James
Kloper, Kenneth
Brain Teasers - 4

Physical Description: 2 folder(s)

box 4, folder 20

1959, May 1958-1959

Scope and Contents note
Absent Minded Teller
Long Division problem
Wine and water
Dividing cake
Correspondents:
Richards, Irving
Bronson, Nathaniel
Houde, John
Guskurst, Robin
Maas, Magela
Orr, Stanley
McFarland, David
Hayashi, Teru
Gray, Dwight
Brigham, Robert
Edgar, David
Argyle, P.
Noble, William
Fletcher, John
Kneser, H.
Galvin, Fred

box 4, folder 21

Desert and Truck 1957-1994

Scope and Contents note
much analysis
Correspondents:
Eisner, Elmer
Phipps, Cecil
Swanson, John
Burchel, Robert
Gale, David

Brain Teasers - 5

Physical Description: 5 folder(s)
1960, February 1960, 2000
Scope and Contents note
Barr’s Belt
Plane in wind
Hair color
(some German references)
Correspondents:
Macaluso, Pat
Killian
Gaus, Andrew
Upson, R.
Lubinski, Robert

Scope and Contents note
Numbers on slips of paper - choose highest
"Googol" game
various analyses (see correspondents)
Correspondents:
Ferguson
Flood
Robison
DeBolt
Von Nardroff
Jackson, Robert
Gaskell, R.
Adams, Edward N.
Fox
Moser, Leo
Stover, Mel

Scope and Contents note
"The Old Maid Problem or When to Accept an Offer", by Robert J. Heppe
Correspondents:
Pinkham, Roger
Heppe, Robert
Donaldson, Norman
box 5, folder 21

**Courier problem [1 of 2] 1960**

Scope and Contents note
Sam Loyd’s version of the Courier problem
Running Dog problem
Dog around Cadets problem
(MG notes)
Quartic solutions
Graphical solutions
Correspondents:
Jackson, Robert
Gibson
Edgeworth
Stout
Shepherd
Hinrichs, Ralph
Neare/Rowe
Raynor
Wilsey, Kenneth
Brown, D.
Perkins, E.

box 5, folder 22

**Courier problem [2 of 2] 1960-1963**

Scope and Contents note
more analysis, and variations
Correspondents:
Green, D.
Kress, Herbert
Meyer, Weston
Ehrrott, H.
Kerst, Edger
Richards, Irving
Hufstedler, Seth
Meehan, Thomas
Salsburg, David
Keranen, David
Brown, W. Byers
Plice, M.
Stoeckly, Robert
Herrington, A.
Younger, F.
Hamann, Jens & Patrick Weidhaas

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**Brain Teasers - 6**

Physical Description: 8 folder(s)

box 6, folder 10

**1960, October 1960**

Scope and Contents note
Just the article
box 6, folder 11  Blue Eyes 1960
Scope and Contents note
problem #6
Correspondents:
Hamilton, Laurens
Brown, Thomas
Kessler, Gilbert

box 6, folder 12  Game of Hip 1960, 1995
Scope and Contents note
Problem #1
Correspondents:
Merritt, Michael
Templeton, David
Dickensen, Allan
Blechner, Michael & Douglas Garcia
Andree, Richard
Golomb, Solomon
Jordan, William
Vanderpool, Donald
Silverman, David

box 6, folder 13  Sliced Cube and Torus 1959-1960
Scope and Contents note
Problem #4
Correspondents:
Emerson, E.
Winker, Jean
Bordelon, Derrill

box 6, folder 14  Switching Puzzle 1960, 1971
Scope and Contents note
Problem #2
Solution in 18 with bottom sliding missing
Flying switch solution

box 6, folder 15  Track Meet 1960
Scope and Contents note
Short cut solution

box 6, folder 16  Monad 1960-1961
Scope and Contents note
Problem #5
Other ways to bisect

box 6, folder 17  Termite 1960
Scope and Contents note
Problem #9
Brain Teasers - 7

Physical Description: 4 folder(s)

box 7, folder 5

1961, June 1961-1962
Scope and Contents note
Letters on Kant's clock problem
Hexahedron problem
Rook problem
Square root problem
Mountain problem
Correspondents:
Hyman, Ray

box 7, folder 6

Arithmagic Square 1963
Scope and Contents note
Some analysis, and references.

box 7, folder 7

Toaster Problem 1961-1962
Scope and Contents note
Correspondents:
Davis, R.J.
Marcus, Mitchell
Dowd, John
Brouse, Richard
Johnson, Clark
Roazen, Harvey
Schnura, Ronald

box 7, folder 8

20 Question Problem 1961
Scope and Contents note
"Coding for the Discrete Noiseless Channel", by Solomon Golumb, 1961 (mimegraph)
Correspondents:
Golomb, Solomon
Youngblood, W.
Zimmerman, Seth
Johansen, Donald
Price, Gary

Brain Teasers - 8

Physical Description: 5 folder(s)

box 8, folder 3

1962, February 1962
Scope and Contents note
Article and answers
**Placing 8 Digits 1962-1973**

Scope and Contents note
"The No Touch Puzzle and Graphical Complementation", by Grank Harary & Allen J. Schwenk
Correspondents:
Harary, Frank
Gruenberger, Fred
Koplowitz, Herp
Danzer, John

**Lady or Tiger 1961-1962**

Scope and Contents note
Correspondents:
Winning, W.C.
Binsack, Joseph
Zeisel, Hans

**6-match Problem 1962, 1973**

Scope and Contents note
Correspondents:
Eckhardt, Henry
Hoover, W.
Read, Ronald
Hood, Rodney
Kymmse, Ronald

**Tennis Match 1962**

Scope and Contents note
Correspondents:
Hogan, W.
Ohlin, Goran
Pett, Martin
Carnahan, Paul
Addis, Peter
Gray, Thomas

**Archimedes' Crossed Cylinders 1962-1963**

Scope and Contents note
3 cylinder case, and other cases
Correspondents:
Sutton, Richard
7 File Cards 1962-1963
Scope and Contents note
Correspondents:
Block, James
Vanderpool, Donald

Floyd's Knob 1962
Scope and Contents note
Correspondents:
Nelson, DeWitte
Abbott, Robert

Calculating Prodigies
Physical Description: 7 folder(s)

1967, April 1967
Scope and Contents note
Various articles.
Correspondents:
Golomb, Solomon
Goodwin, Norris

William Klein 1967-1976
Scope and Contents note
Correspondents:
Klein, William

Aitken 1967
Scope and Contents note
Various articles
Correspondents:
Aitken, Winifred
O'Beirne, Thomas

Arthur Benjamin 1981
Scope and Contents note
Articles

Marvelous Griffith 1967
Scope and Contents note
Arthur F. Griffith: MG notes, article, hand-copy of article

Willie Dysart 1967
Scope and Contents note
Articles, letters, photos
Correspondents:
Roth, David
box 18, folder 26  **Miss. Shakuntala Devi 1977-1993**
Scope and Contents note
Newspaper articles, typed bio (by Moe Moss)

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**Calculus of Finite Difference**
Physical Description: 3 folder(s)

box 7, folder 13  **1961, August 1961**
Scope and Contents note
References, articles
Correspondents:
Gummere, John

Scope and Contents note
(from Dudeney)
Golomb's formula
"Equivalence of Cyclic Sequences Under Transformations of the Affine Group", by Robert C. Titsworth
Correspondents:
Zeiske, Arnold
Vanderpool, Donald
Szekeres, George
Nadler, Morton
Titsworth, Robert
Pscheidt
Golomb, Solomon
Hobbs, Earl
Elspas, Bernard

Scope and Contents note
Correspondents:
Bergman, George
Hobbs, W.W.
Read, Ronald
Isaacs, I. Martin
Harary, Frank
Lorens, Charles
Brown, W.S.
Harter, J.W.
Perkins, Donald
Singmaster, David
Cantor’s Alephs

Physical Description: 3 folder(s)

1966, March 1966-1980

Scope and Contents note
Several “flaws” in proof, commented on by MG

Zippin’s Problem of Replicating Figures

1966-1977

Scope and Contents note
Discussion of reproducing figures infinitely many times (Robert Mack, Zippin, MG)
Correspondents:
Mack, Robert
Zippin

Alephs in Cosmology & Physics 1964-1979

Scope and Contents note
2 articles
Science fiction story “Cantor’s War”, by Christopher Anvil, “If”, June 1974

Card Tricks

Physical Description: 2 folder(s)

1957, September 1957-1958

Scope and Contents note
Concerning various card tricks with a mathematical message (September, 1957)
Correspondents:
Baily, Joshua
Kroening, Irwin

1972, July 1972-1975

Scope and Contents note
"Color Scheme", by Oscar Weigle (reprint)
"Double Cross" by George Sands (lecture notes)
"Oil and Water" by Ed Marlo (photocopy)
"Mantra" (4 page newsletter, 1975), Ed: Sam Dalal
"Upsy Downsy" in letter from "Ron" (no last name)
Correspondents:
Sargeant, Peter
Cohen, Edward
Eto, Jukji
Marlo, Edward

Cards

Physical Description: 8 folder(s)
box 20, folder 4  
**1968, June 1977-1999**

Scope and Contents note
Shuffling.
Baker's Game (original of Free Cell)
Copy of Russian Translation fo article
Correspondents:
Ondrejka, Rudolf
Barry ??

box 20, folder 5  
**Baker's Card Solitaire Game 1967-1983**

Scope and Contents note
Correspondents:
Baker, C.L.

box 20, folder 6  
**Unsolvable Order-1 Games (& Orders 1, 3, 4) 1967-1968**

Scope and Contents note
Correspondents:
Shepherd, Wilfred H.
Hutton, Trevor
Kew, Thomas
Charoosh, Mannis

box 31, folder 3  
**1974, November 1974-1975**

Scope and Contents note
Correspondents:
Wilf, Herbert

box 31, folder 4  
**Conway's Botdrops - etc. 1974-1975**

Scope and Contents note
Conway games: Botdrops, Topswops, Botswops
Correspondents:
Conway, John
Wilf, Herbert
Silver, Roland

box 31, folder 5  
**Silverman Problem 1974**

box 31, folder 6  
**Motel Problem (Permuting Adjacent Digits) 1974**

box 31, folder 7  
**Ransom's 5 Card Problem 1974-1975**

Scope and Contents note
Correspondents:
Rason, Peter
Stover, Mel
Ransom, Tom
Selfridge, Oliver
Weinrich, James

**Carnival Games**

Physical Description: 3 folder(s)

Guide to the Martin Gardner  
Papers SC0647
box 4, folder 17  

1959, April 1958-1997

Scope and Contents note
Lebesgue's Minimal area problem
Spot the spot
Coffee & cream problem (cooling the coffee)
Doughnuts and coffee
Cover the Spot (including small physical game in envelop)
Correspondents:
Smith, J.H.
Mallery, Larry
Confort, Edwin
Achener, Pierre
Gridgeman, Norman
DeBra, Daniel
Alberts, Alan
Speiser, A.
Wilder, John

box 4, folder 18  

3-Dice Game 1959

Scope and Contents note
"canned" response from MG, explaining the odds.
Correspondents:
Smith, Howard

box 4, folder 19  

Sliced Torus 1959-1973

Scope and Contents note
Correspondents:
Jones, Alan
Gould, Richard (analysis)
Massey, Dan (generalized to higher dimensions)
Palmquist, Paul (analysis)
Hall, David (analysis)
Martin, Paul

Catalan Numbers

Physical Description: 5 folder(s)
Box 36, Folder 13

**1976, June 1976**
Scope and Contents note
No article
Polygons to triangle's, etc (folder subtitle)
"Correspondences Between Some Sets Counted by the Catalan Numbers", by David Singmaster (typescript)
Correspondents:
Meyers, William
Eckler, Ross
Daly, William
Gould, Henry
Singmaster, David
Hoggatt, Vernon

Box 36, Folder 14

**Catalan's in General 1967-1976**
Scope and Contents note
Many examples
"Numbers of Things", by Frank Bernhart (chapt. 4 of Thesis) (typescript)
Correspondents:
Knuth, Donald
Gould, Henry
Nozaki, A.

Box 36, Folder 15

**Catalans & Trees 1976**
Scope and Contents note
Various articles
Correspondents:
Meyers, William

Box 36, Folder 16

**Catalan Applications 1975-1976**
Scope and Contents note
Articles and letters of applications

Box 37, Folder 1

**Catalan Structures & Correspondences 1977**
Scope and Contents note
Thesis, by Michael J. Kuchinski, B.S., 1977, Graduate School, West Virginia University

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**Checkers**
Physical Description: 7 folder(s)

Box 50, Folder 1

**1980, January 1979-1996**
Scope and Contents note
Incomplete article.
Many MG notes.
Correspondents:
Beckerson, Alan
Schaeffer, Jonathan
**Game files Series 1**

**Checkers**

- **box 50, folder 2**  
  **Sucker Bets 1979**  
  Scope and Contents note  
  Correspondents:  
  Stover, Mel

- **box 50, folder 3**  
  **Checkers - Histor & Variants 1979**  
  **John Rogers 1979**  
  **Computer Checker Programs 1979-1996**  
  Scope and Contents note  
  MG Notes on phone talk with Bierman, about PAASLOW.  
  Also contains basic checkers rules.  
  Correspondents:  
  Tinsley, Marion  
  Granjean, Burke

- **box 50, folder 6**  
  **Brown's Interchange undated**  
  Scope and Contents note  
  Correspondents:  
  Harris, John

- **box 50, folder 7**  
  **No-Capture Shortest Games 1979-1980**

**Chess "Task" problems**

- **box 25, folder 7**  
  **1972, May 1961-2000**  
  Scope and Contents note  
  "Solution of a Chessboard Configuration Problem", by G.E.Peterson (typescript)  
  Correspondents:  
  Liu, Andy  
  Cohen, Philip  
  Moss, Moe  
  Peterson, G.E.  
  Row, Thur (Mort Luebbert)  
  Nelson, Harry  
  Harris, John  
  Charosh, Mannis

**Chess Problems**

- **box 48, folder 5**  
  **1979, June 1979**  
  Scope and Contents note  
  Joke mate - alternate solutions.

- **box 48, folder 6**  
  **Unattached SuperQueens (Amazons) [1 of 2] 1979**  
  Scope and Contents note  
  Correspondents:  
  Chandra, Ashok  
  Knuth, Donald  
  Kahn, David
box 48, folder 7  Unattached SuperQueens (Amazons) [2 of 2] 1965-1980
   Scope and Contents note
   Proofs for (rest of) non-attacking superqueens problem.
   Correspondents:
   Chandra, Ashok
   Pappinghaus, P.
   Reineke, J.
   Zimmerman, Charles

box 48, folder 8  Pandiagonal Latin Squares 1972-1977
   Scope and Contents note
   Notes (by Donald Knuth and Dorothy Webb) on number of solutions of "Quintessence" puzzle.
   "Construction of Knut Vik Designs", by A. Atkin, L. Hay & R. Larson (typescript)
   "Enumeration and Construction of Pandiagonal Latin Squares of Prime Order", by A. Atkin, L. Hay & R. Larson (typescript)
   Correspondents:
   Knuth, Donald
   Webb, Dorothy
   Hay, Louise
   Eves, Howard

box 48, folder 9  Reflecting Queen Problem 1963-1980
   Scope and Contents note
   Correspondents:
   Klarner, David
   Guy, Richard
   Upton, Leslie
   McIntosh, Richard

box 48, folder 10 "Chromatic No." of Boards undated
   Scope and Contents note
   Notes and a couple of articles

Chessboard Puzzles
   Physical Description: 3 folder(s)

box 9, folder 10  1962, November 1962
   Scope and Contents note
   Just the article

box 9, folder 11  Halving the Board 1962-2000
   Scope and Contents note
   Various calculations and corrections
   Correspondents:
   Marlow, Tom
   Maas, Robert
   McCarthy, John
Quartering the Board 1962-1968
Scope and Contents note
Correspondents:
Patten, William
Moore, John
Grindley, W.H.
Fowler, Bruce

Chinese Puzzles & Berrocal
Physical Description: 6 folder(s)

Scope and Contents note
Some photo's of puzzles
Edited typescript of article (photocopy)

Berrocal [ 1 of 3] undated
Scope and Contents note
Contact prints of many Berrocal sculptures (black & white)

Berrocal [ 2 of 3] undated
Scope and Contents note
"Catalogo General / obras recientes 1974" - Berrocal booklet

Scope and Contents note
Catalogs, etc, from Centicore Arts, Internatational and Arnoold Katzen Gallery
Correspondents:
Berrocal, Miguel
Rudolph, James
Flanagan, Dennis

Scope and Contents note
Bill Cutler's annual newsletter & catalogs
Correspondents:
Slocum, Jerry
Cutler, William
Cross, Arthur

Burr Enumeration [2 of 2] undated
Scope and Contents note

Church of the 4-D
Physical Description: 2 folder(s)
### Game files Series 1

**Church of the 4-D**

<table>
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<tr>
<th>Box Folder</th>
<th>Description</th>
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</table>
| 8, folder 1 | **1962, January 1962-1999**  
Scope and Contents note  
Fourth Dimension  
(See folder on 4th dimension and higher spaces)  
(Also folder on Hypercubes (1966))  
Correspondents:  
MG father  
Casey, Graham  
Stover, Mel |
| 8, folder 2 | **The Plaited Leather Strip 1962**  
Scope and Contents note  
Including some leather examples |
| 25, folder 17 | **Coincidences**  
**1972, October 1967-1972**  
Scope and Contents note  
Correspondents:  
Rowe, R.Robinson  
Bronowski, Judith |
| 6, folder 24 | **Color Triangles, Squares**  
Physical Description: 4 folder(s)  
**1961, March 1961-1977**  
Scope and Contents note  
MacMahon Squares  
W.H.Freeman ad using MacMahon Squares  
Wade Philpott on MacMahon's Three-color Squares |
| 6, folder 25 | **Polymerase Game 1974-1979**  
Scope and Contents note  
(2 color squares)  
Game invented and described by Lasse Winquist |
| 6, folder 26 | **Nelson's 24-Tile Game 1972**  
Scope and Contents note  
Description, variations, strategy  
Correspondents:  
Nelson, Harry |
| 7, folder 1 | **The 30 Color Cubes 1963-1969**  
Scope and Contents note  
Westerind letter has much analysis  
Correspondents:  
Carley, J.F.  
Westerind, L.G. |
**Combinatorial Math**

Physical Description: 3 folder(s)

**box 11, folder 1**  
**1963, August 19631967**  
Scope and Contents note  
Column, references

**box 11, folder 2**  
**Stamp Square 1963-1987**  
Scope and Contents note  
Correspondents:  
Babcock, Richard  
Dunsay, George

**box 11, folder 3**  
**Computer Proofs of Hexagon 1963-1987**  
Scope and Contents note  
Correspondents:  
Daly, William  
Hansen, Wilfred  
Linderson, G.W.  
Kierstead, Friend  
Wagner, Victoria  
Pearlman, Robert  
Shimshoni, M.S.  
Mattheras, Elsie

**Communication with Extraterrestrial Life**

Physical Description: 4 folder(s)

**box 14, folder 19**  
Scope and Contents note  
Project Ozma, etc  
"Extraterrestrial Linguistics", by Solomon Golomb, 1961 (Reprint from Astronautics, 6/5, May 1961)  
Correspondents:  
Golomb, Solomon  
Hein, Piet

**box 14, folder 20**  
**Communication with Extraterrestrial Life [2 of 2] undated**  
Scope and Contents note  
articles, newsprint

**box 14, folder 21**  
**Mars & Extraterrestrial Communication 1965-1966**

**box 14, folder 22**  
**Bell's Problem 1964**  
Scope and Contents note  
Correspondents:  
Field, Mary K. (Mrs. Richard T.)
Conway Biz (Surreal Nos)

Physical Description: 2 folder(s)

box 37, folder 7

1976, September 1959-1976

Scope and Contents note
Partial column.
Prime Nim, Prim, Welter's game
Correspondents:
Conway, John
Shannon, Claude
Barnet, Alan
Hein, Piet
Ulam, Stanislav

box 37, folder 8

Knuth's Surreal Numbers & On Conway's Constructions 1974

Scope and Contents note
Correspondents:
Halmos, Paul
Knuth, Donald
Berlekamp, Elwyn
Kruskal, Martin

Conway's "Game of Life"

box 23, folder 5

1970, October undated

Scope and Contents note
Only some pieces from the article (others cut out.)

Conway's Life II

box 23, folder 14

1971, February 1970

Scope and Contents note
Incomplete article, single letter.

Cooks

Physical Description: 3 folder(s)

box 16, folder 11

1966, May 1961-1966

Scope and Contents note
Correspondents:
Wheeler, D.H.
Panea, Manuel
Macaluso, Pat
box 16, folder 12  **Dudeney's 15-Turn Rook Tour Problem 1966**
Scope and Contents note
Many solutions.
Analysis by Wilfred Shepherd.
Correspondents:
Shepherd, Wilfred H.

box 16, folder 13  **Hunter & Bear Problem 1966**
Scope and Contents note
Correspondents:
Schwartz, Benjamin
Bay, John
Andrews, P.B.S.

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**Coxeter**
Physical Description: 2 folder(s)

box 7, folder 2  **1961, April 1960-1961**
Scope and Contents note
Many letters from Coxeter
Correspondents:
Coxeter, H.S.M.

box 7, folder 3  **Morley's Theorem 1943-1999**
Scope and Contents note
Many articles (mostly proofs) on Morley's theorem

---

**Crossing Numbers**
Physical Description: 2 folder(s)

Scope and Contents note
"Ensnaring the Elusive Eodermdrome", by Gary S. Bloom (photocopy) (from Word Ways)
Various articles
Correspondents:
Harary, Frank
Miller, Donald
Basin, Stan
Steindel, Charles

Scope and Contents note
Correspondents:
Sheratte, Martin
Williams, Leo
Singer, David
Guy, Richard
Hill, Anthony
Csaszar Polyhedron

Physical Description: 4 folder(s)

box 32, folder 18

1975, May 1972-1986
Scope and Contents note
Incomplete article
Papers on Steiner Triple Systems, Steiner Quadruple Systems, etc, including
(photocopy of) Csaszer article.
Correspondents:
Crowe, Donald
Stewart, Bonnie
Frederickson, Greg

box 32, folder 19

Room Squares undated
Scope and Contents note
A type of magic square, by T.G. Room
Various articles on Room Squares
Correspondents:
Crowe, Donald
Mullin, Ronald

box 32, folder 20

Schmucker's Toroid Rings 1975
Scope and Contents note
Toroid rings: 8 octahedra, 8 dodecahedra, 8 icosahedra (and photos of them)
Correspondents:
Coxeter, H.S.M.
Stewart, Bonnie
Schmucker, Kurt

box 32, folder 21

Hadamard Matrices 1975-1986
Scope and Contents note
Several articles
"Higher-Dimensional Hadamard Matrices", by Paul Shlichta (typescript)
Correspondents:
Sloane, N.J.A.
Golomb, Solomon
Schlichta, Paul

Cyclic No's

Physical Description: 6 folder(s)

box 22, folder 15

1970, March 1986
Scope and Contents note
Articles & MG notes
Correspondents:
Golomb, Solomon
box 22, folder 16  **Shortcuts in Identifying & Computing 1970**  
Scope and Contents note  
Correspondents:  
Yates, Samuel

box 22, folder 17  **142857 As Magic Trick 1955-1959**  
Scope and Contents note  
(Cylies in Magic & Light. Calc) [must mean cycles]  
"Die Magische Roulette" (Magic trick)  
Correspondents:  
Van Klaveren, F.W.

box 22, folder 18  **Cyclics in Other Base Systems 1970**  
Scope and Contents note  
Correspondents:  
Koehl, Frederick  
Ferguson, Shaun

box 22, folder 19  **Higher Order Cycles 1968-1990**  
Scope and Contents note  
"A Pre-Eminent Decimal", by C.C. Corbet (typescript)

box 22, folder 20  **Cyclic "Magic" Squares 1975, 1978**  
Scope and Contents note  
"Peculiarities of Prime Numbers", by John Ward (typescript)  
Correspondents:  
Card, L.E.  
Ward, John

---

**Cycloid**

box 13, folder 9  **1964, July 1964**  
Scope and Contents note  
History discussion (Pascal vs Torricelli) by Alexandre Rothan  
Correspondents:  
Rothan, A.  
Miller, Julius  
White, Robert

---

**Diag’s of Algebraic Identities**  
Physical Description: 2 folder(s)
Diag's of Algebraic Identities

1973, October (2D&3D) 1973
Scope and Contents note
"Look-See" Proofs
Diagrams of Algebraic Identities (now called "Proofs Without Words")
No article
Lots of MG notes
Correspondents:
McIntosh, Alistair
O'Beirne, Thomas
Smith, Cedric

1973+43+53=63 Dissection (Wheeler, Duffy, etc) 1973-1994
Scope and Contents note
Correspondents:
Duffy, Emmet
O'Beirne, Thomas

Dice

1968, November undated
Scope and Contents note
Just article (and references)

Digital Roots

1958, July 1954-1974
Scope and Contents note
"Some diverting tricks which involve the concept of numerical congruence"
number tricks
magic trick: "Remembering the Future", by Stewart James
Correspondents:
Rupert, John
James, Stewart
Eliasberg, Jay
McC racken, Daniel
Buky, Anne

Digraphs

Scope and Contents note
Incomplete article.
Correspondents:
Harary, Frank
Parley, Richard
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<th>Title</th>
<th>Date</th>
<th>Scope and Contents note</th>
<th>Correspondents</th>
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<td>Diophantine Analysis</td>
<td>box 22, folder 27</td>
<td>1970, July undated</td>
<td>Just article</td>
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<td>Dividing Figures into n Equal Parts</td>
<td>box 40, folder 10</td>
<td>1977, July 1976-1977</td>
<td>Von Meyenfeldt, Carl</td>
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<td>box 40, folder 11</td>
<td>The 3,4,5 Triangle Quartering 1977</td>
<td>Von Meyenfeldt, Carl, Phipps, Cecil</td>
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<td>box 40, folder 12</td>
<td>Trisection &amp; Quadrature Puzzles 1984-1985</td>
<td>Golomb, Solomon</td>
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<td><strong>Bisection Puzzles 1977-1985</strong></td>
<td>Lots of examples</td>
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<td><strong>Divisibility Rules</strong></td>
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<td>9</td>
<td>5</td>
<td><strong>On division by 7 1962-1977</strong></td>
<td>Lots of (short) articles</td>
</tr>
<tr>
<td>20</td>
<td>2</td>
<td><strong>Dollar Bills</strong></td>
<td>Physical Description: 3 folder(s)</td>
</tr>
</tbody>
</table>

**Guide to the Martin Gardner Papers SC0647**
box 22, folder 7

1969, December 1969
Scope and Contents note
No article
"Domino Triplets: A General Solution", by Wade Philpott (typescript)
"Dominoes", by Professor Hoffmann, 1899 (photocopy)
Correspondents:
Philpott, Wade
Card, L.E.
Pijanowski, Lech
Brooke, Maxey

box 22, folder 8

Scope and Contents note
Long analysis by Peter Roeder
Correspondents:
Philpott, Wade

box 22, folder 9

Straight Chains & Bracelets 1969
Scope and Contents note
Correspondents:
Trigg, Charles

Double Acrostics
Physical Description: 2 folder(s)

box 19, folder 10

1967, September 1967
Scope and Contents note
Article
Correspondents:
Borgmann, Dmitri

box 19, folder 11

Carroll's D-Acrostic 1966-1968
Scope and Contents note
Many suggestions
Correspondents:
Rowe, R.Robinson
Borgmann, Dmitri

Doug Hofstadter
Physical Description: 2 folder(s)
Scope and Contents note
Scott Kim's summary of GEB.
Doug Hofstadter's summary of GEB.
Doug Hofstadter's comments & corrections of the first draft of the column
Correspondents:
Kim, Scott
Hofstadter, Douglas

box 48, folder 12  Doug Hofstadter [2 of 2] 1979
Scope and Contents note
More Hofstadter comments for the column.
"Setting Dinner to Music", a Culinary Offering, by Dorothy Denning (typescript):
description of a dinner in the style of A Musical Offering, inspired by Hofstadter's book.
Various reviews of GEB.
Correspondents:
Kim, Scott
Hofstadter, Douglas
Denning, Dorothy

Dr. Matrix
Physical Description: 3 folder(s)

box 11, folder 23  1964, January 1964
Scope and Contents note
Just the column

box 11, folder 24  Four 4's (and n Fours) [1 of 2] 1964
Scope and Contents note
MANY solutions
Correspondents:
Lindgren, Harry

box 11, folder 25  Four 4's (and n Fours) [2 of 2] 1964-1976
Scope and Contents note
MANY solutions

Dr. Matrix - 5
Physical Description: 3 folder(s)

box 14, folder 1  1965, January 1965-1968
Scope and Contents note
Correspondents:
Glasheen, Adaline
Cheney, Fitch
box 14, folder 2  **Self-Replication Digits & Kaprekar's "6174" 1965-1987**
- Scope and Contents note
- Methods of solving the 4-digit puzzle
- Correspondents:
  - Schaaf, William
  - Card, L.E.
  - Arnold, T.E.

box 14, folder 3  **Ruler Problems 1964-1998**
- Scope and Contents note
- Correspondents:
  - Vaughan, Herbert
  - Haubrich, Richard
  - Van Touren, A.
  - Hodgart, Mathew
  - Leech, John

---

**Dr. Matrix - Earthquake Column**
- Physical Description: 3 folder(s)

box 43, folder 1  **1977, December 1971-1978**
- Scope and Contents note
- Computer printout of names of numbers, 0-999, alphabetical
- "Alphabetic Number Tables 0-1000", 1972 (MIT) - numbers and Roman Numerals (booklet)
- Correspondents:
  - Mercer, Leigh

box 43, folder 2  **Festoons 1977**
- Scope and Contents note
- Correspondents:
  - Kierstead, Friend

box 43, folder 3  **Punk Rock undated**
- Scope and Contents note
- Lots of newspaper articles on Punk (the music and the people)

---

**Dr. Matrix - ESP Test**

box 27, folder 8  **1973, August undated**
- Scope and Contents note
- Correspondents:
  - Newman, James R.

---

**Dr. Matrix - Numerology**
Dr. Matrix - Numerology

box 5, folder 17  
1960, January 1958-1962
Scope and Contents note
Correspondents:
Halsey, Eric
Winters, M.
March, Georgianna
Lindgren, Harry
Dernham, Monte
Melton, John

Dr. Matrix - Sing Sing

box 9, folder 15  
1963, January 1963
Scope and Contents note
Just the article, plus clipping on sing-sing.

Dr. Matrix - The Moon Landing, etc.

box 22, folder 1  
1969, October 1969-1974
Prob. of Points on Sphere 1969
Scope and Contents note
Correspondents:
Coxeter, H.S.M.
Goldberg, Michael

box 22, folder 2  
ABCD x 7 = FGHJ (SPIRO x 7 = AGNEW) 1969-1972
Scope and Contents note
Correspondents:
Trigg, Charles

box 22, folder 3  
Reverse Months & Fri. 13 1969-1981
On 1969 1969
Scope and Contents note
Correspondents:
Mosteller, Frederick
Knuth, Donald

Dr. Matrix & D.M.

Scope and Contents note
Correspondents:

Physical Description: 2 folder(s)
Game files Series 1
Dr. Matrix & D.M.

1976, November 1976-1999
Scope and Contents note
No article. "D.M.": Digital Meditation.
(Also mentions "P.M." for Pentagonal Meditation.
Spherical Trigonometry and "QWuints".
Many letters from Sam Dalal
Correspondents:
Dalal, Sam
Bostrom, Robert

On Calcutta undated
Scope and Contents note
Clippings & articles on Calcutta.

Dr. Matrix & Pyramid
Physical Description: 7 folder(s)

1974, June 1974
Scope and Contents note
Various travel info on Pyramid Lake

Numbering -the-Pyramid problem 1974
Scope and Contents note
Correspondents:
Gutgasz, Hiram Fuller

Readers Who Took Column Seriously 1974
Scope and Contents note
Mail to SA & MG, as well as replies from both MG and publishers

Pyramid Guide 1974
Scope and Contents note
A Bi-Monthly newsletter, issues 7-10,12-13, plus "First Year Annual 1972-1973" (bound issues 1-6)

Pyramid-Canada undated
Scope and Contents note
Mostly newspaper articles on sports team using pyramid power

Scope and Contents note
Lots of newspaper articles, ads, research
Correspondents:
Roosevelt, Cornelius Van S.

Scope and Contents note
Correspondents:
Ebon, Martin
**Dr. Matrix Chess Game**

- **Box 23, Folder 13**
  - **1971, January 1969-1971**
  - **Scope and Contents note**
  - Matrix # 11
  - No article

**Dr. Matrix III**

- **Box 6, Folder 21**
  - **Scope and Contents note**
  - Antimagic squares

- **Box 6, Folder 22**
  - **Miss T's Phone No 1961**
  - **Scope and Contents note**
  - Moving digits from one end of a number to the other (transposing end digit)
  - Correspondents:
    - Hastings, Don

**Dr. Matrix in Houston (Perpetual Motion)**

- **Box 24, Folder 20**
  - **1972, February 1971**
  - **Scope and Contents note**
  - Matrix # 12
  - Correspondents:
    - Soph, Bing

**Dr. Matrix in Istanbul**

- **Box 51, Folder 11**
  - **1980, September 1976-1980**
  - **Scope and Contents note**
  - Incomplete article.
  - Correspondents:
    - Knuth, Donald
    - Nelson, Harry
    - Goodman, Gary
    - Morton, E.
    - Buhler, Joe

- **Box 51, Folder 12**
  - **Istanbul 1980**
  - **Scope and Contents note**
  - Many newspaper articles on Istanbul.
  - Letters correcting geography & language mistakes in column.
<table>
<thead>
<tr>
<th>Box and Folder</th>
<th>Description</th>
</tr>
</thead>
</table>
| box 51, folder 13 | Trisections of the Cube 1980  
Scope and Contents note  
Infinite number of trisections. |
| box 19, folder 20 | Dr. Matrix in Squaresville  
Physical Description: 3 folder(s) |
| box 19, folder 21 | 1968, January 1968-1977  
Hippies 1968  
Scope and Contents note  
Many newspaper articles |
| box 19, folder 22 | Buttons 1968  
Scope and Contents note  
Various "short quotes" and pictures for buttons, ads, pictures. |
| box 33, folder 18 | Dr. Matrix on Bible  
Physical Description: 2 folder(s) |
| box 33, folder 19 | 1975, September 1971-1976  
Scope and Contents note  
Letters to the editor from later issues  
Early typescript of article  
Correspondents:  
Flanagan, Dennis  
Subjects and Indexing Terms  
Van Roosevelt, Cornelius |
| box 33, folder 19 | Bible & Word Play 1974-1975  
Scope and Contents note  
Many notes from Dmitri Borgmann on number & word play in the bible  
Correspondents:  
Borgmann, Dmitri |
| box 46, folder 13 | Dr. Matrix's Robot  
Physical Description: 5 folder(s) |
| box 46, folder 13 | 1978, December 1977-1979  
Scope and Contents note  
No article.  
Djinni robot, and ROBOT program  
Correspondents:  
Walker, Jearl |
<table>
<thead>
<tr>
<th>Folder</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>box 46, folder 14</td>
<td><strong>Kt Switch 1978-1979</strong>&lt;br&gt;Scope and Contents note&lt;br&gt;Problems exchanging knight (on a chessboard and smaller)&lt;br&gt;Mauldon's variants (on knight exchange)&lt;br&gt;Correspondents:&lt;br&gt;Mauldon, James&lt;br&gt;Schwarz, Benjamin</td>
</tr>
<tr>
<td>box 47, folder 1</td>
<td><strong>NKST 1978</strong>&lt;br&gt;Scope and Contents note&lt;br&gt;Words with the letters &quot;NKST&quot; in the middle.</td>
</tr>
<tr>
<td>box 47, folder 2</td>
<td><strong>1/3 Chinese 1978-1979</strong>&lt;br&gt;Scope and Contents note&lt;br&gt;Can one be 1/3 Chinese?</td>
</tr>
<tr>
<td>box 47, folder 3</td>
<td><strong>Soc. Sec. No. 1978-1979</strong>&lt;br&gt;Scope and Contents note&lt;br&gt;9-digit number, where product of first n digits is divisible by n, for all n 1-9.</td>
</tr>
<tr>
<td>box 3, folder 11</td>
<td><strong>1958, June 1958-1962</strong>&lt;br&gt;Scope and Contents note&lt;br&gt;Correspondents:&lt;br&gt;Glasheen, Adaline&lt;br&gt;Verbeek, C.C.</td>
</tr>
<tr>
<td>box 3, folder 12</td>
<td><strong>Mrs. Fulleylove &amp; Diary 1960-1977</strong>&lt;br&gt;Scope and Contents note&lt;br&gt;Margery Fulleylove, Dudeneys' daughter&lt;br&gt;James Fulleylove, his grandson&lt;br&gt;Alice Dudeney, wife of Henry, kept a diary, but it is not available. It has been &quot;closed&quot; until 2000.</td>
</tr>
<tr>
<td>box 3, folder 13</td>
<td><strong>Angela Newing 1981-1988</strong>&lt;br&gt;Scope and Contents note&lt;br&gt;Dudeney expert</td>
</tr>
<tr>
<td>box 3, folder 14</td>
<td><strong>Dudeney Scrapbook, Vol I 1972-1986</strong>&lt;br&gt;Scope and Contents note&lt;br&gt;Photocopies of scrapbook, containing articles, 1895—1908</td>
</tr>
<tr>
<td>box 3, folder 15</td>
<td><strong>Dudeney Scrapbook, Vol II 1972</strong>&lt;br&gt;Scope and Contents note&lt;br&gt;Photocopies of scrapbook, containing articles, 1909-1915(?)</td>
</tr>
</tbody>
</table>

**Dudeney**

Physical Description: 5 folder(s)

**"e" & Catenary**

Physical Description: 7 folder(s)
box 7, folder 17  
**1961, October 1960-1999**
Scope and Contents note
'e', the exponential constant
Mostly articles on 'e'
Correspondents:
O'Shea, Owen

box 7, folder 18  
**Catenary and Tractrix Curve 1959-1998**
Scope and Contents note
notes, articles
Correspondents:
Johansson, Torbjorn

box 7, folder 19  
**Rational Fractions for 'e' 1961-1994**
Scope and Contents note
Correspondents:
Hendrick, L.
Feldman, John
Clamage, Allan
Lewis, Donald
Patton, Robert
Brown, George
Heitz, Robert
Lassen, Herbert
Fuchs, Helmut
box 7, folder 20  
**Mnemonics for 'e' 1957-1966**

Scope and Contents note
Correspondents:
Boucher, Claude
Angrick, Warren
Nottingham, R.
Gutierrez, Joseph
Jarnagin, William
Sanet, Morton
Brooke, Maxey
Conklin, Edward
Krall, Al
Stand, M.
Greene, John
Swenson, Richard
Duncan, Fred
Widhoff, Gene
Keast, F.
Mage, David
Gianino, Peter
Gruenberger, Fred
Kerslake, R.
McKiggen, I.
Smiley, Richard

box 7, folder 21  
**Curious Problems & Formulas Involving e 1961**

Scope and Contents note
Correspondents:
Isaacs, I. Martin
Moser, Leo
Heiting, Ted

box 7, folder 22  
**Hatcheck Problem (or Matching Cards) undated**

Scope and Contents note
Unsigned, undated typescript "To Be Solved With Ease"

box 7, folder 23  
**Decimal Expansion of e 1965**

---

**Eggs**

Physical Description: 2 folder(s)

box 50, folder 10  
**1980, April 1980-1997**

Scope and Contents note
No article.
Maxwell's Ovals

box 50, folder 11  
**Letters on Egg & Bottle 1980**

---

**Eleusis II**

Physical Description: 5 folder(s)
1977, October 1977-2001
Scope and Contents note
Incomplete article.
Varios other rules suggested.
Correspondents:
Abbott, Robert


Research on Eleusis 1966-1982
Scope and Contents note
Several of Robert Abbott's newsletters
Correspondents:
Jaworski, John
Newman, J.Robert
Abbott, Robert
Dietterich, Thomas

Delphi (Kruskal) 1962-1977
Scope and Contents note
Copies of correspondance between Robert Abbott & Martin Kruskal
Correspondents:
Kruskal, Martin
Sackson, Sid

Pensari 1985
Scope and Contents note
Induction games by Robert Katz
Correspondents:
Katz, Robert

Elevators

1973, February 1972-1973
Scope and Contents note
Correspondents:
Knuth, Donald
Sherin, Richard
Holmes, Robert
Golomb, Solomon

Ellipse


ESP Machines - SRI (NASA)
Physical Description: 5 folder(s)
<table>
<thead>
<tr>
<th>Box/Folder</th>
<th>Description</th>
<th>Date</th>
<th>Correspondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>34, 1</td>
<td>1975, October 1975-1976</td>
<td></td>
<td>Hoppe, Richard; Diaconis, Persi; Deutsch, Ronald; Jones, Earle</td>
</tr>
<tr>
<td>34, 3</td>
<td>Targ's ESP Machine undated</td>
<td></td>
<td>Model 100A ESP Teaching Machine, Instruction Manual, from Aquarius Electronics (Manual)</td>
</tr>
<tr>
<td>34, 4</td>
<td>Letters From Parapsychologists (P&amp;T, Tart, Cole, Schneidler) 1975-1976</td>
<td></td>
<td>Elgin, Duane; Cole, Phyllis; Puthoff, Harold; Targ, Russell; Schmeidler, Gertrude; Tart, Charles</td>
</tr>
<tr>
<td>36, 12</td>
<td>1976, May 1976</td>
<td></td>
<td>Scully, Tim (Aquarius Electronics); Honorton, Charles</td>
</tr>
<tr>
<td></td>
<td>Everything</td>
<td></td>
<td>Knuth, Donald; Tompkins, Robert</td>
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</tbody>
</table>

Guide to the Martin Gardner Papers SC0647

SC0647 54
<table>
<thead>
<tr>
<th>Series</th>
<th>Title</th>
<th>Physical Description</th>
<th>Box and Folder</th>
<th>Date Range</th>
<th>Scope and Contents</th>
<th>Correspondents</th>
</tr>
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<tbody>
<tr>
<td>Factorials</td>
<td></td>
<td>3 folder(s)</td>
<td>box 19, folder 7</td>
<td>1967, August 1989</td>
<td>article (incomplete)</td>
<td></td>
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<tr>
<td>Factorials</td>
<td></td>
<td></td>
<td>box 19, folder 8</td>
<td>R. E. Smith [1 of 2] 1967</td>
<td></td>
<td>Smith, Robert, Flanagan, Dennis</td>
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<tr>
<td>Factorials</td>
<td></td>
<td></td>
<td>box 19, folder 9</td>
<td>R. E. Smith [1 of 2] undated</td>
<td></td>
<td></td>
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<td>Fallacies</td>
<td></td>
<td></td>
<td>box 3, folder 1</td>
<td>1958, January 1889-1984</td>
<td>photocopy: Current Literature, April, 1889 &quot;The Ten Travellers&quot;</td>
<td>Mooney, John, Allen, Ralph</td>
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<td>Fibonacci Numbers</td>
<td></td>
<td></td>
<td>box 21, folder 6</td>
<td>1969, March undated</td>
<td></td>
<td></td>
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<tr>
<td>Fingers</td>
<td></td>
<td>3 folder(s)</td>
<td>box 20, folder 10</td>
<td>1968, September 1968-2000</td>
<td></td>
<td>Ring, Ken</td>
</tr>
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<td>Fingers</td>
<td></td>
<td></td>
<td>box 20, folder 11</td>
<td>Finger Multipication undated</td>
<td></td>
<td>MG notes.</td>
</tr>
</tbody>
</table>
**Game files Series 1**

**Fingers**

**Counting & Number Bases 1958-1968**

Scope and Contents note
Story: "How to Count on Your Fingers", by Fred Pohl
Article: "Mathematics and the Folkways", by Martin Gardner, in Journel of Philosophy, 47/7, March 1950
Mnemonic for Pi in base 8 (in Knuth letter)
Correspondents:
Pohl, Frederick
Knuth, Donald

**Flatland & Hilton**

**box 9, folder 1**

Scope and Contents note
"Do We Have a Two-Dimensional View of Crime and Deviance?" by Karen Paldan
Biography of C.H. Hinton, by T. Weston
Correspondents:
Coxeter, H.S.M.
Hayward, Roger
Robert, Gregory
Calhamer, Allan
Holmes, Larry
Weston, Timothy

**Flexagons**

Physical Description: 4 folder(s)

**box 1, folder 3**

1956, December 1956-2000
Scope and Contents note
(Models in separate folder)
History of flexagons
models, comments, analysis
flexapyramids
Correspondents:
Mott-Smith, Geoffrey
Ransom, Tom
Templeton, Hugh
Little, John
Polyakov, N
George, Douglas

**box 1, folder 4**

Bibliography, tearsheets of articles [1 of 2] 1956-1983
Scope and Contents note
The Curious Family of Flexagons, Frank R. Bernhart
Some Elements of Flexagon Theory, Frank R. Bernhart
Interim Report on Hexa-Hexa Aberrations, Donald Comstock 24 Apr, 1979
**Flexagons**

**Bibliography, tearsheets of articles [2 of 2] 1954-1993**

Scope and Contents note
Flexagon, Nauka i Zhizn (in Russian), 1970
Correspondents:
Tukey, John

**Frank Bernhart's Work 1969 - 1993**

Scope and Contents note
Counting flexagons with Feynman diagrams
On flexagon maps
"Some Elements of the Mathematical Theory of Flexagons" (Part 1)
"The Curious Flexagon Family"
Correspondents:
Mitchell, Phil

**Flieess**

**Game Learning Machines**

Physical Description: 6 folder(s)

**1962, March 1961-1977**

Scope and Contents note
Hexapawn
Extendapawn
Various analyses of games and machines
Typescript of Hexapawn brochure, from W.R. Aul

**Reader Reports on Hexapawn, Contests, etc. 1962-1965**

**Other Simple Learning Devices 1961-1995**

Scope and Contents note
Computer "Family Tree" from Ballistic Research Laboratories Electronic Scientific Computer (BRLESC)
GLIM Learning Machine (Game Learning Intelligent Machine), by Russell Yost
NIMBLE (Nim Box Logic Engine) - Learns to play Nim
Tit Tat To machine
ACE - A Learning Machine

**Reprints of Column & TV Use, etc. 1962-1967**

Scope and Contents note
Including Mame Mamu Ka (Russian? magazine) - 1962
Nature and Science Magazine(1966)

**"Baby" Games (Minigames) 1962**

Scope and Contents note
Checkers - 4x4 Analysis (MG & W. Grandjean)
Go - 5x5 Analysis (MG & D. Nix)
Chess - 5x5
Pawns - 2x4 (2 matchboxes)
Checkers (5x5) 1962
Scope and Contents note
Analysis - MG, Knuth, Grandjean, Caswell
Correspondents:
Caswell, Robert L.
Grandjean, W.B.

Game Strategies
Physical Description: 4 folder(s)

1961, July 1961
Scope and Contents note
Just the article (about Bridg-it and Halma, the latter a variation of Chinese Checkers)

Bridg-It and Twixt [1 of 2] 1958-1963
Scope and Contents note
(Also called Gale.)
Full analysis by Alfred Lehman: "A Solution to the Shannon Switching Game"
Robot Gale players.
Booklet in separate envelope, of Gale layouts with instructions for the Game of Gale, marked "Season's Greetings! The Hatcher's", about 4x4 inches.
Correspondents:
Shannon, Claude
Lehman, Alfred
Gross, Oliver
Gale, David
Hein, Piet

Scope and Contents note
References to "Board Games folder".
"Bridg-it on the 1401", by Gunter Wenzel
Program (for Bridg-it) for HP-97, by Mordecai Schwartz
Correspondents:
Fergason, Thomas
Shepherd, Wilfred H.
Wenzel, Guenter
Reynolds, A.C.
Gale, David
Checker Problem 1961
Scope and Contents note
(related to Halma)
22 move solutions, 20 move solutions.
proof (by Vern Poythress) that 20 moves is minimum.
Correspondents:
Vanderpool, Donald
Durling, Allan
Poythress, Vern

Game Theory

1967, December 1967-1971
Scope and Contents note
Morra - board and instructions (Piet Hein game).
Various papers by Rufus Isaacs
Correspondents:
Morgenstern, Oskar
Isaacs, Rufus

Games

Physical Description: 5 folder(s)

1973, January undated
Scope and Contents note
Sim, Chomp & Race Track
Mostly article + Ian Stewart article (on Chomp)

Sim 1972-1981
Scope and Contents note
Analyses: 5-Point Sim, 6-Point Sim, N-Point, Dual, Choice
Dual game analyzed by Leslie Shader (mimeograph)
Correspondents:
Shader, Leslie
Croach, Jesse
Erdos, Paul
Simmons, Gustavus
McLeod, John
Chandra, Ashok
Beeler, Michael
Harary, Frank
box 26, folder 3  
**Race Track 1971-1974**  
Scope and Contents note  
Sci. Am. Christmas card  
Demolition Derby & other variants (James Henle)  
Many variants  
Correspondents:  
Henle, James  
Nievergelt, Jurg  
Falconer, Tomas

box 26, folder 4  
**Chomp [1 of 2] 1972-1973**  
Scope and Contents note  
"A Curious Nim-type Game", by David Gale (mimeograph) - original game description  
"Game of Divisors", by Fred Schuh (typescript) translation by G.J. Westerink  
Correspondents:  
Gale, David  
Thompson, Ken  
Winker, Steve  
Westerink, G.J.  
Beeler, Michael  
Nelson, Harry  
Lunon, Fred

box 26, folder 5  
**Chomp [2 of 2] 1972-1986**  
Scope and Contents note  
Partial analysis of 3xN Chomp, from F. Bernhart  
Correspondents:  
Silverman, David  
Westerink, G.J.

---

**Games (Jam, Hot, Etc.)**  
Physical Description: 3 folder(s)

box 18, folder 8  
**1967, February 1967**  
Scope and Contents note  
just article.

box 18, folder 9  
**Kayles (String Nim) 1964-1967**  
Scope and Contents note  
analysis by Henon  
Correspondents:  
Henon, Michel  
Spoerl, Charles  
Epstein, Richard

box 18, folder 10  
**Squad Car Game 1966**  
Scope and Contents note  
Correspondents:  
Isaacs, Rufus
**Geometric Fallacies**

box 23, folder 16

1971, April 1971

Scope and Contents note

No article.

Correspondents:

Leech, John

**Golomb's Graceful Graphs**

Physical Description: 5 folder(s)

box 24, folder 21


Scope and Contents note

Many & various articles.

"My views of the Problem", by Takashi Wakui, from Fascinating Puzzles Monthly No. 36, July, 1968 (photocopy)

Correspondents:

Simmons, Gustavus

Golomb, Solomon

Lagarior, Jeff

box 24, folder 22


Scope and Contents note

Correspondents:

Hollingsworth, Lowell

Hodgart, Mathew

Reid, Robert

Chandra, Ashok

Ashenfelter, Robert

Robertson, Douglas

box 24, folder 23

Results, etc, from Readers on Graceful Graphs 1972-1994

Scope and Contents note

Correspondents:

Golomb, Solomon

Mixon, Bill

Harries, Wolfgang

box 24, folder 24

Disproof of Golomb Conjecture 1974

Scope and Contents note

"Large Graceful Subgraphs of the Complete Graph", by Gustavus Simmons (typescript)

Correspondents:

Simmons, Gustavus

Van Rongen, J.B.

Leech, John

Golomb, Solomon
Recent Papers - Golomb, etc 1982-1984
Scope and Contents note
(Referenced in latest version of column in "Wheels, Life...")

Graphs

1964, April 1964
Scope and Contents note
Application of Hamiltonian Lines to hydrocarbons (in Eckroth letter)
Correspondents:
Meally, Victor
Knowlton, Kenneth
Eckroth, David

Gray Codes (& Chinese Rings)

Physical Description: 4 folder(s)

Scope and Contents note
Various articles.
The Brain, puzzle from Mag-Nif, by Marvin Allison, Jr.
"Cyclic Codes in Analog-to-Digital Encoders", by Chas. Cole (photocopy)
Correspondents:
Allison, Marvin
Deutsch, E.

Scope and Contents note
Gray's patent (Pulse Code Communication), 1953
Gray Codes & Dragon Curves (in George Darwin letter)
Stibitz Patent (Binary Counter), 1943 (predates Gray?)
Puzzles based on Gray codes (see Leslie Upton letter)
"The Treasure of Grayham Binar" (also Leslie Upton letter)
"Lucky Light", by Dave Lederman (magic trick)
Correspondents:
Darwin, George
Stibitz, George
Knuth, Donald
Upton, Leslie
Cipra, Barry
<table>
<thead>
<tr>
<th>Box and Folder</th>
<th>Description</th>
</tr>
</thead>
</table>
| box 25, folder 14 | **Chinese Rings 1972-1998**  
Scope and Contents note  
Various commercial rings, Princeps Puzzle (electronic)  
Correspondents:  
Golomb, Michael  
Knuth, Donald  
Ray, David  
Rasmussen, Peter |
| box 25, folder 15 | **Paths in N-Cubes 1972-1985**  
Scope and Contents note  
Correspondents:  
Read, Ronald  
Bradford, L.E.  
Harary, Frank  
Winkler, Steve  
Bell, Alex  
Vanderschel, David |
| box 51, folder 1 | **Groups (Finite)**  
Physical Description: 4 folder(s)  
**1980, June 1980**  
Scope and Contents note  
No article (see next folder: 51/2)  
MG notes.  
Lots of short articles on groups (& reviews of books on groups.) |
| box 51, folder 2 | **Sporadic Groups 1968-1980**  
Scope and Contents note  
SA article.  
Golomb lists errors in column.  
Lots of MG notes, articles, etc.  
Correspondents:  
Golomb, Solomon  
Grossman, Israel  
Lyons, Richard  
Gorenstein, Dan  
Griess, Robert  
McKay, John |
| box 51, folder 3 | **Lie (Infinite) Groups undated**  
Scope and Contents note  
MG notes, a couple of book reviews |
| box 51, folder 4 | **Galois undated**  
Scope and Contents note  
Articles on Galois, mostly by Tony Rothman |

Scope and Contents note
Notes from Richard Guy. Relates to column & contains number curios NOT dealing with primes (& usable in Future Columns.)

Correspondents:
Guy, Richard
Philpott, Wade
Mullin, Albert
Yates, Samuel

---

### Hakenbush

**box 24, folder 19**

1972, January undated
Scope and Contents note
Correspondents:
Conway, John

---

### Halma

Physical Description: 9 folder(s)

**box 24, folder 6**

1971, October undated
Scope and Contents note
Just article & rules for Halma (& references)

**box 24, folder 7**

Halma papers by Elithorn 1971
Scope and Contents note
Many papers: preprints, typescripts, reprints, etc.

**box 24, folder 8**

Halma Computer Programs undated

**box 24, folder 9**

Transfer Problems 1971-1983
Scope and Contents note
Lots of solutions, by MG and others.
Correspondents:
Knuth, Donald
Fujimura, Kobon
Harris, John

**box 24, folder 10**

Halma Solitaire Problems 1971
Scope and Contents note
Mostly MG notes and solutions
Correspondents:
Harris, John

**box 24, folder 11**

3x3 undated
Scope and Contents note
MG notes
Game files Series 1

Halma

box 24, folder 12

4x4 undated

Scope and Contents note
MG notes

box 24, folder 13

5x5 Square 1971

Scope and Contents note
MG notes
Correspondents:
Widdeer, Vera
Gordon, Leonard

box 24, folder 14

6x6 Square undated

Scope and Contents note
MG notes

Hamilton's Icosian Game

Physical Description: 3 folder(s)

box 2, folder 1

1957, May 1957

Scope and Contents note
Icosian Game
Tower of Hanoi
Hamiltonian Path
(Polyominoes)

box 2, folder 2


Scope and Contents note
All you ever wanted to know about The Towers of Hanoi but were afraid to ask, by
W.F. Lunnon
Correspondents:
Walsh, Timothy
Katz, Sylvan
Moeser, Robert
Armstron, H.
Paciulan, Kenneth
Revennaugh, Vance
Lunnon, Fred

box 2, folder 3


Scope and Contents note
(see model "The Great Pyramid", in box xxx)
Ad, in French, of "Jeux Scientifiques" of Edouard Lucas
The Towers of Hanoi" by Jay Kapraff and Gary Adamson
Correspondents:
Crowe, Donald
Knuth, Donald

Harary's Generalized TTT
1979, April 1978-1979

Scope and Contents note

"Achievement and Avoidance Games", by Frank Harary (typescript) -- written for MG for this column. (Talks about various games, and Ramsey Theory.)

Correspondents:

Harary, Frank
Austin, A.K.

Helix

1963, June 1960-1989

Scope and Contents note

Correspondents:

Katsanis, Theodore
Lind, Douglas
Brown, Robert

Hex

1957, July 1957-2000

Scope and Contents note

History and discussion about Hex (MG, Nash, Gale)
Con-Tac-Tix (a Piet Hein game)

Correspondents:

Nash, John
Golomb, Solomon
Stover, Mel
Shannon, Claude
Gale, David
Milnor, John
Hayward, Ryan
Van Ryswyck, Jack
Browne, Cameron

Hexes & Stars

Physical Description: 7 folder(s)

1974, July 1972-1978

Scope and Contents note

Photocopy of column, plus some partial cut-outs of the column & some corrections for next month.
box 30, folder 10  **Square Triangles 1960-1988**
Scope and Contents note
"The Address Problem", by Michael Tennor (typescript)
"Triangular-Square-Pentagonal Numbers", by R.J. Stroeker, Report 7701/M, Econometric Inst, Erasmus University
Correspondents:
Tennor, Michael
Furry, W.H.
Adler, Irving
Jankovich, Gradimir

box 30, folder 11  **Hexes 1974-1986**
Scope and Contents note
Correspondents:
Grinstead, Charles
Shallit, Jeffrey
Hitotumatu, Sin

box 30, folder 12  **Star Numbers 1973-1974**
Scope and Contents note
Lots of MG notes
Computer listing of some factorials, printed in "star" format
Correspondents:
Card, L.E.
Milwee, George
McKay, John
Coxeter, H.S.M.
Harris, John

box 30, folder 13  **Triangle Stars 1973**
Scope and Contents note
MG notes
Correspondents:
Meally, Victor
Wainwright, Robert

box 30, folder 14  **Square Stars 1973**
Scope and Contents note
notes
Correspondents:
Meally, Victor

box 30, folder 15  **The Pell Equation 1973**

---

**Hexiamonds**
Physical Description: 5 folder(s)
1964, December 1958-1973
Scope and Contents note
much general information, history, proofs, and solutions
Lewis also deals with non-connected pieces, and ones connected at vertices. Draft of article.
Correspondents:
Williams, Merideth
Povah, Maurice
Struyk, Adrian
Haselgrove, Jenifer
Lewis, Charles
Schaffer, Karl

New Material From Readers 1964-1983
Scope and Contents note
Correspondents:
Reid, Robert
Struyk, Adrian
Card, L.E.
Philpott, Wade

The 66 Octiamonds & Higher 1964-1975
Scope and Contents note
Correspondents:
Philpott, Wade
Penrose, Roger
Escher, Mauritius C.

The Rhombi 1964-1966
Scope and Contents note
Correspondents:
Struyk, Adrian
Philpott, Wade
Fletcher, John

Triplication Problems (and Twin, etc) 1964-1970
Scope and Contents note
Correspondents:
Philpott, Wade

Hyperbola
Physical Description: 2 folder(s)
**Game files Series 1**

**Hyperbola**

**box 41, folder 12**

1977, September 1961-1977

Scope and Contents note
No article
Things of Science: Curve Unit, No. 139 (Instructions)
MG notes
Correspondents:
Cibulskis, Walter
Klein, Arthur

**box 41, folder 13**

**Hyperboloids 1977**

Scope and Contents note
Information on McDonnell Planetarium
Slides & photos of McDonnell shadows
Correspondents:
Sutherland, Ronald

---

**I Ching**

Physical Description: 4 folder(s)

**box 28, folder 5**


Scope and Contents note
No article (but issue cover)
Correspondents:
Diaconis, Persi
Chen, S.T.

**box 28, folder 6**


Scope and Contents note
"I Ching Oracles", magic trick by Sam Dalal, in Swami, Sept. 1974
"Pattern in the Arrangements of the Trigrams of the I Ching", by Nicholas Bolton & Nicol Macleod (typescript)
Correspondents:
Bolton, Nicholas

**box 28, folder 7**

**The Unsolved Problem of Hexagram Ordering 1973-1986**

Scope and Contents note
"Defining Two Sequences of the Hexagrams in the I Ching by Their Linear Symbols", by Mou-Ta Chen (typescript)
"The Riddle of the Number Sequence of the Chines I Ching - a Geomantic Solution", by Norbert Muller (typescript)
Correspondents:
Miller, Aaron

**box 28, folder 8**

**N-Cube in Anthropology 1976**

Scope and Contents note
Correspondents:
Hoffmann, Hans
Imaginary & Complex Numbers

1979, August 1965-1979
Scope and Contents note
Notes and articles
Correspondents:
Kierstead, Friend

Induction Paradoxes
Scope and Contents note
Physical Description: 3 folder(s)

1976, March 1976-1986
Scope and Contents note
Only snippet of article
"Urn ing a Resolution of Hempel's Paradox", by Stuart Meyer (typescript)
Correspondents:
Meyer, Stuart
Good, Jack

Solomonoff's Work 1976
Scope and Contents note
Articles by Solomonoff
Correspondents:
Solomonoff, Ray

Letters on the Pies 1976
Scope and Contents note
*Lots* of letters
Correspondents:
Pratt, John
Berent, Paul
Good, Robert
Wittman, Donald
Blyth, Colin

Induction Games

1959, June 1959-1964
Scope and Contents note
Eleusis
The Game of Eleusis
Correspondents:
Abbott, Robert
Weinberg, Gerald

Joke Problems
Game files Series 1

Joke Problems

box 10, folder 5  

1963, April 1962-1963
Scope and Contents note
Correspondents:
Weber, William

Joke Quickies

box 20, folder 9  

1968, August 1968

Knights & "Cooks"

box 19, folder 12  

1967, October 1967
Scope and Contents note
Correspondents:
Golomb, Solomon
Bruce, Robert
Vasco, Charles
Isaacs, Rufus
Shepherd, Wilfred H.
Reid, Robert

Knots

Physical Description: 2 folder(s)

box 7, folder 16  

1961, September 1959-1961
Scope and Contents note
Huffman correspondence: lots of drawings
Correspondents:
Huffman, David
Norman, Richard

box 53, folder 15  

Scope and Contents note
Incomplete article.
Penrose magic trick.
Correspondents:
Brown, Frederick (IGKT)
Thompson, Don
Rolfsen, Dale
Trotter, Hale
Penrose, Roger

Knotted Torus
1972, December 1958-1982
Scope and Contents note
Proofs no 2 knots cancel.
A torus, embedded in 3-space, can be knotted in only 2 ways
Cutting a 2-hole solid torus to produce an outside knotted solid torus
... and more
Turning an Arbitrary Two-Sided Surface Inside-Out
"Untying a Knotted Torus", by John Stillwell (typescript)
Correspondents:
Asimov, Dan
Stasheff, James
Bing, R.H.
Stillwell, John

Scope and Contents note
No article.
Correspondents:
Dennett, Daniel
Flanagan, Dennis

Letters on Laffer Col. 1981-1982
Scope and Contents note
Correspondents:
Rocourt, Georges
Briland, Joseph

Phillips Curve 1985
Scope and Contents note
MG notes & some articles.

Laffer Curve II 1981-1985
Scope and Contents note

Latin Squares
Scope and Contents note
Physical Description: 7 folder(s)
<table>
<thead>
<tr>
<th>Box and Folder</th>
<th>Description</th>
</tr>
</thead>
</table>
| box 5, folder 9 | **1959, November 1959-1975**  
Scope and Contents note  
Graeco-Latin Square  
Design of Experiments (notes by MG)  
"Theoretical Studies on Orthogonal Latin Squares", by R. Aravamudhan (Orthogonal Array)  
Correspondents:  
Knuth, Donald  
Scott, Frank  
Betts, Donald |
| box 5, folder 10 | **Order-10 Projective Plane (non-existance of) 1988-1993**  
Arkins Work 1972-1982  
Scope and Contents note  
Eulerian Magic Cube Problem of Order Ten  
Correspondents:  
Arkin, Joseph |
| box 5, folder 11 | **Parker - Articles and Letters 1959-1963**  
Scope and Contents note  
Orthogonal Latin Squares |
| box 5, folder 12 | **Latin Cubes 1970-1973**  
Scope and Contents note  
Correspondents:  
Taylor, Walter  
Peters, James  
Arkin, Joseph |
| box 5, folder 13 | **Bachet's Order-4 Card puzzle 1959-1960**  
Scope and Contents note  
analyses by Pugh and Goldenberg  
Correspondents:  
Pugh, A. Henry  
Goldenberg, Bernard  
Karfunkel |
| box 5, folder 14 | **Diagonal Provisos and Arkins 10x10 1967-1993**  
Scope and Contents note  
Orhogonal Latin Square, Eulerian Square  
Correspondents:  
Black, Norton  
Most, Mel  
Knuth, Donald |
| box 5, folder 15 | **Lattice of Integers**  
Physical Description: 2 folder(s) |
1965, May 1962-1965
Scope and Contents note
"Visibility of Primes", by Robert B. Ely, Ill (typescript)
Correspondents:
Ely, Robert
Pryde, Gereoge
Naranan, S.

Billiard Problem & G.C.D. Finder 1961-1977
Scope and Contents note
Patent 2,978,816 (GED Finder), A. Zarrotsky
Correspondents:
Becker, Joseph
Hayes, Brian

Left vs. Right
1958, March 1958
Scope and Contents note
About left- and right-handedness, mirror images and kindred matters
Correspondents:
Wiener, R.S.
Silver, Helen
Reis, Richard

Letters - Col. in general
Letters - Col. in general 13 Apr 1989 - 13 Apr 1997
Scope and Contents note
Correspondents:
Schwenk, Allen
Zimmermann, Mark

Lewis Carroll
1960, March 1960
Scope and Contents note
Only column; points to Doublets folder

Lightning Calculating Tricks
Physical Description: 2 folder(s)
Game files Series 1
Lightning Calculating Tricks

1967, May 1946-1970
Scope and Contents note
Correspondents:
Jaques, Richard
Becker, Joseph
De Grote, L.H.
Hempel, Carl

Wallace Lee's Trick For Multiplication "Magic No's" 1967-1972
Scope and Contents note
Copies of "Swami"
Dividing by 7 tricks
Correspondents:
Dalal, Sam
Lee, Wallace

Limits of Infinite Series

1964, November 1964
Scope and Contents note
article only (refers to separate folder)

Logic

1959, February 1956-1959
Scope and Contents note
Smith-Jones-Robinson problem (Dudeney's problem)
Colored hats (Smullyan)
Eddington problem "The Four Liars"
"An Experiment in Symbolic Work on the IBM 704", by John Kemeny, 1956
Correspondents:
Biddy, Charles
Youngdahl, C.A.
Watson, R.
Jonelis, John
Smullyan, Raymond
Hollo, Julius
McMillan, Brockway
Fletcher, John
Manheimer, Wallace
Bookstan, John
Fielding, James
Osborn, Sidney
Hooven, Frederick
Matzger, Alan

M-Pire Problem (& Map Coloring)

Guide to the Martin Gardner Papers SC0647
Scope and Contents note
Correspondents:
Taylor, Herbert

M.C. Escher
Physical Description: 7 folder(s)

Scope and Contents note
cloth "print" of Fishes & Birds (original??)
Correspondents:
Fomenko, A.J.
Sakane, Itsuo

Scope and Contents note
various newprint articles

Correspondence - Corny Roosevelt 1965-1981
Scope and Contents note
Cornelius Van S. Roosevelt
(Photocopies of letters from Escher to Roosevelt)
2 uncancelled Netherlands stamps designed by Escher
Correspondents:
Roosevelt, Cornelius Van S.

Correspondence - Escher 1961-1981
Scope and Contents note
Correspondents:
Escher, Mauritis C.
Roosevelt, Cornelius Van S.

Scope and Contents note
various articles about Escher
Correspondents:
Schattschneider, Doris
Graham, John
Emmer, M.

About Escher [2 of 2] undated
Scope and Contents note
Newsprint articles about Escher
**Game files Series 1**

**M.C. Escher**

---

**Photos, Prints, Postcards 1971-1989**

Scope and Contents note
From an envelop, returning them from Doris Schattschneider to Martin Gardner.
About 8 photos, 22 cards, 8 illus.
Correspondents:
Schattschneider, Doris
Roosevelt, Cornelius Van S.
Jacobs, Harold

---

**MacMahan & 30 Cubes**

Physical Description: 9 folder(s)

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Scope and Contents note
No article.
"Some Notes on the 30 6-color Cubes,", by M.G. Harman (typescript)
Correspondents:
Harman, Michael
Sonneborg, Henry III

---


Scope and Contents note
"Tori of Colored Cubes", by Zoltan Perjes (typescript)
[note on Szilassi 7-hedron, in G.B. Lamb letter]
Photo of Percy MacMahan
Correspondents:
Perjes, Zoltan
Andrews, George
Moskovich, Ivan
Cameron, Peter
Westerlink, G.

---

**Conway - 30 Cubes 1970-1992**

Scope and Contents note
MG notes & Conway notes.
"Thought Cubes", by Moti Ashkenazi & Ehud Artzi (instructions)
Correspondents:
Philpott, Wade
Voz (Vosburgh Lyons)

---

**8-Block Problems 1967-1971**

Scope and Contents note
Various note and proofs, especially of Mayblox & 8 Blocks to Madness.
Notes & colorings, by N.W. Johnson, Eric Cross
Correspondents:
Bernhart, Frank
Philpott, Wade
Davis, Harry
<table>
<thead>
<tr>
<th>Box Folder</th>
<th>Collection Item</th>
<th>Dates</th>
<th>Scope and Contents Note</th>
</tr>
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<tbody>
<tr>
<td>45, 13</td>
<td>Armbruster Set 1970-1973</td>
<td>Correspondence with Frank Armbruster on MG booklet for 30 cubes.</td>
<td></td>
</tr>
<tr>
<td>45, 14</td>
<td>MacMahan, Book On, etc 1971-1978</td>
<td>Photo copies &amp; typescripts of MacMahon articles &amp; other notes on his works. Correspondents: Andrews, George</td>
<td></td>
</tr>
<tr>
<td>45, 15</td>
<td>Color Cubes - Other Sets 1961-1972</td>
<td>Various sets of cubes: 27 cube game, a 27-cube set, 23 cubes, colored polyhedra, 57 cubes, colored edge cubes. Correspondents: Meek, William</td>
<td></td>
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</table>

**Magic**

<table>
<thead>
<tr>
<th>Box Folder</th>
<th>Collection Item</th>
<th>Dates</th>
<th>Scope and Contents Note</th>
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<tbody>
<tr>
<td>13, 10</td>
<td>1964, August 1964</td>
<td>article only</td>
<td></td>
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</tbody>
</table>

**Magic & Probability**

<table>
<thead>
<tr>
<th>Box Folder</th>
<th>Collection Item</th>
<th>Dates</th>
<th>Scope and Contents Note</th>
</tr>
</thead>
</table>
**Magic Convention**

Physical Description: 2 folder(s)

**box 9, folder 2**

1962, August 1961-1979

Scope and Contents note
Correspondents:
Fowler, James
Cheney, Fitch
Jedwab, Jonathan
Brecht, L.E.A.

**box 9, folder 3**

Four-Card Problem 1953-1998

Scope and Contents note
descriptions and analyses

---

**Magic Matrix**

**box 1, folder 7**

1957, January 1957-1978

Scope and Contents note
Magic square
Addition table
Matrix force
Calendar magic
"Doth", by Phil Goldstein (Magic tricks based on Gilbreath principle)
Correspondents:
Stover, Mel
Lyons, Phil
Kruskal, William
Goldstein, Phil

Subjects and Indexing Terms
magic tricks

---

**Magic Squares**

**box 4, folder 16**

1959, March 1959

Scope and Contents note
see magic square folders (just the article is in this folder.)

---

**Magic Squares & Cubes**

Physical Description: 8 folder(s)

**box 35, folder 1**

1976, January undated

Scope and Contents note
Incomplete article
Correspondents:
Staib, John

---

**Guide to the Martin Gardner Papers SC0647**
Scope and Contents note
Many cubes, and theories of construction in both letters & articles
Correspondents:
Lamb, Gil
Handricks, John
Loewy, Manfred
Taylor, Walter

Scope and Contents note
"M-Dimensional Queen's Lattices and Magic Arrays", by I.P. Howard (typescript)
Correspondents:
Howard, Ian P.
Walker, Robert
Chaffer, Robert
Benson, William
Bird, John

Scope and Contents note
"Franklyn Magic Cubes", by Donald Piele (typescript)
(Also article on Game of Life, by Piele)
Correspondents:
Piele, Donald
Dorrell, Philip
Benson, William
Ondrejka, Rudolf
Straus, E.G.
Lamb, Gil

box 35, folder 5  Order 7 Cube 1973-1984
Scope and Contents note
"Perfect Magic Cubes of Order Seven", by Bayard Wynne (photocopy, draft)
More examples and some methods of composition
Correspondents:
Barwell, Brian
Wynne, Bayard
Brooke, Patrick
Theiler, James

Scope and Contents note
Correspondents:
Myers, Richard
Staib, John
Gosper, Bill
### Magic Squares & Cubes

<table>
<thead>
<tr>
<th>Box, Folder</th>
<th>Description</th>
<th>Correspondents</th>
</tr>
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<tbody>
<tr>
<td>35, 8</td>
<td>Order 8 and Up 1976-1981</td>
<td>Alspach, Brian, Benson, William</td>
</tr>
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</table>

### Magic Stars

<table>
<thead>
<tr>
<th>Box, Folder</th>
<th>Description</th>
<th>Correspondents</th>
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<tbody>
<tr>
<td>15, 16</td>
<td>1965, December undated</td>
<td></td>
</tr>
</tbody>
</table>

Just the articles (see hypercube folder) 
(like magic squares, but star shapes)

### Magician

<table>
<thead>
<tr>
<th>Box, Folder</th>
<th>Description</th>
<th>Correspondents</th>
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<tbody>
<tr>
<td>6, 8</td>
<td>1960, August 1960-1992</td>
<td>Liu, Andy</td>
</tr>
</tbody>
</table>

Mathemagic: Tricks based on mathematical principles

### Map Coloring

<table>
<thead>
<tr>
<th>Box, Folder</th>
<th>Description</th>
<th>Correspondents</th>
</tr>
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<tbody>
<tr>
<td>6, 9</td>
<td>1960, September 1960</td>
<td>Sciame, Dennis</td>
</tr>
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</table>

4 color map problem

### Matches

<table>
<thead>
<tr>
<th>Box, Folder</th>
<th>Description</th>
<th>Correspondents</th>
</tr>
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<tr>
<td>21, 16</td>
<td>1969, July 1969</td>
<td>Nievergelt, Jurg</td>
</tr>
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Physical Description: 2 folder(s)
Nievergelt's Game: Hit & Run 1967-1978

Scope and Contents note
Correspondents:
Nievergelt, Jurg
Proter, E.H.
Bell, Donald
Shepherd, Wilfred H.

Math. Induction
Physical Description: 4 folder(s)

1977, May 1977
Scope and Contents note
No article
Spots on forehead, Unfaithful wives, etc

Scope and Contents note
Notes and articles
Correspondents:
Nelson, Harry
Gale, David

Letters (Colored hats, Numbers on Forhead) [1 of 2] 1977
Scope and Contents note
Much good analysis
Correspondents:
Brams, Steven
Mosteller, Frederick

Letters (Colored hats, Numbers on Forhead) [2 of 2] 1977
Scope and Contents note
More good analysis
Correspondents:
Gale, David
Isaacs, I. Martin

Math. Zoo
Physical Description: 3 folder(s)

1978, June 1978-1979
Scope and Contents note
Many articles on math/animals
Several letters on Animals that roll
Correspondents:
Davis, Chandler
### Deltahedra 1978
- **Scope and Contents note**
- Lots of photos of deltahedra in letter from Emerson Frost
- **Correspondents:**
  - Schattschneider, Doris
  - Chaltin, Henrik
  - Stewart, Bonnie
  - Frost, Emerson

### Tiling Sphere with Hexagons 1978
- **Scope and Contents note**
- **Correspondents:**
  - Grunbaum, Branko
  - Isaacs, Rufus

### Mathematical Mailman
- **1965, June 1965**
- **Scope and Contents note**
- Route problems (best route and worst route)
  - stamps
- **Correspondents:**
  - Melton, Charles
  - Shudde, R.H.
  - Heile, Frank

### Matrix - 6
- **Physical Description:** 2 folder(s)

#### 1966, January 1965-1966
- **Scope and Contents note**
- Psychiatry
- **Correspondents:**
  - Borgmann, Dmitri

#### Honest Numbers 1966-1990
- **Scope and Contents note**
- Many examples
- **Correspondents:**
  - Lindgren, Harry

### Mazes
**Game files Series 1**

**Mazes**

- **box 4, folder 14**
  - **1959, January 1908-1975**
  - Scope and Contents note
  - plan of Hampton Court Palace maze
  - maze robots
  - Correspondents:
    - Gaskell, Philip
    - Wallace, Richard

---

**Mechanical Puzzles**

- **box 5, folder 4**
  - **1959, September 1959-1963**
  - Scope and Contents note
  - about Lester A. Grimes (and L.D. Whitaker)
  - Photos of the collection

---

**Melody Machines**

- **box 31, folder 8**
  - **1974, December 1974-1981**
  - Scope and Contents note
  - Article not complete.
  - Correspondents:
    - Deitch, Donald
    - O'Beirne, Thomas
    - Knuth, Donald

- **box 31, folder 9**
  - **Mozart: Waltzes, Country Dances 1974-1975**
  - Scope and Contents note
  - Various articles, descriptions and ads, including copy of Mozarts' original instructions.

- **box 31, folder 10**
  - **O'Beirne 1965-1974**
  - Scope and Contents note
  - Several articles by T.H. O'Beirne, on computers and music.
  - Correspondents:
    - O'Beirne, Thomas

- **box 31, folder 11**
  - **Haydn-Stadler Trios 1974**
  - Scope and Contents note
  - Correspondents:
    - O'Beirne, Thomas
    - Thomas, Gunter

- **box 31, folder 12**
  - **"Buzzword" Charts 1974-1975**
  - Scope and Contents note
  - Correspondents:
    - Gross, Herbert

---

Guide to the Martin Gardner Papers SC0647
**Minimal Sculpture**

Physical Description: 9 folder(s)

**box 46, folder 4**


Scope and Contents note
Incomplete article.
4 photo negatives of sculptures
Lots of articles (with pictures) of sculptures & artistes

**box 46, folder 5**

1978, November [2 of 2] undated

Scope and Contents note
Newspaper articles with pictures of minimalist sculptures.

**box 46, folder 6**

The Apple Cut 1982

Scope and Contents note
"Le Coupe Du Roi and its Relevance to Stereochemistry", by Frank Anet et. al. (typescript)
Correspondents:
Mislow, Kurt

**box 46, folder 7**

Folded Card Paradox 1978-1985

Scope and Contents note
"Hypercard Experiments", by Ben Harris (bound photocopy)
Various versions of hypercards and magic tricks based on them.
Correspondents:
Stover, Mel
Iles, Kim
Merva, Paul

**box 46, folder 8**

Picasso - Paper Fold Sculpture undated

Scope and Contents note
Mostly newspaper articles on Picasso sculpture "Bust of Sylvette" & Chicago Letter from MG to New York Times, anti-Bust.

**box 46, folder 9**

Serra's NYC "Arc" undated

Scope and Contents note
Various magazine & newspaper articles

**box 46, folder 10**

Carl Andre 1976-1990

Scope and Contents note
Photos of his work, articles, etc.
<table>
<thead>
<tr>
<th>Box/Folder</th>
<th>Document Title</th>
<th>Date Range</th>
<th>Scope and Contents Note</th>
</tr>
</thead>
</table>
| 46, 11     | Kenneth Snelson 1978 |          | Scope and Contents note  
Catalog: Kenneth Snelson, Skulpturen, Nationalgalerie Berlin, 1977  
Photos and articles.  
Correspondents:  
Snelson, Kenneth  
Hein, Piet  
McClellan, John |
| 46, 12     | Scilassi Polyhedra 1978-1981 |          | Scope and Contents note  
Picture of glass model of polyhedron, from David Barnhouse  
[Unit fractions in Steward letter]  
Correspondents:  
Quimby, Shirley  
Szilassi, Lajos  
Guy, Richard  
Stewart, Bonnie  
Grunbaum, Branko |

**Misc. Comb. Puzzles**

Physical Description: 5 folder(s)

<table>
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<tr>
<th>Box/Folder</th>
<th>Document Title</th>
<th>Date Range</th>
<th>Scope and Contents Note</th>
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</thead>
</table>
| 37, 9      | 1976, October undated |          | Scope and Contents note  
Only contains answers to column. |
| 37, 10     | Sam Loyd's Klondike Maze 1976-1987 |          | Scope and Contents note  
Correspondents:  
Smith, Maxine  
Bennett, Harold  
Kravitz, Sidney  
Shortz, Will |
| 37, 11     | Chinese Checker Transfers 1961-1985 |          | Scope and Contents note  
Correspondents:  
Levenspiel, Octave |
| 37, 12     | My No-3-in-line (Minimum) Problem 1975-1976 |          | Scope and Contents note  
Several articles.  
Correspondents:  
Ainley, Stephen  
Harris, John |
Letters on No-3-in-line (Maximum) Problem 1975-1986

Scope and Contents note
Correspondents:
Harris, John
Sands, Bill
Guy, Richard
Beeler, Michael

Mnemonics

1957, October 1925-1973

Scope and Contents note
How to remember numbers by mnemonic devices such as cuff links and red zebras (October, 1957)
"Number Dictionary", by Bruno Furst
"Zufall's Memory Trix", Numbers 1, 2, 4, by Bernard Zufall (packet)
"The Zufall Collection", by H. Adrian Smith
Correspondents:
Rhodes, Leon
Dasgupta, S.
Low, Barbara
Spenser, D.
Moran, Carl

Modulo Arithmetic

1981, February 1981

Scope and Contents note
No article.
MG notes.
Correspondents:
Weeks, Dennis

Moebius Bands

Physical Description: 7 folder(s)

1968, December 1953-1992

Scope and Contents note
"The Afghan Border Race" (Magic Trick, preprint).
Moebius Toy designs, by Narynov: "Mystery of the Moebius Strip", "Earth & Comet Galley", "Kazakh Bottle"
Instructions for making Moebius Hat, Scarf
Correspondents:
Tuckerman, Bryant
Ransom, Tom
Grim, Bruce
Narynov, Saken
Moebius Bands

box 20, folder 17  Moebius Strip in Fiction & Verse 1972
Scope and Contents note
Various articles and reprints, including:
"A. Botts and the Moebius Strip", by William Hazlett Upson
"Star, Bright", by Mark Clifton
"Delayed Action", by Charles V. DeVet
"The Wall of Darkness", by Arthur C. Clarke
"The Geometrics of Johnny Day", by Nelson S. Bond

box 20, folder 18  Moebius Strip in Technology & Science 1967-2000
Scope and Contents note
Several Patents and articles.
Correspondents:
Peterson, Ivars
Engel, Douglas

box 20, folder 19  Moebius Xmas Cards undated

box 20, folder 20  Crossed Moebius Bands 1962-1997
Scope and Contents note
Separation: 4 Zippered material bands, to experiment with (from Jean Pedersen?)
Nagashima: long letter with diagrams, in Japanese
Correspondents:
Gordon, Leonard
Barr, Steven
Nagashima, Takahiro
Huff, William
Pedersen, Jean

box 20, folder 21  Double, Triple, etc - Bands 1961-1977
Scope and Contents note
Correspondents:
Mallette, Vincent
Woodbury, Steve
Munger, Elmer
Thurston, David

box 20, folder 22  Moebius Strip in Art 1974-2000
Scope and Contents note
Also history of strips (Roman Mosaics)
From The Worm Runners Digest (magazine), reprints of articles by Tom McClellan:
"Strange Interlude" (14/1)
"Love in Sud Nim" (July, 1973, 15/1)
"Dogmatic Dog on Mobiles" (18/2)

Mohr-Mascheroni
Physical Description: 4 folder(s)
  Scope and Contents note
  Geometric constructions with compass & straightedge or straightedge alone
  Correspondents:
  Hallerberg, Arthur

box 21, folder 23  Mash. Problems 1963-1969
  Scope and Contents note
  Bisect line, the square, Phi, hexagon, center of circle
  Correspondents:
  Goldberg, Michael

box 21, folder 24  6-arc solutions to diagonal point 1969
box 21, folder 25  Toothpick Const's (Dawson) 1969-1973
  Scope and Contents note
  Correspondents:
  Charosh, Mannis
  Johnson, Crockett

box 3, folder 6  Monkey and Coconuts
  Physical Description: 2 folder(s)

box 3, folder 6  1958, April 1951-1993
  Scope and Contents note
  "Coconuts", by David Singmaster (history of the problem. Unpublished?)
  Correspondents:
  Kirchner, Roger
  Shaw, A.
  Healey, Tom
  Weaver, Warren
  Wright, Alfred
  Danskin, John
  Wilson, J.Walter
  Anning, Norman
  Whitehead, J.H.C.
  Dirac, P.A.M.
  Browne, Owens Hand
Box 3, folder 7


Scope and Contents note
Correspondents:
Borgeson, Carl
Miller, Donald
Glicksman, Abraham
Detwiler, V.
Gibson, Robert
Kazarinoff, Nicholas
Krasner, Sol
Whitlock, Bill
Weaver, Warren (with Xerox of Lewis Carroll letter)

---

Box 7, folder 4

**Mr. Apollinax**

**1961, May 1961-1965**

Scope and Contents note
Several math hoaxes: 4-color counterexample, flaw in relativity, Fermat's last theorem proved, prediction and other paradoxes.
Correspondents:
Good, Jack

---

Box 54, folder 1

**My Steiner Problem**

Physical Description: 7 folders

**1986, June 1985-1996**

Scope and Contents note
No article.
MG notes.
Correspondents:
Hwang, Frank
Piel, Jonathan
Liu, Andy
Graham, Ron
Chung, Fan

---

Box 54, folder 2

**Isometric Steiner Trees undated**

Scope and Contents note
One small article on Steiner Minimal Trees on Chinese Checkerboards, by Hwang and Du.
Extensions By Readers 1986
Scope and Contents note
3-D extensions (cubes, tori, Klein's bottles, etc.)
Correspondents:
Letaw, John
Ellis, Michael
Pechenick, Kay
Oblak, Frank
Gascoigne, Stuart
Giuseppe, Argento

Improvements on 10 & 22 Squares 1986
Scope and Contents note
Correspondents:
Carlson, Eric
Selfridge, Oliver
Ashenfelter, Robert
Wainwright, Robert
Putney, Charles
Hubbard, A.C.

Steiner Minimum Trees [1 of 2] 1986
Scope and Contents note
Varius articles (some quite long.)
Correspondents:
Haug, Eberhard

Scope and Contents note
Problem for triangles.
Cauchy's apparatus (use of weights to solve.)
Soap film.
Algorithm from Rufas Isaacs.
Correspondents:
Van der Poel, Willam

Rectilinear Steiner Trees undated
Scope and Contents note
3 articles & some references.

Napier's Abacus
Physical Description: 5 folder(s)

1973, April 1969-1973
Scope and Contents note
Much more on chessboard computer from Craigie Schensted
Correspondents:
Schensted, Craigie
<table>
<thead>
<tr>
<th>Box/Folder</th>
<th>Title</th>
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| box 26, folder 9 | **Negative-Base Systems 1968-1974**  
  Scope and Contents note  
  "The Acid Test", by John Staib (typescript) on base-10  
  Correspondents:  
  Strung, John  
  Staib, John |
| box 26, folder 10 | **DeRegt Papers on Negative-base Notation [1 of 2] 1968-1973**  
  Scope and Contents note  
  Maurits P. de Regt - several papers and a patent |
| box 26, folder 11 | **DeRegt Papers on Negative-base Notation [1 of 2] 1968-1973**  
  Scope and Contents note  
  Continuation |
| box 26, folder 12 | **Fibonacci Notation 1973-1976**  
  Scope and Contents note  
  Correspondents:  
  Harris, John  
  Keller, Tim |
| box 26, folder 7 | **Napiers Bones**  
  **1973, March 1972-1973**  
  Scope and Contents note  
  Ron Edward's Lightning Cal. Trick  
  Abaco Naperiano Perfeccionado  
  Correspondents:  
  Kierstead, Friend  
  Burkhart, William  
  Quintana, Luis Benito |
| box 40, folder 9 | **Negative Numbers**  
  **1977, June 1977-1990**  
  Scope and Contents note  
  No article  
  "A Theory of Shadows", by Wayne Blizard, 1989 (reprint)  
  Many articles & teaching suggestions for negative numbers |
| box 28, folder 9 | **New Games (Cram, Crosscram, Bynum, Quadrage)**  
  Physical Description: 10 folder(s)  
  **1974, February 19851998**  
  Scope and Contents note  
  No article |
Cram 1958-1966
Scope and Contents note
Analysis of "Domino game", possibly by Conway, but no signature.
Correspondents:
Mott-Smith, Geoffrey

Cross-Cram 1973-1974
Scope and Contents note
Correspondents:
Andersson, Goran
Chandra, Ashok

1xN Cram 1974-1976
Scope and Contents note
"Strategies in Simple Cases of Cram", by Magnus Tideman (photocopy): Analyzes 5x5, nx1 and others
"Some Remarks on Nim-like Games", by Sin Hitotumatu, preprint
Conway notes on 1xM Cram
Correspondents:
Hitotumatu, Sin
Banerji, Ranan
Weber, Robert
Anick, David
Silverman, David
Charosh, Mannis
Klein-Buimovici, Dorian
Singmaster, David
Henon, Michel

Bynum's Version of Tactix 1972-1975
Scope and Contents note
Original description of Bynum's Game (Unit Elimination), by Jim Bynum
Analysis by Conway, Bynum
Correspondents:
Bynum, Jim
Conway, John

Quadraphage (Square-Eater) 1970-1974
Scope and Contents note
"Quadraphag, Chessgo, Dukego and Kinggo", by Elwyn Berlekamp (typescript)
Various analyses; note by Don Knuth (on MG notes)
Correspondents:
Berlekamp, Elwyn
Golomb, Solomon
Charosh, Mannis
Silverman, David
Haubrich, Joseph
New Games (Cram, Crosscram, Bynum, Quadraphage)

box 28, folder 15  Trapping Rook, B's, & Q 1974
Scope and Contents note
Correspondents:
Chandra, Ashok
Shapiro, Eli

box 28, folder 16  Trapping Knight with 3 Quads 1974
Scope and Contents note
Correspondents:
Adams, Edward N.

box 28, folder 17  Kt. With 2 Quads 1974
Scope and Contents note
Correspondents:
Butters, Jerry
Adams, Edward N.

box 28, folder 18  Blass & Conway - Angels, Pope, Fool, etc 1974
Scope and Contents note
Notes from Conway, Blass

Newcomb’s Paradox
box 27, folder 7  1973, July undated
Scope and Contents note
Empty - refers to March, 1974 column.

Nim
Physical Description: 3 folder(s)

box 3, folder 2  1958, February 1958-1974
Scope and Contents note
"How to Play Dr. Nim" (pamphlet)
Origin of name
Correspondents:
Distler, Dan
Hart, M.
Kunik, I. Jordan (with patent)

box 3, folder 3  Nim Machines 1958-1960
Scope and Contents note
Correspondents:
Chapman, Seville
Potter, Jack
Monti, A.
box 3, folder 4  Tac Tix (NIMBI) 1958-1980
Scope and Contents note
Nimbi, by Piet Hein (pamphlet)
Correspondents:
Abreu, Ruben
Hinrichs, Ralph
Trowbridge, James
Buckley, Michael
Beeler, Michael
Wolfberg, Michael
Mott-Smith, Geoffrey
Berg, Monroe
Fraenkel, Aviezri

Non-Euclidean Geometry
Physical Description: 5 folder(s)

box 53, folder 1  1981, October 1981
Scope and Contents note
No article.
Coxeter corrections to column.
MG notes.
Some discussion of consistency of elementry geometry, and paper by Tarski on it.
Correspondents:
Coxeter, H.S.M.
Miller, Arthur I.

box 53, folder 2  Poincare & Whitehead 1971
Scope and Contents note
Details of Whitehead's thoughts on relativety, by Lowe.
MG notes on Poncare.
"Whitehead's Philosophy of Science", by Adolf Grunbaum, on Whitehead vs Einstein on Relativity (typescript.)
Correspondents:
Lowe, Victor

box 53, folder 3  References on Non-Euclidean Geometry 1990-1998
Scope and Contents note
Many articles, plus MG list (of references) and some reviews.

box 53, folder 4  Parallel Postulate (Playfair) and False Proofs 1951-1952
Scope and Contents note
MG notes.
Many articles & excerpts.
Correspondents:
Callahan, J.J.

box 53, folder 5  Models of Hyperbolic Plane (Escher III) undated
Non-Transitive Paradoxes

Physical Description: 6 folder(s)

box 30, folder 16

Scope and Contents note
No article
Magic Tricks: Little Bingo, Chip Flip, the Right Bettor (from Karl Fulves)
The Upstream Game (from A.K. Austin)
Bar Racudda (Bob Farmer)
Jan-Ken-Pon Chips (Max Maven) (in separate folder)
"A Gaming Wheel Based on Cyclic Advantage", by Walter Funkenbusch (typescript)
Correspondents:
Stover, Mel

box 30, folder 17

Scope and Contents note
Partial manuscript on Nontransitive games, by Karl Fulves
Correspondents:
Fulves, Karl

box 30, folder 18

Voting Paradoxes [1 of 2] 1974
Scope and Contents note
various articles
Correspondents:
Fishburn, Peter
Usiskin, Zalman

box 30, folder 19

Scope and Contents note
"What it Takes to Avoid Arrow's Paradox", by Howard Margolis (typescript)
"A Rational Voting Procedure", by Kenneth Norton (typescript)
Correspondents:
Klahr, David
Smith, Tony
Blyth, Colin
Diaconis, Persi
Rudkin, Arthur

box 31, folder 1

Scope and Contents note
(Bagley letter includes photocopy of original article)
Correspondents:
Varga, Tamas
Conway, John
Wolk, Barry
Nelson, Harry
Silverman, David
Bagley, Desmond
Game files Series 1
Non-Transitive Paradoxes

Scope and Contents note
Analysis of probabilities in binary strings, by Stanley Collings
Correspondents:
Wendel, J.G.
Knuth, Donald
Collings, Stanley
Odlyzko, Andrew
Connolly, Michael
Hurst, Bryce

Nothing (& Conway's No's)
Physical Description: 2 folder(s)

Null and zero (and the Null-graph) 1975
Scope and Contents note
"Is the Null-Graph a Pointless Concept?", by Frank Harary & Ronald Read (photocopy)
Correspondents:
Mosteller, Frederick

Nozick
Physical Description: 8 folder(s)

Other Refs on Newcomb [1 of 2] 1974-1986
Scope and Contents note
Various articles
"Newcomb's Problem and the Dominance Principle", by Paul Snow (typescript)
"Newcomb's Paradox", by Jerry Malom (typescript)
Correspondents:
Asimov, Isaac
Hohman, William
Richter, Reed
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<td>box 29, folder 3</td>
<td><strong>Other Refs on Newcomb [2 of 2] 1998</strong>&lt;br&gt;Scope and Contents note&lt;br&gt;&quot;A Proof That &quot;Newcomb's Paradox&quot; is not a Genuine Paradox&quot;, by Dugald Keith (typescript)&lt;br&gt;&quot;Newcomb Without Tears: The Role of Causal Factors in Rational Decision&quot;, by Brian Skyrms (typescript)&lt;br&gt;&quot;The Predictor Versus the Rational Chooser: A Solution to Newcomb's Problem&quot;, by Dean Clark (typescript)&lt;br&gt;Correspondents: Nozick, Robert&lt;br&gt;Langan, Chris&lt;br&gt;Kruskal, Martin&lt;br&gt;Newcomb, William&lt;br&gt;Sorensen, Roy</td>
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<td>box 29, folder 4</td>
<td><strong>Bar Hillel 1974</strong>&lt;br&gt;Scope and Contents note&lt;br&gt;&quot;Newcomb's Paradox Revisited&quot;, by Maya Bar-Hillel &amp; Avishai Margolit (offprint, Brit. J. Phil. Sci. 23(1972) 295-304&lt;br&gt;Correspondents: Bar-Hillel, Maya</td>
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</table>
| box 29, folder 5 | **Schlessinger's Article, & Papers On It 1974**
| box 29, folder 6 | **Bram's Paper 1975-1976**<br>Scope and Contents note<br>"Newcomb's Problem and Prisoners Dilemma"
Also: Curriculum Vita (of Brams)<br>Correspondents: Brams, Steven |
| box 29, folder 7 | **Papers by Eells [1 of 2] 1985**<br>Scope and Contents note<br>Offprints & typescripts, 1984-1985 |
| box 29, folder 8 | **Papers by Eells [2 of 2] 1985**<br>Scope and Contents note<br>1985 paper |
| | **Op Art**<br>Physical Description: 3 folder(s) |
| box 14, folder 16 | **1965, July [1 of 2] 1965-1966**<br>Scope and Contents note<br>mostly many examples |
| box 14, folder 17 | **Op Art [2 of 2] undated**<br>Scope and Contents note<br>Newsprint articles |
The 4 Bugs 1965
Scope and Contents note
Correspondents:
Good, I.J.
McCall, Storrs

Optical Illusions
1970, May 1970

Origami
1959, July 1959-1961

Oulipu - Word Play
Physical Description: 5 folder(s)

Scope and Contents note
(Leight also includes analysis of 2-pile Nim game)
Correspondents:
Gummere, John
McClenann, John
Eckler, Ross
Leight, Walter

From Readers (Oulipu) 1977
Scope and Contents note
Lots of anagrams, poems, and other word play.

Italo Calvino undated
Scope and Contents note
Articles and book reviews about Calvino

Scope and Contents note
Some of his work
"Oulipian" poems
("Selected Declarations of Dependence" in next folder)
Mathews Algorithm (in French) (typescript)
Snowball poem
Mathews Algorithm (in English, translation by HM) (typescript)
Correspondents:
Mathews, Harry

Harry Mathews [2 of 2] undated
Scope and Contents note
"Selected Declarations of Dependence", by Harry Mathews ("A Novel" crossed out),
illustrated by Alex Katz (newsprint)
Packing of Squares

Physical Description: 10 folder(s)

1979, October 1978-1979
Scope and Contents note
Incomplete article.
Articles and a few letters
Correspondents:
Krieger, Michael

Returned by Friedman [1 of 2] 1979-1997
Scope and Contents note
(Most of these files were lent to Friedman, and returned in a batch.)
Many letters and some articles on square packing.
"Packing Unit Squares in Squares: A Survey and New Results", by Erich Friedman (typescript) (mid-'90's)
Correspondents:
Friedman, Erich
Potjewyd, John
Konopasek, Milos
Engler, Paul
Crowther, Joseph
Ammann, Robert
Stoll, Douglas
Graham, Ron
Stromquist, Walter
Trump, Walter

Scope and Contents note
3 issues of "Ronden", magazine, with square packing problem: 4/80, 9/80, 12/80
Correspondents:
Gustafsson, Mats
Cottingham, Charles
Hamalainen, Pertti
Gobel, Fritz

Tiling Plane (Consecutive Squares) 1972-1986
Scope and Contents note
Golomb's Problem (notes)
Correspondents:
Golomb, Solomon
Tutte, W.T.
Penrose, Roger
<table>
<thead>
<tr>
<th>Box</th>
<th>Folder</th>
<th>Description</th>
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</table>
| 49  | 9      | Graham & Erdos undated  
Scope and Contents note  
Mostly articles. |
| 49  | 10     | Wainwright's Square Pack Problem  
1981-1992  
Scope and Contents note  
Correspondents:  
Wainwright, Robert |
| 49  | 11     | Unit Squares Into Squares undated  
Scope and Contents note  
List of conjectured values of S(N)  
Correspondents:  
Friedman, Erich |
| 49  | 12     | The 70x70 Problem 1966-1980  
Scope and Contents note  
Also on a torus.  
"The Tesselator", by Zoltan Perjes  
Correspondents:  
Blyth, Colin  
Britton, Dick  
Taylor, James  
Conway, John  
Shepherd, Wilfred  
Reid, Robert |
| 49  | 13     | Tiling Space With Distinct Cubes 1991  
Scope and Contents note  
Correspondents:  
Wainwright, Robert  
Graham, Ron  
Gordon, Basil |
| 49  | 14     | Tiling Space With Distinct Cubes - No 2  
Face-to-Face undated  
Scope and Contents note  
Just article by S. Stein |
| 22  | 28     | Palindromes  
1970, August undated  
Scope and Contents note  
Newspaper clippings. |
|      |        | Paper Cutting |
Game files Series 1
Paper Cutting

box 6, folder 6 1960, June 1960-1998
Scope and Contents note
also folding
Folding the black cube (with models)

---

Paper Folds (Neale)
Physical Description: 5 folder(s)

box 23, folder 17 1971, May 1971
Scope and Contents note
Various magic tricks & puzzles by Bob Neale: Odd & Even Flex; Sheep & Goats.
Flexing model
Correspondents:
Neale, Robert
Swinford, Paul

box 23, folder 18 1xN (Linear Strip) [1 of 2] 1961-1981
Scope and Contents note
Articles on Map & Stamp Folding, by Lunnon, Koehler

box 23, folder 19 1xN (Linear Strip) [2 of 2] 1966-1982
Scope and Contents note
Correspondents:
Bohigian, Haig
Knuth, Donald
Kaplan, Saul
Wells, Mark
Zbikowski, Mark

box 23, folder 20 3x3 Map 1967-1971
Scope and Contents note
Beelzebub puzzle
Correspondents:
Neale, Robert

box 23, folder 21 Rectangles 1970-1971
Scope and Contents note
Articles, MG notes
Correspondents:
Russell, Mike

---

Parabola
<table>
<thead>
<tr>
<th>Box</th>
<th>Folder</th>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
</table>
Incomplete article.  
Artwork from article.  
MG notes.  
Untitled paper, by Sam Matlin, on a geometric transformation relating parabolas and triangles, and generalized conics (typescript)  
Various articles on the parabola.  
Correspondents:  
Matlin, Sam  
Graham, Ron |

### Paradox of the Unexpected Examination

**Physical Description:** 4 folder(s)

<table>
<thead>
<tr>
<th>Box</th>
<th>Folder</th>
<th>Date</th>
<th>Description</th>
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</table>
Various articles, including most of the ones from Mind, with comments by Gardner  
Quines letters include history of the problem  
Correspondents:  
Quine, W.V.  
Meltzer, Bernard  
Schoenberg, Judith  
Mendelson, Elliott  
Norwood, Rick (Prisoner's Card Game) |
| 10  | 2      | **Paradox of the Unexpected Examination [2 of 2] 1979-2000** | Scope and Contents note  
more articles  
Correspondents:  
Chow, Timothy |
| 10  | 3      | **Roy Sorensen 1986-1991** | Scope and Contents note  
Correspondents:  
Sorensen, Roy |
| 10  | 4      | **Letters on Paradox of Unexpected Hanging 1963-1984** | Scope and Contents note  
Many letters! |

**Parity**
**Box 11, Folder 22**  
*1963, December 1959=1964*

**Scope and Contents note**

"Informal deduction in algebra: properties of odd and even numbers", by Commission on Mathematics of the College Entrance Examination Board", pamphlet, 1959

MG notes

Correspondents:

Pugh, A. Henry
Seiner, John
Singleton, C.R.J.

---

**Parodies**

**Box 1, Folder 2**

**Parodies 1959-1977**

**Scope and Contents note**

Parodies:

New Yorker, 1965
New Yorker, 1976
National Lampoon, 1977

Gardner's proposal for Humanistic science magazine

Correspondents:

Flanagan, Dennis

---

**Pascal Triangle**

**Physical Description:** 9 folder(s)

**Box 17, Folder 19**

**1966, December [1 of 2] 1966**

**Scope and Contents note**

Various articles

**Box 17, Folder 20**

**Pascal Triangle [2 of 2] undated**

**Scope and Contents note**

"Chromatics, as Applied to Mathematics Studies with Pascal's Triangle", by Prof. Siegfried Rosch, 1964, in

Palette 15 (Internal house magazine of Sandoz, Ltd.


HexStat, from Science Materials Center (rolling beads in a hexagonal layout), with teachers manual [in separate envelop, filed elsewhere.]

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**Box 18, Folder 1**

**Misc. Properties & Puzzles 1966-1975**

**Scope and Contents note**

Many articles

Correspondents:

Hoggatt, Verner, Jr.
Braun, William
Struyk, Adrian
Golomb, Solomon
box 18, folder 2  
Pascal Triangle & Probability 1963-1968  
Scope and Contents note  
(Ruchlis on HexStat, see Box 17, folder 20 [2 of 2] for model  
Correspondents:  
Ulrich, James  
Ruchlis, Hy  
Morgan, James

box 18, folder 3  
Generalized to Trinomials, etc 1960-1967  
Scope and Contents note  
articles & analysis  
Correspondents:  
Stuermann, Walter  
Tangen, John

box 18, folder 4  
Fibonacci Numbers 1966-1972  
Scope and Contents note  
Correspondents:  
Hoggatt, Verner, Jr.

box 18, folder 5  
Patterns of Primes, Multiples of n, etc. [1 of 2] 1966-1971  
Scope and Contents note  
"The Increase of Error Probability When Using P.C.M. Repeaters with Code Converters", by L.E. Legers, Philips research Labs Technical Note 155/66  
"Patterns and Algorithms", by Jerome Rothstein, CIS Research Center Tech. Report, 1971  
Correspondents:  
Kirka, Richard  
Legers, L.E.

box 18, folder 6  
Patterns of Primes, Multiples of n, etc. [2 of 2] 1965-1977  
Scope and Contents note  
German articles by Sigfried Rusch (English of one is in Box 17/20 [ 2 of 2])  
"Exploring the Pascal Triangle", by class of The Hyde School, 1975

box 18, folder 7  
Apex, & Related Material 1966-1982  
Scope and Contents note  
Correspondents:  
Collings, Stanley  
Wevers, J.H.  
Bonello, Antonio

Pathological Curves  
Physical Description: 3 folder(s)
1976, December 1976
Scope and Contents note
Fragments of article, marked for book.
Correspondents:
Goldberg, Michael
Shanks, Merrill
Hitotumatu, Sin
Mandelbrot, Benoît

Gosper's Flowsnake Curve 1975-1977
Scope and Contents note
Many diagrams from Gosper
Correspondents:
Gosper, Bill
Fry, Alan

Gosper's Comment on Chapter 1977-1988
Scope and Contents note
More diagrams (from Gosper), many with comments.

Pedersen's Strip Solids
Physical Description: 4 folder(s)

1971, September 1971
Scope and Contents note
Correspondents:
Pargeter, A.R.

"Sphericity" of Platonic Solids 1971
Scope and Contents note
Correspondents:
Gridgeman, Norman
Dewar, Robert

From Mrs. P[edersen] undated
Scope and Contents note
Jean Pedersen correspondence
"A New Look at the Platonic Solids", by Jean Pedersen (typescript)
Various strips for models
Correspondents:
Pedersen, Jean

Gurule's Work 1971-1985
Scope and Contents note
Ben Gurule
Pictures of his braided polyhedra.
Patent claims and counterclaims
Correspondents:
Gurule, Ben
Pedersen, Jean
Pennies
  Physical Description: 8 folder(s)

box 15, folder 19  
1966, February 1966
  Scope and Contents note
  Article, includes triangular solitaire

box 15, folder 20  
Rolling Coins 1965-1993
  Scope and Contents note
  Correspondents:
  Goldberg, Michael

box 15, folder 21  
Isometric Solitaire 1966-1967
  Scope and Contents note
  (Triangular and rhombic)
  "The Official Triangular Peg Solitaire Handbook", by William Miller, 1979 (typescript)
  analyses by Choros and Harris, and comments on Philpott's analysis (which is in 15/22)
  Correspondents:
  Charosh, Mannis
  Harris, John

box 15, folder 22  
Varient Brands 1966-1986
  Scope and Contents note
  Davis (on Rhomboids) (Harry Davis)
  Philpott analysis (isometric) - triangles and rhombic
  "Think & Jump" (hexagonal)
  Polytaire Problems (Piet Hein)
  Correspondents:
  Davis, Harry
  Hein, Piet
  Philpott, Wade

box 15, folder 23  
The 10-Triangle 1966 (?)
  Scope and Contents note
  Martin Gardner notes

box 15, folder 24  
The 15-Triangle 1965-1988
  Scope and Contents note
  Solutions, proofs
  "A Problem in Triangular Peg Solitaire", by B.L. Schwartz (typescript), 2 versions
  Correspondents:
  Philpott, Wade
  Davis, Harry
  Thomas, R.E.
  Schwartz, Benjamin
9 Moves for 15-Triangular with 5-move sweep 1966
Scope and Contents note
Correspondents:
Kierstead, Friend

21-triangle & 28-triangle & 36-triangle 1966
Scope and Contents note
Various minimum solutions (with some proofs)
Philpott's comments on Charosh comments
Correspondents:
Philpott, Wade
Davis, Harry

Penrose Tiles
Physical Description: 25 folder(s)

Scope and Contents note
Partial article.
Some slides of paintings by Richard Kurman
Photo of rug by Tony Banford
"Quasicrystallography: Some Interesting New Patterns", by P.A.B. Pleasants
(photocopy of typescript)
Correspondents:
Penrose, Roger
Shephard, Geoffrey
Guy, Richard
Pleasants, Peter

Scope and Contents note
Penrose corrections to original article.
"Penrose Tilings", by Tami Martin & Art Johnson, ~1992 (typescript)
Sample of Penrose toilet paper.
"Termeszet Vilaga" (magazine), Sept. 1997 (includes article by MG)
Correspondents:
Penrose, Roger
Martin, Tami
Golomb, Solomon
Osborn, John

Penrose Tiles [3 of 3] undated
Scope and Contents note
"Termeszet Vilaga" (magazine) August, 1997 (includes article by MG)
Several articles on Penrose tilings.
box 38, folder 4  **Quasi-Crystals [1 of 3] 1985-1999**
Scope and Contents note
Lots of articles, clippings, etc. on quasi-crystals.
Rhombic Hexahedron modules, pictures, patent (of C. Perry), instructions -- from Helmut Bergman
Correspondents:
Bergman, Helmut

Scope and Contents note
More articles.
Correspondents:
Heldring, Otto

Scope and Contents note
More articles.

box 38, folder 7  **Conway's Non-Periodic 3D Tile (Convex) 1993**
Scope and Contents note
The model framework on file-folder paper (to be cut out), and a short article from Focus.

box 38, folder 8  **Nori's Algorithm 1987**
Scope and Contents note
"A Very Simple Algorithm That Generates an Infinite Sequence of Aperiodic Patterns",
by Marco Ronchetti and Franco Nori ["Just a Preliminary and Incomplete Draft"] (typescript), along with around 30 examples.
Correspondents:
Nori, Franco

box 38, folder 9  **de Bruijn Material [1 of 2] 1980-1982**
Scope and Contents note
2 papers (typescript) by de Bruijn
Correspondents:
De Bruijn, N.G.

box 38, folder 10  **de Bruijn Material [2 of 2] undated**
Scope and Contents note
More de Bruijn papers.
Bibliography of de Bruijn papers on Penrose patterns.

box 38, folder 11  **Ammann's Tiles 1969-1996**
Scope and Contents note
Many hand-drawn aperiodic examples.
Some proofs, in letters
Correspondents:
Ammann, Robert
Penrose, Roger
Grunbaum, Branko
Box 38, folder 12: **Originals of duplicated pages undated**

Scope and Contents note:

From folder 38/11

Box 38, folder 13: **Conway Material 1975-1980**

Scope and Contents note:

Notes on Conway lecture on the tiles, Bell Labs, 1980.

Lots of notes (and corrections) about the tiles.

Slides from a Conway lecture

Correspondents:

Guy, Richard (for J.H.C.)
Conway, John
Knuth, Donald

Box 38, folder 14: **Originals of duplicated pages undated**

Scope and Contents note:

From folder 38/13

Box 38, folder 15: **Forcing Theory 1977**

Scope and Contents note:

MG report to Penrose on what Conway has been doing with Penrose tiles, partly on how Ammann bars "force" other infinite sets.

Correspondents:

Penrose, Roger

Box 38, folder 16: **Non-Periodic Tiling 1970-1981**

Scope and Contents note:

Spiral and other non-periodic (but not aperiodic) tilings.

Correspondents:

Goldberg, Michael
Kershner, R.
Knuth, Donald
Wallace, John
Schattschneider, Doris
Hein, Piet

Box 38, folder 17: **3-Space Non-Periodic Tilings 1976-1989**

Scope and Contents note:

Correspondents:

Ammann, Robert
Kim, Scott
Coxeter, H.S.M.
Penrose, Roger

Box 38, folder 18: **Ellen Perstein 1999-2001**

Scope and Contents note:

"Tilings with Penrose Rhomb Clusters", by Ellen Perstein (color computer output), plus discussion.

Correspondents:

Perstein, Ellen
Schattschneider, Doris
box 39, folder 1  

**Wnag Dominoes 1965-1977**  
Scope and Contents note  
Articles & letters on Wang tiles.  
"Computers, Games, and Logic", by Hao Wang (typescript)  
Correspondents:  
Hart, Tim  
Robinson, Raphael

box 39, folder 2  

**Robinson - on the Penrose Tiles 1975-1976**  
Scope and Contents note  
Articles (& letters) on Penrose tiles  
"Comments on the Penrose Tiles - September 1975", by Raphael M. Robinson (typescript)  
Correspondents:  
Robinson, Raphael

box 39, folder 3  

**Eric Rogener undated**  
Scope and Contents note  
Some kite and dart tilings

box 39, folder 4  

**Harborth & P. Hein 1976**  
Scope and Contents note  
Correspondents:  
Harborth, Heiko  
Schattschneider, Doris

box 39, folder 5  

**Pauling’s Criticisms undated**  
Scope and Contents note  
About quasicrystals

box 39, folder 6  

**Theo Bense (New Zealand) 1991-1992**  
Scope and Contents note  
Various 3-D models based on Penrose tiling, with pictures & description. Also article in Dutch.  
Correspondents:  
Bense, Theo

box 39, folder 7  

**Miyazaki 1978**  
Scope and Contents note  
"On Some Periodical and Non-Periodical Honeycombs", by Koji Miyazaki, 1977 (booklet, with many laid-in photos. Also mentions Golden Polytopes and Golden Isozonohedra.)  
Correspondents:  
Miyazaki, Koji

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**Pentomino Games**  
Physical Description: 3 folder(s)
1965, October 1965-1994
Scope and Contents note
"The Game of Pentominoes: A First Player Win", by Hilarie K. Orman, 1994 (typescript)
Correspondents:
Golomb, Solomon

De Bono’s L-Game 1974-1984
Scope and Contents note
Correspondents:
Dewdney, A.K.
Penszko, Marek

Rectification Problem (form rectangles) 1964-1989
Scope and Contents note
"Rectifiable Polyominoes", by "Group Four", VCP (reproduction)
"Polyominoes Which Tile Rectangles", by Solomon Golomb (typescript)
Correspondents:
Harris, John
O’Beirne, Thomas
Klarner, David
Spira, Robert

Pentominoes
Physical Description: 2 folder(s)

1960, November 1960-1962
Scope and Contents note
Correspondents:
Golomb, Solomon

Domino’s and Fault-Free Rectangles 1960-1976
Scope and Contents note
Correspondents:
Philpott, Wade

Perfect No’s

1968, March 1968
Scope and Contents note
Just article.
Other folders: Weird numbers, number problems

Phi

1959, August 1959
Scope and Contents note
(just the article)
Pi

box 6, folder 7

1960, July 1960-1993
Scope and Contents note
"The Number Pi", by Edmund Kelly

---

Pierce

Physic Description: 5 folder(s)

box 45, folder 1

1978, July 1978
Scope and Contents note
Charles Sanders Pierce
Incomplete article.
Correspondents:
Eisele, Carolyn
Knuth, Donald
Jones, Charles

box 45, folder 2

Pierce's 1, 2, & 3rd ness 1978
Scope and Contents note
MG notes.
Correspondents:
Hartshorne, Charles
Fisch, Max

box 45, folder 3

Burks, on Pierce 1976
Scope and Contents note
Papers (typescript) by Arthur Burks
Correspondents:
Burks, Arthur

box 45, folder 4

Chas. Pierce - Misc. Papers on undated

box 45, folder 5

Pierce's Card Trick 1965-1985
Scope and Contents note
Correspondents:
Anderson, Sabra
Eisemann, Kurt
Halmos, Paul

---

Pigeon-Hole Principle

box 51, folder 10

1980, August 1980
Scope and Contents note
Incomplete article (article written by Ross Honsberger)
Dewdney SA article on Honsberger
Correspondents:
Rebman, Ken
Platonic Solids

1958, December 1958-1962
Scope and Contents note
Resistance Cube Puzzle
Correspondents:
Wetter, Arthur
Parkenson, R.A.
Eklund, Karl

Pocket Calculator

Scope and Contents note
Correspondents:
DeLong, Howard
Knuth, Donald
Hitotumatu, Sin
McPhee, Mary Jo
Jud, Wallace

Point-Set Coverings of Spheres

Physical Description: 2 folder(s)

Point-Set Coverings of Spheres (Conway, Simmons) [2 of 2] 1973
Scope and Contents note
Lots of correspondence & articles from/with Simmons
Correspondents:
Simmons, Gustavus

Scope and Contents note
No article (1 page photocopy)
Correspondents:
Croft, H.
Angstrom, Knut
Alma, G.G.P.
Golomb, Solomon
Simmons, Gustavus

Polycubes (& Soma II)

1972, September undated
Scope and Contents note
Just article (incomplete)
(includes Slither)
**Polyominoes**

**1957, December 1957**

Scope and Contents note
More about complex dominoes (December, 1957)
References a separate box of letters

**Primes**

Physical Description: 7 folder(s)

**1964, March 1964**

Scope and Contents note
Column

**Ulam's Spiral 1964-1966, 2000**

Scope and Contents note
Correspondents:
Ducker, W.L.
Ulam, Stanislav
Jones, Florence
Amick, Owen
Clark, Arthur C.

**Correspondence on the Spiral Pattern [1 of 2] 1964-1966**

Scope and Contents note
Are the pictures wrong?
Hexagonal plot
Rows of squares
"The Structure of the Prime Number", by Wang Chia-chu (photocopy of typescript)
Correspondents:
Richter, Charles
Nelson, W.L.
Stuart, James
Baumgant, Bruce
Eisenberg, Frank
Phelan, Stephen
Ulam, Stanislav
Vanderpool, Donald

**Correspondence on the Spiral Pattern [2 of 2] 1985-1987**

Scope and Contents note
3 Reports from Naval Surface Weapons Center, by R. S. Sery:
"A New Method for Finding Prime-Rich Equations of the Type I=x^2-x+c" (1986)
"Relationships Between Prime-Rich Euler Type Equations and a Triangular Array of the Odd Integers" (1985)
Triangular Grids [1 of 2] 1932-1964
Scope and Contents note
"A Triangular Arrangement of Numbers Leading to the Graphical Determination of
Euler Sequences", by L.M.Klauber (1932) (Thermofax of typescript)
"Never Prime" Seive, & "Prime Likely" Sieve (triangular), by Klauber
Correspondents:
Klauber, L.

Scope and Contents note
Correspondents:
Brooks, Rodney

Hexagonal Grids 1964-1987

Prismatic Rings
Physical Description: 3 folder(s)

1978, August 1976-1990
Scope and Contents note
Slides from Ikuo Sakurai, photos from Quimby
Correspondents:
McAdams, H.T.
Sequin, Carlo
Peavey, L.H.
Quimby, Shirley
Evans, Pierce
Draper, S.W.
Ferguson, Helaman
Engel, Douglas

Early Letters on 1964-1978
Scott Kim on 1976-1978

Broken Stick 1959-1990
Scope and Contents note
analysis of "at random"
Correspondents:
Kling, Frederick, John Ross, Norman Cliff
Redheffer, Ray
Adams, Edward N.
James, Robert
Lynch, Gerald
Bach, G. and R. Sharp
Knalf, David
Geschwind, Norman
<table>
<thead>
<tr>
<th>Box and Folder</th>
<th>Description</th>
</tr>
</thead>
</table>
| box 5, folder 7 | **Random Chord (Bertrand's Problem) 1939-2002**  
Scope and Contents note  
Correspondents:  
Goldman, Thomas  
Lydiard, J.M.  
Jaray, R.J.  
Bauer, Richard  
MacQueen, J.T. |
| box 5, folder 8 | **Paradox of 2nd Child 1959-1992**  
Scope and Contents note  
Correspondents:  
McVey, Joseph  
Kemeny, John  
Rosenstock, Herbert  
Heironimus, J.P.  
Baron, Julius  
Smith, Howard  
Collier, J.H.  
Lincoln, Alexander  
Olson, Roger |
| box 1, folder 13 | **Probability Paradoxes**  
Physical Description: 8 folder(s)  
**1957, April 1957**  
Scope and Contents note  
"Paradoxes dealing with birthdays, playing cards, coins, crows and red-haired typists" |
| box 1, folder 14 | **Hempel's Paradox 1968**  
Scope and Contents note  
MG card model of Hempel's paradox (undated) |
<table>
<thead>
<tr>
<th>Box 1, Folder 15</th>
<th><strong>Letters on Hempel's Paradox 1957-1988</strong></th>
</tr>
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<td>Scope and Contents note</td>
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<td>Correspondents:</td>
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<td>Arabadjis, Gus</td>
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<td>Smith, Preston</td>
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<td>Maclver, Donald</td>
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<td>Hobson, Paul</td>
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<td>Chodosch, Robert</td>
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<td>Alchian, Armen</td>
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<td>Barnhart, E. Paul</td>
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<td>Isen, Werner</td>
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<td>Geppert, Donovan</td>
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<td></td>
<td>&quot;Steve&quot;</td>
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<td>Smith, Dan</td>
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<td>Colman, Morris</td>
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<td>Michie, Donald</td>
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<td>Porte, Jean</td>
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<td>Meyer, Stuart</td>
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<tr>
<th>Box 1, Folder 16</th>
<th><strong>Papers and references on Hempel's Paradox [1 of 2] 1946-1985</strong></th>
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<tr>
<td></td>
<td>Scope and Contents note</td>
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<tr>
<td></td>
<td>&quot;The Priggish Principles&quot;, I.F. Good</td>
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<td>Correspondents:</td>
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<td></td>
<td>Hacking, Ian</td>
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<tr>
<th>Box 1, Folder 17</th>
<th><strong>Papers and references on Hempel's Paradox [2 of 2] 1957-1997</strong></th>
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<td>Scope and Contents note</td>
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<td>Correspondents:</td>
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<td>Swinburne, Richard</td>
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<td>Michie, Donald</td>
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<td>Hempel, Carl</td>
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<td>Stove, David</td>
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<td>Shotwell, David</td>
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<tr>
<th>Box 23, Folder 10</th>
<th><strong>1970, December 1969-1971</strong></th>
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<td>Scope and Contents note</td>
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<tr>
<td></td>
<td>No article.</td>
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<td>Various discussions of paradoxes</td>
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<tr>
<th>Box 23, Folder 11</th>
<th><strong>Non-Transitive Dice [1 of 2] 1970-2000</strong></th>
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<tr>
<td></td>
<td>Scope and Contents note</td>
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<tr>
<td></td>
<td>Several articles.</td>
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<td>&quot;Non-Transitive Dominance Relations Among Dreidels&quot;, by R. Tenney &amp; Caxton Easten (typescript)</td>
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<td>Correspondents:</td>
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<tr>
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<td>Stover, Mel</td>
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<td>Rosen, Joe</td>
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<td>Efron, Bradley</td>
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<td>Hein, Piet</td>
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<td>Thorp, Edward</td>
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</table>
Non-Transitive Dice [2 of 2] 1975
Scope and Contents note
"Latest Last Entry Time and Proper Strategic Choice from Among a Certain Set of Options having Non-Transitive Advantages", by W.W. Fukenbusch, Dept. of Math, Michigan Tech. U., 1974 (booklet)
Correspondents:
Funkenbusch, W.

Problems
Physical Description: 10 folder(s)

1972, April 1967-1972
Scope and Contents note
Correspondents:
Silverman, David

Dudney's Digit Problem 1972
Scope and Contents note
Many computer solutions of problem #7

Variants - using Digits 1972
Scope and Contents note
Of problem #7, multiplying numbers using the 9 digits, different bases, addition, etc.
Correspondents:
Card, L.E.
Crocker, Guy

10-Digit Variant 1972
Scope and Contents note
Variants of #7, but multiplying using 10 digits (0-9)

Simmon's Band and Cord Variant, etc 1972
Scope and Contents note
Variants of #1, folding strip with ends attached (also folding cards.)

Frieze Patterns (Coxeter & Conway) 1971-1972
Scope and Contents note
Various reprints & preprints of articles on Frieze patterns.
Conway notes (June, 1972) on Frieze patterns, also "unimpartial hackenbush"
"The Geometry of Frieze Patterns", by D. Broline & D.W. Crowe (typescript)
Correspondents:
Coxeter, H.S.M.
Conway, John
box 49, folder 18  
**1979, December 1977-1996**

Scope and Contents note
Incomplete article.
Corrections to several problems.
Correspondents:
Boas, R.P.h
Schwartz, Benjamin
Penny, Walter

box 49, folder 19  
**The "Impossible" Number Problem [1 of 2] 1979**

Scope and Contents note
Lots of solution procedures, reports on statement error (sum cannot be limited to 20), etc.
Correspondents:
Dijkstra, Edsger
Berlekamp, Elwyn
Hull, Thomas
Stover, Mel
McCarthy, Don

box 49, folder 20  
**The "Impossible" Number Problem [2 of 2] 1979-1993**

Scope and Contents note
"The Impossible Problem", by Lee Sallows (typescript)
Correspondents:
Agin, Gerald
Lew, John
Sallows, Lee

box 49, folder 21  
**Taylor's Linked Toruses 1979-1980**

Scope and Contents note
Various alternative diagrams of solutions (and variations)
Photos of a solution in clay & brass ring (by Fieux).
Correspondents:
Francis, George
Taylor, Herbert

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**Problems - 11**

Physical Description: 9 folder(s)

box 11, folder 13  
**1963, November 1963**

Scope and Contents note
Lohr, Lenox

box 11, folder 14  
**Bracing a Square 1963**

Scope and Contents note
Correspondents:
Robinson, Raphael
<table>
<thead>
<tr>
<th>Box/Label</th>
<th>Description</th>
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<tbody>
<tr>
<td>box 11, folder 15</td>
<td><strong>23-Rods 1963</strong>&lt;br&gt;Scope and Contents note&lt;br&gt;Correspondents:&lt;br&gt;Andersen, Eric</td>
</tr>
<tr>
<td>box 11, folder 16</td>
<td><strong>Rigidifying Higher Polygons 1999</strong>&lt;br&gt;Scope and Contents note&lt;br&gt;Bracing a pentagon &amp; hinged dissection&lt;br&gt;Correspondents:&lt;br&gt;Frederickson, Greg</td>
</tr>
<tr>
<td>box 11, folder 17</td>
<td><strong>3-D Mazes 1962-1964</strong>&lt;br&gt;Scope and Contents note&lt;br&gt;Correspondents:&lt;br&gt;Abbott, Robert</td>
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<td>box 11, folder 18</td>
<td><strong>Word Squares 1963-1965</strong>&lt;br&gt;Scope and Contents note&lt;br&gt;Correspondents:&lt;br&gt;Borgmann, Dmitri</td>
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<tr>
<td>box 11, folder 19</td>
<td><strong>Clock Problem 1963-1964</strong>&lt;br&gt;Scope and Contents note&lt;br&gt;Correspondents:&lt;br&gt;Klarner, David</td>
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<tr>
<td>box 11, folder 20</td>
<td><strong>Schuh's Problem 1963</strong>&lt;br&gt;Scope and Contents note&lt;br&gt;Correspondents:&lt;br&gt;Brown, J.C.&lt;br&gt;Ungar, Andrew&lt;br&gt;Beach, Breat&lt;br&gt;Allen, D.J.&lt;br&gt;Shepherd, W.A.&lt;br&gt;Dickson, John&lt;br&gt;Brewster, George&lt;br&gt;Bienenfeld, David</td>
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<tr>
<td>box 11, folder 21</td>
<td><strong>Proofs of Max. Move Chess Problem 1963</strong></td>
</tr>
<tr>
<td>box 15, folder 8</td>
<td><strong>1965, November 1964-1965</strong>&lt;br&gt;Scope and Contents note&lt;br&gt;Word and number problems&lt;br&gt;Article&lt;br&gt;Source of #6&lt;br&gt;Comment on key &amp; ring</td>
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<tr>
<td>box 15, folder 9</td>
<td><strong>Sam Loyd's toothpick Problem 1965</strong>&lt;br&gt;Scope and Contents note&lt;br&gt;Various general solutions and proofs&lt;br&gt;Correspondents:&lt;br&gt;Brown, J.C.&lt;br&gt;Ungar, Andrew&lt;br&gt;Beach, Breat&lt;br&gt;Allen, D.J.&lt;br&gt;Shepherd, W.A.&lt;br&gt;Dickson, John&lt;br&gt;Brewster, George&lt;br&gt;Bienenfeld, David</td>
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</table>
box 15, folder 10  
**Rectangle-Free Squares 1965-1966**
Scope and Contents note
also Formulas for rectangle-free problem on squares
Correspondents:
Hodgart, Mathew
Harris, John
Bienenfeld, David
Knowlton, William

box 15, folder 11  
**Lady in Lake 1965-1967**
Scope and Contents note
Correspondents:
Max, Nelson
Perry, R.L.

box 15, folder 12  
**Glass-Test Goof 1964-1965**
Scope and Contents note
Correspondents:
Barr, Steven
Hall, David

box 15, folder 13  
**The Anagram Dictionary 1964-1966**
Scope and Contents note
Correspondents:
Temperley, Nicholas
Shepherd, Wilfred H.
Borgmann, Dmitri

box 15, folder 14  
**Barr's Sets of Cocircular points 1965**

box 15, folder 15  
**Rolling Cube Tours 1964-1997**
Scope and Contents note
Gough describes games: Relate, Egyptian Game
Correspondents:
Harris, John
Gough, John

---

**Problems with Game Material**

Physical Description: 6 folder(s)

box 43, folder 10  
**1978, February 1972-1978**
Scope and Contents note
Correspondents:
Silverman, David
Sicherman Dice 1977-1979
Scope and Contents note
Correspondents:
Hitotumatu, Sin
Gallian, Joseph
Broline, Duane
Sicherman, George
Knuth, Donald

The Complex Polytope 1977-1992
Scope and Contents note
Karl Scherer's proof of square problem: 8 is minimum no. of equal squares with each vertex shared
Correspondents:
Youngs, Dale
Scheerer, Karl
Coxeter, H.S.M.
Mycielski, Jan
Kim, Scott

27 Dice Problem 1978
Scope and Contents note
Some nice analysis
Correspondents:
Funkenbusch, W.
Jackman, Kenneth
Lipscomp, Kenneth
Vanderschel, David
Lopow, Leonard

Conway's Checker Jump 1979, 1997
Scope and Contents note
Only 2 articles on problem and variations

Kruskal Kount 1975-1976
Scope and Contents note
Various discussions of presentation
Correspondents:
Endfield, Cy
Kruskal, Martin
Lerman, Benjamin
Marlo, Edward
Hudson, Charles
Fulves, Karl

Pythagorean Theorem
Physical Description: 4 folder(s)
Pythagorean Theorem

Scope and Contents note
Also Pythagorean triangles
Proofs, generalizations
Correspondents:
Beyer, William
Trigg, Charles
Loomis, E.G.

Equiareal PP Triangles 1960
Scope and Contents note
Correspondents:
Whitlock, Bill

Pythagorean Triples 1960-1995
Scope and Contents note
"The Pythagorean Numbers in Vector Problems", by Leo Lavatelli (typescript)
Correspondents:
Umansky, Harlan
Rathbun, Randall

Matrix' Prediction 1964
Scope and Contents note
(tail end of October article, Pythagorean Theorem)
Notes on how he (MG) did it, with other possibilities

Quickly Problems
Physical Description: 3 folder(s)

Pentagon Viewing Problem 1971
Scope and Contents note
Lots of claims of falsity
Correspondents:
Silverman, David

The 24 Touching Cubes 1971
Scope and Contents note
Also details of 22 cube solution; also hypercube solutions
Correspondents:
Fischer, Michael
Holmes, Robert
Fawcett, Kenneth
Riley, John
Ogilvy, Stan

Ramsey Theory
Physical Description: 15 folder(s)
<table>
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<th>Box and Folder</th>
<th>Description</th>
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| box 42, folder 6 | 1977, November 1977-1989  
Scope and Contents note  
Incomplete article  
Correspondents:  
Knuth, Donald  
Harary, Frank  
Ulam, Stanislav |
| box 42, folder 7 | Ramsey Theory (Refs) 1979-1996  
Scope and Contents note  
Notes by MG  
Various papers, reviews, etc  
Long survey article (typescript) by Stefan Burr, nd (about 1975)  
Correspondents:  
Harary, Frank |
| box 42, folder 8 | Papers by Fan Chung 1982-1988  
Scope and Contents note  
Correspondents:  
Chung, Fan |
| box 42, folder 9 | R(4,5)=25 (Ann Landers) 1993  
Scope and Contents note  
Ann Landers mention of Ramsey(4,5) being 25, with letter from MG in response |
| box 42, folder 10 | Readers - Corrections & New Material 1977  
Scope and Contents note  
Correspondents:  
Harary, Frank  
Basin, Lewis  
Schwenk, Allen  
Lorden, Gary |
| box 42, folder 11 | Forced Chromatic Triangles in Graphs (& Blue-empty ones) 1962  
Scope and Contents note  
Correspondents:  
Schwenk, Allen  
Jenks, Robert |
| box 42, folder 12 | Ramsey No's for Cycles (Polygons) undated  
Scope and Contents note  
MG notes and 2 article reprints |
| box 42, folder 13 | Graham's Hypercube Problem undated  
Scope and Contents note  
Knuth article on large numbers, but *no Graham!* |
| box 42, folder 14 | Multiple Disjoint Triangles undated |
| box 42, folder 15 | Ramsey No's for Stars undated  
Scope and Contents note  
MG notes, 2 articles (by Burr & others) |
box 42, folder 16  Spoked Wheels undated
Scope and Contents note
MG notes

box 42, folder 17  R(3,3,...) Problems 1977
Scope and Contents note
MG notes & articles by Folkman
Correspondents:
Fletcher, John

box 42, folder 18  Erdos-Graham Problem 1977
Scope and Contents note
MG notes & some articles
Correspondents:
Schwenk, Allen

box 42, folder 19  Euclidean Ramsey Theory undated
Scope and Contents note
MG notes
"Euclidean Ramsey Theorems", I, II, III, by Erdos, Graham et. al. (photocopy)

box 42, folder 20  Related Problems (Ramsey Type) 1978
Scope and Contents note
Lots of articles
Correspondents:
Shader, Leslie

Random Numbers
Physical Description: 2 folder(s)

box 20, folder 7  1968, July 1968
Scope and Contents note
Fink letter on Borges.
Correspondents:
Fink, Federico

box 20, folder 8  Random Number Generators 1968
Scope and Contents note
Several articles
Correspondents:
Hull, Thomas

Random Walks I (Linear)
# Game files Series 1

## Random Walks I (Linear)

**Scope and Contents note**
- MG notes on betting games with Red/Black cards (with letter from Enn Norak and notes from Persi Diaconis)
- Correspondents: Mosteller, Frederick
  Mackay, Alan
  Oliver, Barney
  Norak, Enn

**Random Walks II (Plane and Space)**

**Physical Description:** 4 folder(s)

**1969, June 1969**
- Scope and Contents note
- Einstein knew of Brownian motion: excerpts of translations of Einstein, from Karol Mysels
- Various other non-technical articles on random walks, from Quandum, the Sciences, American Science, Math Horizons, Sci. Am.

**2-Dim. Walks 1969**
- Scope and Contents note
- Notes & articles on Brownian Motion
- MG notes on triangular random walks
- Correspondents: Weiss, Mitchell

**3-D Walks on Skeletons of Solids 1969**
- Scope and Contents note
- Correspondents: O'Beirne, Thomas

**Self-Avoidance Walks undated**
- Scope and Contents note
- Just one article: "How to Avoid Yourself", by Brian Hayes, from American Scientist, Vol. 86

## Reflections & Rotations

**Physical Description:** 3 folder(s)

**1962, May 1958-1970**
- Scope and Contents note
  - "Symmetry and asymmetry and the strange world of upside-down art"
  - "Explorations", Ed. Marshall McLuhan, containing "If Wittgenstein had been an Eskimo", by Edmund Carpenter
- Correspondents: Legman, G.
Game files Series 1

Reflections & Rotations

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<tr>
<th>box 8, folder 16</th>
<th>Upside-Down and Side Pix 1962-?</th>
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<tr>
<td></td>
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<td>lots of pictures</td>
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<th>Upside-Down Houses 1869-1984</th>
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<th>Rep-Tiles</th>
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<td></td>
<td>&quot;Mutession: New Tiling Relationship Among Planar Polygons&quot;, by Rochelle Meyer</td>
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<th>Self-Similar Fractals [1 of 2] 1965-1976</th>
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<td>Gosper, Bill</td>
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<td>Schattschneider, Doris</td>
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<td>&quot;Classification of Self-Affine Lattice Tilings&quot;, Christoph Bandt &amp; Goetz Gelbrich</td>
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<td>&quot;Self-Affine Lattice Reptiles with Two Pieces in Rn&quot;, by Goetz Gelbrich</td>
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<td>&quot;Crystallographic Reptiles&quot;, by Goetz Gelbrich</td>
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<td>&quot;Fractal Penrose Tilings I&quot;, by Christoph Bandt and Petra Gommelt</td>
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<th>box 9, folder 16</th>
<th>Rotors</th>
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<th>box 9, folder 16</th>
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<td>Curves of Constant Width</td>
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<td>7-sided coin (United Kingdom, 50p)</td>
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<td>Article: &quot;Roundness and its Ramifications&quot;, by E. Lindberg</td>
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<td></td>
<td>&quot;Megalithic Compound Ring Geometry&quot;, by Thaddeus Cowan</td>
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<td>Knowlton, William</td>
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<td>Herdan, R.</td>
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Game files Series 1

Rotors

box 9, folder 17  Kakeya Needle and Other Turning Problems 1963-2001
  Scope and Contents note
  Several articles and papers
  Correspondents:
    Neches, Bernard

box 9, folder 18  Drills for Square Holes, etc. 1959-1964
  Scope and Contents note
  "How to Drill Square Hexagon Octagon Pentagon Holes", pamphlet from Watts Bros.
  Tool Works, 1959
  Correspondents:
    Beck, Dereck

box 9, folder 19  Rotors in Polygons etc (Goldberg) 1962
  Scope and Contents note
  Articles on N-Gon rotors
  Correspondents:
    Goldberg, Michael

Sackson's Game Book

box 22, folder 6  1969, November 1964-1978
  Scope and Contents note
  About "A Gamut of Games", by Sid Sackson
  Correspondents:
    Sackson, Sid

Sam Loyd

Physical Description: 2 folder(s)

box 2, folder 6  1957, August 1897-1997
  Scope and Contents note
  two donkey puzzle (donkey puzzle)
  14-15 (or Boss) puzzle
  Get off the Earth puzzle
  Correspondents:
    Slocum, Jerry
    Shortz, Will
    Knuth, Donald
    Keeler, Donald
    Slocum, Jerry

box 2, folder 7  Trick Donkey & other Sam Loyd premiums 1884-1999
  Scope and Contents note
  Various commercial uses of Sam Loyd puzzles
  Article on Mel Stover, by Max Maven
  Donkey puzzle

Guide to the Martin Gardner  SC0647
Papers SC0647
**Scarne**

**1961, December 1961**

Scope and Contents note
Several newspaper articles on gambling.
Correspondents:
Stout, John
Russ ??

**Science Puzzles**

Physical Description: 7 folder(s)

**1966, August 1963-1974**

**Compton Tube 1966-1995**

Scope and Contents note
In Fultz letter, MG mentions his experiences with Compton
Correspondents:
Fultz, Dave

**Hourglass Toy 1963-1967**

Scope and Contents note
Correspondents:
Paulus, George
Hein, Piet

**Bell Rope Problem 1966**

**Hose Problem 1966**

**Bird in Box 1960-1966**

**Electrical Paradox of 2 Bulbs 1960-1967**

**Scott Kim**

Physical Description: 5 folder(s)

**1981, June 1981-1996**

Scope and Contents note
Correspondents:
Temperley, Nicholas
Kim, Scott

**Kim's Symmetry Art & Lettering 1979-1981**

Scope and Contents note
Many, many inversions - photocopies of hand-drawn, plus first draft of text of Inversions book.
Omni article.
Some inversions by readers.
Kim's Christmas cards.
Correspondents:
Kim, Scott
Montalvo, Fanya
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<th>Correspondents</th>
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<tr>
<td>52</td>
<td>10</td>
<td><strong>Word Inversions &amp; Reflections 1964-1992</strong></td>
<td>Various examples of word inversions, etc (not Kim’s.)</td>
<td>Kim, Scott</td>
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<td>More inversions (from Scot Morris)</td>
<td>Lee, Wallace</td>
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<td>McClellan, John</td>
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<td>Croft, Dick</td>
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<td>52</td>
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<td><strong>Scott Kim’s Queens Problem 1975-1996</strong></td>
<td>Many notes, proofs, etc (Kim &amp; other readers.)</td>
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<td><strong>Scott Kim Problems (Snakes, etc) 1977-1997</strong></td>
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<td><strong>1965, March 1964</strong></td>
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<td><strong>6 Blades Grass 1967</strong></td>
<td>&quot;Brain Teasers and Information Theory&quot;, by Waldean Schulz, 1967 (photocopy of typescript)</td>
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<td>14</td>
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<td><strong>The 8-Puzzle 1964-1987</strong></td>
<td>&quot;A Method to Calculate the Minimum Moves Required to Reverse the Serial Position of N-I Consecutively Numberd Blocks on N Unit Spaces When N is ODD and teh Square Root of N an Integer&quot;, by Harry Davis (typescript)</td>
<td>Mitchie, Donald</td>
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<td>Schofield, P.D.</td>
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<td><strong>T-Teller, Liar, &amp; Randomizer 1965</strong></td>
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<td>O’Beirne, Thomas</td>
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| box 18, folder 12 | NORA x L = ARON 1967 | Scope and Contents note | Card, L.E.  
     |                     |                          | Gaiennie, Bernd |
| box 18, folder 13 | Polyomino Colon "Maps" 1966-1967 | Scope and Contents note | Harris, John  
     |                     |                          | Reid, Robert |
| box 18, folder 14 | The 3 Pennies (Lucky Light) 1967 | Scope and Contents note | Lindon, J.A.  
     |                     |                          | O’Beirne, Thomas  
     |                     |                          | Kruskal, J.B.  
     |                     |                          | Schensted, Craig |
| box 18, folder 15 | The 10 Soldiers 1964-1967 | Scope and Contents note | Van Lint, J.H.  
     |                     |                          | Rowe, R.Robinson  
     |                     |                          | Harman, M.G.  
     |                     |                          | Denton, Arthur |
| box 18, folder 16 | \{1,3,8,120,0\} 1967-1983 | Scope and Contents note | Harter, William G.  
     |                     |                          | Seitz, Charles  
     |                     |                          | Davis, Chandler |
| box 18, folder 17 | Dragon Curve (paper fold) [1 of 2] 1966-1967 | Scope and Contents note | Lots of drawings of curve  
     |                     |                          | Harter, William G.  
     |                     |                          | Seitz, Charles  
<pre><code> |                     |                          | Davis, Chandler |
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<td>18, 19</td>
<td>3-D Dragon (Wire-bend Curves) 1987</td>
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<td>2 copies of &quot;Wire Bending&quot; paper, by Michel Mendes France &amp; J.O. Shallit</td>
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<td>Correspondents: Shallit, Jeffrey</td>
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<td>1967, November 1960-1967</td>
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<td>Article</td>
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<td>Rope &amp; Knot, Circle of Truths &amp; Liars, Sheep problem</td>
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<td>O'Beirnes Tri-Hex Game 1967</td>
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<td>Correspondents: Langford, C. Dudley</td>
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| box 21, folder 7 | 1969, April 1969  
Scope and Contents note  
Analysis of perfect square problem with negative & irrational bases (Schensted)  
Correspondents:  
Schensted, Craig  
Holt, Anatol |
| box 21, folder 8 | Counter & Urn Problems 1969-1975  
Scope and Contents note  
Correspondents:  
Kruskal, Martin  
Bock, Jay  
Perry, R.L. |
| box 21, folder 9 | The Rotation Table 1964-1969  
Scope and Contents note  
Lots of solutions  
Correspondents:  
Isaacs, I. Martin  
Knuth, Donald  
Kruskal, Martin  
Horwitz, Paul |
| box 21, folder 10 | Presto Chess 1969  
Scope and Contents note  
Correspondents:  
Silverman, David  
Stover, Mel  
Mills, William  
Golomb, Solomon  
Knuth, Donald |
Scope and Contents note  
Correspondents:  
Pohl, Frederick |
| box 22, folder 12 | "Self-Descriptive" No's 1970  
Scope and Contents note  
analysis  
Correspondents:  
Hoffman, Dean |
| box 22, folder 13 | Geography Game 1969  
Scope and Contents note  
Correspondents:  
Silverman, David  
Kierstead, Friend |
### box 22, folder 14

**Angle-Sum Proofs 1970**

**Scope and Contents note**

MG folder title was picture of the problem: 3x1 rectangle divided into 3 squares, with 3 lines from base of each verticle to the right-top vertex, as in the article.

**Correspondents:**
- Trigg, Charles
- Card, L.E.
- Bankoff, Leon
- Hoggatt, Vernon
- Golomb, Solomon

### box 23, folder 6


**Scope and Contents note**

Article not complete.

**Correspondents:**
- Freeman, Dyson
- Milligan, W.Lloyd
- Rasig, Richard
- Mosteller, Frederick
- Rowe, R.Robinson

### box 23, folder 7

**Diophantine Problem of 20 Deposits 1966-1984**

**Scope and Contents note**

(20th deposit= 1 million dollars)

**Correspondents:**
- Monzert, Leonard
- Hoggatt, Vernon
- Schroeder, Manfred

### box 23, folder 8

**Cheyney: PI Numbers 1969-1971**

**Scope and Contents note**

**Correspondents:**
- Heech, John
- Cheney, Fitch
- Hoggatt, Vernon
- Longley-Cook, Mark

### box 23, folder 9

**Conway's Dodecahedron Puzzle - & Related Ones 1970**

**Scope and Contents note**

Conway's analysis of coloring edges of icosahedra & dodecahedra

Philpotts analysis of othe regular polyhedra

**Correspondents:**
- Philpott, Wade
- Conway, John
- Hein, Piet
box 26, folder 13


Scope and Contents note
Article - not complete
Original letters (to MG) for many of the problems
Correspondents:
Smullyan, Raymond
Rosenwald, Robert
Philpott, Wade
Pratt, Vaughn
Nokakovic, Miodrag
Huffman, Dean

box 26, folder 14

**Maximum rook Tours (Arrows) 1968-1985**

Scope and Contents note
"Rooks Roaming Round Regular Rectangles", by Edward Peters (typescript)

box 26, folder 15

**Infinite Ladders (paradoxes) 1960-1973**

Scope and Contents note
Towers of exponents

box 26, folder 16

**Skewes No. & Other Biggies 1972**

Scope and Contents note
Ackerman's Function
"Skewered!", by Isaacs Asimov (article from Fantasy and Science Fiction magazine, Nov, 1974 on Skewes Number)

box 26, folder 17

**Polypowers (Ladders) 1973-1990**

Scope and Contents note
Number of ways to put parentheses in finite ladders of powers
Correspondents:
Sternheimer, R.M.
Skekeres, G.
Grosse, Aristid

box 27, folder 1

**Grosse Letters 1972-1973**

Scope and Contents note
About polypowers
Correspondents:
Grosse, Aristid

box 27, folder 2

**Sternheimer (on Polypowers) [1 of 2] 1977-1979**

Scope and Contents note
Papers by Sternheimer
Correspondents:
Sternheimer, R.M.

box 27, folder 3

**Sternheimer (on Polypowers) [2 of 2] 1977**

Scope and Contents note
One more Sternheimer article
<table>
<thead>
<tr>
<th>Box Folder</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>box 27, folder 4</td>
<td>Other Letters - Polypowers 1973-1974</td>
</tr>
<tr>
<td></td>
<td>Scope and Contents note</td>
</tr>
<tr>
<td></td>
<td>Skinner discusses &quot;Skinner Function&quot;, related to Ackerman's.</td>
</tr>
<tr>
<td></td>
<td>Correspondents:</td>
</tr>
<tr>
<td></td>
<td>Kramer, Roy</td>
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<td></td>
<td>Skinner, Lee</td>
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<tr>
<td></td>
<td>Mullin, Albert</td>
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<td></td>
<td>Waldvogel, Jorg</td>
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<td></td>
<td>Pechenick, Kay</td>
</tr>
<tr>
<td>box 29, folder 9</td>
<td>1974, April 1974</td>
</tr>
<tr>
<td></td>
<td>Scope and Contents note</td>
</tr>
<tr>
<td></td>
<td>No article.</td>
</tr>
<tr>
<td></td>
<td>Reverse-the-fish letters</td>
</tr>
<tr>
<td>box 29, folder 10</td>
<td>Smullyan's Monochromatic Chess Problem 1974</td>
</tr>
<tr>
<td></td>
<td>Scope and Contents note</td>
</tr>
<tr>
<td></td>
<td>Correspondents:</td>
</tr>
<tr>
<td></td>
<td>Hooker, C.J.</td>
</tr>
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<td></td>
<td>Butler, William</td>
</tr>
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<td>Blasberg, Steven</td>
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<td>box 29, folder 11</td>
<td>Circle Theorem 1974</td>
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<td>Scope and Contents note</td>
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<td>Correspondents:</td>
</tr>
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<td></td>
<td>Hein, Piet</td>
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<td>box 29, folder 12</td>
<td>Bookcases Problem 1973-1974</td>
</tr>
<tr>
<td>box 29, folder 13</td>
<td>7 x 13 = 28 Routine 1968-1974</td>
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<tr>
<td>box 29, folder 14</td>
<td>Flipping Coin (Persi) (Irrational Prob's) 1973-1981</td>
</tr>
<tr>
<td></td>
<td>Scope and Contents note</td>
</tr>
<tr>
<td></td>
<td>Typed notes (by MG?) about Persi’s problem of Irrational Probabilities</td>
</tr>
<tr>
<td></td>
<td>Correspondents:</td>
</tr>
<tr>
<td></td>
<td>Diaconis, Persi</td>
</tr>
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<td></td>
<td>Shallit, Jeffrey</td>
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<td></td>
<td>Subjects and Indexing Terms</td>
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<td></td>
<td>Garwin, Richard</td>
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<td></td>
<td>Adams, E.N.</td>
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<tr>
<td>box 29, folder 15</td>
<td>Gun Port Problem 1974</td>
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<tr>
<td>box 29, folder 16</td>
<td>Functional Fixedness Tests 1974</td>
</tr>
<tr>
<td>box 32, folder 3</td>
<td>1975, March 1975</td>
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<td></td>
<td>Scope and Contents note</td>
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<td></td>
<td>Incomplete article</td>
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<td>Letter on “Sigil of Scoteia”</td>
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<tr>
<td>Box</td>
<td>Folder</td>
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<td>32</td>
<td>6</td>
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<td>32</td>
<td>8</td>
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<tr>
<td>32</td>
<td>9</td>
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</tbody>
</table>
Kaprekar's "Self-Numbers" 1974-1978

Scope and Contents note
Other Kaprekar problems:
"The Political Leaders' Birthday Puzzle",
"A Wonderful Process of Fattening all the Numerical Terms in an Equation Giving Equality in Sum of the Squares of all Terms on Each Side",
"On the Wonderful Arrival of Final Zeroes by Reversed and Subtraction Continuous Process".

Correspondents:
Stolarsky, Kenneth
Kaprekar, D.R.
Sloane, N.J.A.
Dalal, Sam
Woods, Donald

1975, December 1968-1975

Scope and Contents note
The Sixth Symbol & Other Problems (typescript)

Correspondents:
Warshaw, Stephen
Eckler, Ross
Brown, Spencer

1977, April 1959-1977

Scope and Contents note
No article
Brief MG notes on Steiner Ellipse problem
Letter on torus distortions

Correspondents:
Salmon, Royes


Scope and Contents note
Various impossibility proofs, notes on difference triangles, etc.

Correspondents:
Sicherman, George
Trigg, Charles
Taylor, Herbert
Coxeter, H.S.M.


Scope and Contents note

Correspondents:
Rogers, Douglass
Ramsay, Colin
<table>
<thead>
<tr>
<th>Box/Folder</th>
<th>Description</th>
<th>Date Range</th>
<th>Scope and Contents</th>
</tr>
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<tbody>
<tr>
<td>box 40, folder 1</td>
<td>Lost King tours 1977</td>
<td></td>
<td>Correspondents: Kim, Scott</td>
</tr>
<tr>
<td>box 40, folder 4</td>
<td>No-3-in-line Problem undated</td>
<td></td>
<td>Contains note: original folder has been replace, A photocopy of an article on &quot;Progress on the No-Three-in-Line Problem&quot;</td>
</tr>
</tbody>
</table>
Game files Series 1
Short Problems

box 47, folder 15  
Rotating Table 1979-1995  
Scope and Contents note  
Lots of analysis of variations  
Correspondents:  
Ahrens, Richard  
Mason, John  
Diaconis, Persi  
Ehrenborg, Richard

box 47, folder 16  
Tiling With Incomparable Rectangles [Reingold] 1974-1979  
Scope and Contents note  
Various analyses & solutions  
Correspondents:  
Reingold, Edward  
Duijvestijn, A.J.W.

box 48, folder 1  
Boxing Boxes (Scott Kim) 1979-1985  
Scope and Contents note  
Several articles and typescripts  
Paper model: 6 pieces, 3 + 3 mirrored, rectangular box dissections, so no 2 rectangles share a common dimension, by Scott Kim  
Correspondents:  
Poniachik, Jaime  
Den Hertog, M.  
Cutler, William

box 52, folder 3  
Scope and Contents note  
Collection of letters to Mainichi Daily News on measurements with one yen coins (column by Vladimir Tamari.)  
15 on yen coins.  
Correspondents:  
Hein, Piet  
Tamari, Vladimir  
Conway, John

box 52, folder 4  
Obtuse Triangle & Square 1959-1985  
Scope and Contents note  
Also acute triangle dissections.  
Several proofs that minimum no. of acute triangles in a square is 8.  
Correspondents:  
Gerver, Joseph  
Federico, P.J.  
Sutcliffe, Alan  
Lindgren, Harry  
Vanderpool, Donald  
Coxeter, H.S.M.  
Goldberg, Michael
Short Problems - 12

Physical Description: 6 folder(s)

box 13, folder 3  
1964, June 1964
Scope and Contents note
article only

box 13, folder 4  
Oil Well Problem 1964

box 13, folder 5  
Moon Trip Problem 1964
Scope and Contents note
Improved solutions by Robert Elgin, Witt. Shepherd
Correspondents:
Elgin, Robert
Shepherd, Wilfred H.
Hodgart, Mathew

box 13, folder 6  
Sprague's 16-coin Problem (=100) 1964
Scope and Contents note
"The Postage Stamp Problem", by P. Wegner & A. Doig (typescript)
Correspondents:
Wegner, Peter
Hodgart, Mathew

box 13, folder 7  
Ranking Weights 2964-1996
Scope and Contents note
Correspondents:
Henon, Michel
Johnson, Selmer
Knuth, Donald

box 13, folder 8  
Word Square 1964
Scope and Contents note
Correspondents:
Card, L.E.

box 52, folder 5  
Isosceles Triangles 1981
Scope and Contents note
Split equilateral triangle into 5 isosceles, square to acute triangles
Correspondents:
Cundy, H.M.

box 52, folder 6  
Scope and Contents note
Correspondents:
High, Bob
Brams, Steven

box 52, folder 7  
Generalized Quilt Problem 1981
Scope and Contents note
MG notes, various analyses, generalizations.
Shuffles

Physical Description: 5 folder(s)

box 17, folder 9

1966, October 1984-1996

Scope and Contents note
Several articles by and about Persi Diaconis
No original article

box 17, folder 10

The Repeated Pattern Shuffle 1961-1972

Scope and Contents note
Correspondents:
McMillan, Edwin
Van Arsdale, Daniel

box 17, folder 11

Faro Shuffles [1 of 2] 1968-1975

Scope and Contents note
Many articles from magic journals.
Correspondents:
Diaconis, Persi
Marlo, Edward
Racherbaumer, Jon
Hudson, Charles
Swinford, Paul
Fairfax, John
Carroll, Charles
Morris, S. Brent

box 17, folder 12


Scope and Contents note
More articles, both from magic and math journals
Correspondents:
Bonfield, Murry
Hudson, Charles
Diaconis, Persi

box 17, folder 13


Scope and Contents note
Alphametic solution
Preprint: "Cycle Lengths in Sequences of Permutations", by N.S. Mendelsohn (typescript)

Simple Games

Physical Description: 6 folder(s)
<table>
<thead>
<tr>
<th>Box, Folder</th>
<th>Title</th>
<th>Date/Period</th>
<th>Scope and Contents</th>
<th>Correspondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>33, 1</td>
<td>1975, June 1975</td>
<td>Scope and Contents note</td>
<td>Missing (most of) article</td>
<td>Hitotumatu, Sin</td>
</tr>
<tr>
<td>33, 2</td>
<td>Tromino 1xn Cram, &amp; Vlam's Square Version 1974-1976</td>
<td>Scope and Contents note</td>
<td>&quot;Reverse Cram With Block Sizes Not Exceeding 13&quot;, by Ronald Evans (typescript)</td>
<td>Ulam, Stanislav, Silverman, David, Hitotumatu, Sin</td>
</tr>
<tr>
<td>33, 3</td>
<td>Dodgem 1975</td>
<td>Scope and Contents note</td>
<td>Algorithm for Dodgem (Rebertus)</td>
<td>Rebertus, Dennis, Fremlin, David, Vanderschel, David, Vout, Colin</td>
</tr>
<tr>
<td>33, 4</td>
<td>Lewthwaite's Game 1975</td>
<td>Scope and Contents note</td>
<td></td>
<td>Lewthwaite, G.W., Elwell, David</td>
</tr>
<tr>
<td>33, 5</td>
<td>Beck's Hex &amp; Rex (Reverse Hex) 1957-1989</td>
<td>Scope and Contents note</td>
<td></td>
<td>Winder, Robert, Evans, Ron, Silverman, David, Harris, John, Schensted, Craige, Beck, Anatole</td>
</tr>
<tr>
<td>33, 6</td>
<td>Ulam's Game undated</td>
<td>Scope and Contents note</td>
<td>&quot;New rules and Old Games&quot;, by Stanislav Ulam (photocopy)</td>
<td>Ulam, Stanislav, Beidler, John</td>
</tr>
</tbody>
</table>

Simplicity

Physical Description: 4 folder(s)
<table>
<thead>
<tr>
<th>Box</th>
<th>Folder</th>
<th>Date/Title</th>
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</thead>
<tbody>
<tr>
<td>21</td>
<td>18</td>
<td>1969, August 1969&lt;br&gt;Scope and Contents note&lt;br&gt;many articles&lt;br&gt;Correspondents: Van Heerden, P.J.</td>
</tr>
<tr>
<td>21</td>
<td>19</td>
<td>N. Goodman - On Simplicity&lt;br&gt;undated&lt;br&gt;Scope and Contents note&lt;br&gt;Many articles &amp; references</td>
</tr>
<tr>
<td>21</td>
<td>20</td>
<td>Von Aubel's Theorem (Squares on Quadrilaterals) 1969&lt;br&gt;Scope and Contents note&lt;br&gt;Correspondents: Goodwin, W. Nelson</td>
</tr>
<tr>
<td>21</td>
<td>21</td>
<td>Moser's Spots on a Circle 1967-1973&lt;br&gt;Scope and Contents note&lt;br&gt;Correspondents: Phipps, S.&lt;br&gt;Moser, Leo&lt;br&gt;Rowe, R.Robinson&lt;br&gt;Kruskal, Martin</td>
</tr>
</tbody>
</table>

### Sliding Block Puzzles

Physical Description: 12 folder(s)

<table>
<thead>
<tr>
<th>Box</th>
<th>Folder</th>
<th>Date/Title</th>
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<tbody>
<tr>
<td>12</td>
<td>1</td>
<td>1964, February 1964-1989&lt;br&gt;Scope and Contents note&lt;br&gt;Correspondents: Hordern, Edward&lt;br&gt;Cutler, William</td>
</tr>
<tr>
<td>12</td>
<td>2</td>
<td>Sliding Blocks (Unit Squares) 1964-1999&lt;br&gt;Scope and Contents note&lt;br&gt;&quot;Twice&quot; Puzzle in envelope&lt;br&gt;H. Davis has minimum moves&lt;br&gt;Correspondents: Knuth, Donald&lt;br&gt;Davis, Harry&lt;br&gt;Gordon, Leonard&lt;br&gt;Charosh, Mannis</td>
</tr>
<tr>
<td>12</td>
<td>3</td>
<td>Triangle &amp; Hexagonal Forms 1964-1969&lt;br&gt;Scope and Contents note&lt;br&gt;Correspondents: Klemper, B.</td>
</tr>
</tbody>
</table>
box 12, folder 4  **Stotts Tiger Puzzles 1963-1964**
Scope and Contents note
Discriptions and solutions
Correspondents:
Wilson, Ted
Stotts, Sherley
Stotts, Edna
Grimes, Lester

box 12, folder 5  **Concave Pieces 1964-1965**
Scope and Contents note
Ma's Puzzle (23 move solutions)
Traffic Jam
Various solutions
Patents

box 12, folder 6  **Variants of Red Donkey 1963-1964**
Scope and Contents note
(L'Ane Rouge)

box 12, folder 7  **Escott’s Puzzle 1962-1964**
box 12, folder 8  **Escott’s Slider - Solutions in 48 1970**
box 12, folder 9  **L’Ane Rouge 1961-1977**
Scope and Contents note
Computer programs

box 12, folder 10  **Unit Squares (counters) But Non-Rect 1964-1978**
box 12, folder 11  **Sliding Blocks (Rectangles) 1963-1987**
Scope and Contents note
Filipak's 1-2-3 puzzle
Line Up the Quinties (Fatiguant)
Dad's Puzzle (also Pennant Puzzle, Moving Day, Charlie Chaplin)
Flying Puzzle, New Boss Puzzle, Tokyo Parking
Correspondents:
Fulves, Karl
Dalgety, James
Vejmola, Stan
Rogers, Tom
Conway, John
Gordon, Leonard
Yoshagihara, Nob

box 12, folder 12  **Piet Hein’s Blox Box 1972-1973**
Scope and Contents note
Correspondents:
Knuth, Donald

---

Smullyan
box 44, folder 1  
**1978, March 1978-1988**  
Scope and Contents note  
Partial column  
Correspondents:  
Sickel, Sharon  
Kennedy, James

---

**Solar System**  
Physical Description: 2 folder(s)

box 22, folder 21  
**1970, April 1970-1978**  
Scope and Contents note  
"Bode and Kepler", by David Hanna (typescript)

---

**Solitaire**  
Physical Description: 6 folder(s)

box 8, folder 18  
**1962, June 1962-1969**  
Scope and Contents note  
Instructions for Polyaire, a Piet Hein game  
"25-Hole Triangular Solitaire", by Nob Yoshigahara (from Puzzle World)  
Various proofs of minima.  
Correspondents:  
Philpott, Wade  
Willcocks, T.H.  
Davis, Harry  
Beasley, John

box 8, folder 19  
**Theory 1962-2000**  
Scope and Contents note  
Stewart's Method  
Aker's Method  
Correspondents:  
Rubenstein, Michael  
Akers, Shelden  
Gordon, Gary  
Philpott, Wade  
Charosh, Mannis

box 8, folder 20  
**Problems undated**  
Scope and Contents note  
(of solitaire)

box 8, folder 21  
**Solidaire 1965**  
Scope and Contents note  
Single letter from MG to Davis, about 3-D solitaire
Game files Series 1
Solitaire

box 8, folder 22  Beasley, John 1981-1985
Scope and Contents note
Much correspondence, for Beasley's book on peg solitaire.
Correspondents:
Beasley, John
Maltby, John
Hutchings, Robert

box 8, folder 23  Square & Rectangular Boards undated
Scope and Contents note
Preprint: "Advances in Peg Solitaire", by Benjamin L. Schwartz

Soma Cube

box 4, folder 6  1958, September 2002
Scope and Contents note
reference to "Polycube folders", unknown location.
One article from MAA "Nine Cubits or Simple Soma", by Guy and Paulhus

Sphere Packing
Physical Description: 2 folder(s)

box 6, folder 4  1960, May 1950-1960
Scope and Contents note
Several monographs
Small pieces of paper, 3x5 cards, etc, in envelopes
Reports on experiments
Hodgden letter mentions B. Fuller & tensegrity; Hodgden claims discovery of tensegrity to a sphere.
Correspondents:
Coxeter, H.S.M.
Hodgden, Lee

box 6, folder 5  Sphere Packing [2 of 2] 1960-1966

Spheres & Hyperspheres

box 20, folder 3  1968, May 1968

Spirals

box 8, folder 14  1962, April 1962-1978
Scope and Contents note
... and Helices
"Spirals", by Gerald Oster (typescript)
Several models for drawing spirals of various types
Correspondents:
Lemon, Harvey
Hayward, Roger
**Sprouts & Brussels Sprouts**

*Physical Description: 2 folder(s)*

**box 19, folder 5**


*Scope and Contents note*

Lots of analysis, variations, proofs

*Correspondents:*

Paterson, Mike
Conway, John
Hartshorne, David
Gans, Eric
Isaacs, Rufus
Moore, Thomas

**box 19, folder 6**


*Scope and Contents note*

More analysis

*Correspondents:*

Layman, Robert
Grubin, Mike
Maas, Robert
Conway, John

**Square Packing**

*Physical Description: 4 folder(s)*

**box 17, folder 5**

**1966, September 1965-1996**

*Scope and Contents note*

Mrs. Perkins Quilt

*Correspondents:*

Conner, W.J.
Grindley, W.H.
Wainwright, Robert
Cutler, William

**box 17, folder 6**

**Moser’s Work 1960-1966**

*Scope and Contents note*

*Correspondents:*

Moser, Leo
Lindgren, Harry

**box 17, folder 7**

**49 Solutions 1966-1996**

*Scope and Contents note*

*Correspondents:*

Cutler, William
Reid, Robert
Minimum Square Problem (for \(1+2+\ldots+n\)) 1966-1978

Scope and Contents note
Correspondents:
- Golomb, Solomon
- Perjes, Zoltan

Squaring the Square

Scope and Contents note
Physical Description: 5 folder(s)

1958, November 1958-1984

Scope and Contents note
"Tables of Simple Squared Squares of Orders 13 through 21 and 2x1 Simple Squared Rectangles of Orders 17-21", by R.J.W. Duijvestijn, Department of Applied Mathematics, Technische Hogeschool Twente, 9- lug-79
Correspondents:
- Spindler, William
- Tutte, W.T.


Scope and Contents note
"Catalogue of simple squared rectangles of orders nine through fourteen and their elements", by C.J. Bouwkamp, A.J.W. Duijvestijn and P. Medema, Department of Mathematics, Technische Hogeschool, 1960
"Lowest Order Squared Rectangles and Squares with a Cross", by A.J.W. Duijvestijn and P. Leeuw, Technische Hogeschool Twente, Memorandum Nr. 278, 1979
"Lowest Order Squared Rectangles and Squares with the Largest Element not on a Boundry", by A.J.W. Duijvestijn and P. Leeuw, Technische Hogeschool Twente, Memorandum Nr. 279, 1979
Correspondents:
- Bordelon, Derrill
- Willcocks, T.H.

Federico's History 1978-1983

Scope and Contents note
Various articles by Pasquale Federico, and his historical review + bibliography
Correspondents:
- Federico, P.J.


Scope and Contents note
Correspondents:
- Duijvestijn, A.J.W.
- Ellis, Ray
- Federico, P.J.
- Goldberg, Michael
The 21 Dissection 1983
Scope and Contents note
see Federico folder (4/10)
Correspondents:
Schattschneider, Doris

Steen - Approval Voting
1980, October 1980
Scope and Contents note
Written by Lynn Arthur Steen.
Several articles by Steven Brams.
Discussion of future of Games column (with Steen)
Correspondents:
Brams, Steven
Ottewell, Guy
Lundgren, Carl

Steiner Triples, Kirkman Schoolgirls, & Handcuffed Prisoners (& Bridge)
Physical Description: 5 folder(s)

Ollerenshaw & Bands (Handcuffed Prisoners) 1980
Scope and Contents note
Correspondents:
Ollerenshaw, Kathleen

Handcuffed Prisoners 1973-1980
Scope and Contents note
MG notes.
Correspondents:
Mendelsohn, Nathan

Bridge Tournaments 1980
Scope and Contents note
MG notes.
(Also Whist tournaments.)

Kirkman Schoolgirls - etc 1980
Scope and Contents note
MG notes.
Correspondents:
Knuth, Donald

Strange maps
Physical Description: 9 folder(s)
1975, November 1975-1978
Scope and Contents note
"Wallpaper Mapes", by M.D. McIlroy (reprint?)
Correspondents:
Flanagan, Dennis
Gilbert, Edgar
Post, J.B.

Projections 1975-1998
Scope and Contents note
Various articles and examples
Correspondents:
Hill, Karl (Cahill)

E. N. Gilbert Mapes 1975
Scope and Contents note
Correspondents:
Gilbert, Edgar

Dissection Maps 1976
Scope and Contents note
Quincunial Projection
Butterfly Map (Cahill)
Refs to gnomonic projection to cube; gnomic projection to Icosahedron

On Harrison 1975
Scope and Contents note
Richard Edes Harrison
(Some very nice color maps of portions of the world in separate location.)

B. Fuller [1 of 2] 1975
Scope and Contents note
Various Fuller maps and related items


Harvard - Computer Graphics Lab 1978
Scope and Contents note
Newsletter, catalog, conference, symposium announcements, about Topological Data
Structures for Geographic Information Systems

Portney's Maps 1975
Scope and Contents note
Joe Portney: two calendars, 24 versions of the Earth: flat, dodecahedral, conical, sine-cosine, etc.

String
Physical Description: 2 folder(s)
box 9, folder 13

**1962, December 1962-1997**

- Scope and Contents note
- 3 photos of string figures, Yucan Territory
- Notes on murder mystery: "Leopard Cat's Cradle", by Jerome Barry
- String Releases (type of magic trick)
- Correspondents:
  - Katz, Max

box 9, folder 14

**Aragon's Poem 1962-1963**

- Scope and Contents note
- Many answers
- Christmas greetings
- End of strings article
- Correspondents:
  - Pauling, Linus
  - Burton, Dennis

---

**Tangent Circles**

- Physical Description: 10 folder(s)

box 47, folder 4

**1979, January 1978-1979**

- Scope and Contents note
- No article.
- Correspondents:
  - Goldberg, Michael
  - Graham, Ron

box 47, folder 5

**Packing Circles, Touching Circles 1964-1978**

- Scope and Contents note
- Original article (complete)
- Analysis by Philip Jackson, Donald Davies
- Correspondents:
  - Jackson, Philip
  - Davies, Donald
  - Harris, John
  - Pedoe, Dan

box 47, folder 6

**Circles to Squares (& Rectangles) 1978**

- Scope and Contents note
- Correspondents:
  - Goldberg, Michael

box 47, folder 7

**Circles to Circles 1959-1990**

- Scope and Contents note
- Correspondents:
  - Rowe, R.Robinson
<table>
<thead>
<tr>
<th>Box/Folder</th>
<th>Description</th>
<th>Correspondents</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>47, 8</td>
<td>Material from Schaer (Check for Book) 1978</td>
<td>Schwartz, Benjamin, Schaer, J., Jepsen, Charles</td>
<td></td>
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<tr>
<td>47, 9</td>
<td>Arbelos 1978</td>
<td>Bankoff, Leon</td>
<td></td>
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<tr>
<td>47, 10</td>
<td>Golomb's Coins 1973-1979</td>
<td>Isaacs, Rufus, Golomb, Solomon, Pedoe</td>
<td></td>
</tr>
<tr>
<td>47, 11</td>
<td>From Ron G. 1978</td>
<td>Graham, Ron</td>
<td></td>
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<tr>
<td>47, 12</td>
<td>Malgatti Problem 1967-1968</td>
<td>Michael Goldberg</td>
<td></td>
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<tr>
<td>47, 13</td>
<td>Circles to Triangles 1979-1981</td>
<td>Ammann, Robert, Hitotumatu, Sin</td>
<td></td>
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<tr>
<td>53, 10</td>
<td>Tasks That End</td>
<td>Flanagan, Dennis</td>
<td></td>
</tr>
<tr>
<td>47, 8</td>
<td>1983, April 1982-1983</td>
<td></td>
<td></td>
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</tbody>
</table>
box 53, folder 11  Hydra Problem 1982-1983
Scope and Contents note
Lots of papers/articles.
Correspondents:
Graham, Ron
Dershowitz, Nachum
Manna, Zohar

box 53, folder 12  Bulgarian Solitaire 1982-1984
Scope and Contents note
Lots of MG notes.
Correspondents:
Knuth, Donald
Bressoad, David (to Knuth)
Nadvorney, Leo
Brandt, Jorgen
Bernhart, Frank

box 53, folder 13  K (K-1) "Proofs" 1983-1984
Scope and Contents note
Correspondents:
Weiss, Benjamin
Brenner, Charles
Lindsey II, John
Akin, Ethan
Burhart, Frank
Farjon, David
Knuth, Donald
Marshal, Ian
Butler, William
Iguca, Kiyoshi

box 53, folder 14  18-Spot Problem (Graham & Berlekamp) 1976
Scope and Contents note
Correspondents:
Nelson, Harry
Silverman, David

Taxicab Geometry
Physical Description: 2 folder(s)

Scope and Contents note
Lots of short articles
Correspondents:
Krause, Eugene
Schwartz, Benjamin
Abbott, Ken
Game files Series 1

Taxicab Geometry

<table>
<thead>
<tr>
<th>Box</th>
<th>Folder</th>
<th>Date</th>
<th>Description</th>
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Ternary System

<table>
<thead>
<tr>
<th>Box</th>
<th>Folder</th>
<th>Date</th>
<th>Description</th>
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Tetraflexigons

Physical Description: 3 folder(s)

<table>
<thead>
<tr>
<th>Box</th>
<th>Folder</th>
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<th>Description</th>
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Subjects and Indexing Terms
Flexicubes
<table>
<thead>
<tr>
<th>Box Folder</th>
<th>Description</th>
</tr>
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</table>
| box 3, folder 10 | **Flexitube 1955-1978**  
Scope and Contents note  
Correspondents:  
Ming, Yong  
Edwards, Ron  
Legman, G.  
Whitney, James  
Wood, George  
Becker, Joseph  
Stone, A.H. (with analysis)  
Swinford, Paul  
Leech, John |
| box 14, folder 4 | **Tetrahedron**  
Physical Description: 4 folder(s)  
**1965, February 1965**  
Scope and Contents note  
"Three Structures by Buckminster Fuller in the Garden of the Museum of Modern Art, New York" (1959) (Poster/Booklet)  
Correspondents:  
Marengo, Norman  
Trigg, Charles |
| box 14, folder 5 | **Tetrahedra - Paper Models 1965**  
Scope and Contents note  
Correspondents:  
Trigg, Charles |
| box 14, folder 6 | **Alexander G. Bell 1964**  
Scope and Contents note  
Museum |
| box 14, folder 7 | **Tetrahedron Magic Trick undated** |
| box 19, folder 3 | **Tetrahexes & Tetraboloes**  
Physical Description: 2 folder(s)  
**1967, June 1967**  
Scope and Contents note  
Article; see folders |
| box 19, folder 4 | **Proofs of Tower Uniqueness 1967**  
Scope and Contents note  
Many (similar) proofs  
Correspondents:  
Klarner, David  
Holt, Machael |
The 24 Color Triangles

Physical Description: 2 folder(s)

1968, October 1961-1995

Scope and Contents note
Many examples, theory.
Trimino, Trifolia, Multi-Match III instructions (from Kadon Ent.)
Contack (Parker Brothers game, in letter)
Correspondents:
Coster, Ora & Theo
Parker Brothers, Inc
Philpott, Wade
Jonas, E.C.
Harris, John
Jones, Kathy
Haubrich, Jacques

Conway’s 27-cube Puzzles (& Trigg’s) 1967-1968

Scope and Contents note
Correspondents:
Trigg, Charles

The Hypercube

Physical Description: 5 folder(s)

1966, November 1966

Scope and Contents note
just article (see 4D Geometry folder)

Unfolding the Hypercube 1961-1980

Scope and Contents note
Correspondents:
Coxeter, H.S.M.
Levy-Leblond, J.M.
Schmidt, Eric
Nelson, Harry
Vidal, Claudio

Hypercube 1966-1974

Scope and Contents note
"The Ifth of Oofth", by Walter Tevis (Sci. FI. story from Galaxy Mag, Apr, 1957)
Ways to draw a hypercube
Correspondents:
Barton, Hiram
**Correct Solution to Max. Cubes in Hypercube 1966-2000**

Scope and Contents note

"Partial Solution to the Largest m-Cube in an n-cube", by Kay DeVicci (typescript)

Other solutions in the various letters below, summary in Guy's letter.

Correspondents:

- Pechenick, Kay
- Baer, Hermann
- De Jong, G. de Josselin
- Bosch, Eugen
- DeVicci, Kay
- Guy, Richard

**Prince Rupert's Hypercube Problem 1960-2000**

Scope and Contents note

Various solutions which disagree with each other

**The Infinite Regress**

**The Planiverse**

Physical Description: 5 folder(s)

**Planiverse Ideas from Readers 1980**

Scope and Contents note

Many ideas, designs, etc.

Correspondents:

- Dewdney, A.K.
- Harris, John
- Engel, Douglas
- Stewart, Ian
- Knowlton, Kenneth
Abbott's Flatland 1980-1983
Scope and Contents note
Ads & pictures of Arion Press version of Flatland.

Henle's Linear Go (Pinch) (& Other Linear Games) 1971-1980
Scope and Contents note
Linear Go (Henle), 1D Checkers (MG), 1D Chess
Correspondents:
Henle, James

The Supperellipse
Physical Description: 4 folder(s)

1965, September 1965-1988
Scope and Contents note
Magazine: "Dansk Kunsthaandvaerk 4", Aug. 1964 (Danish)
Magazine: "Inspiration 68" (Danish/English) - filed elsewhere
"King of Supershape", by Anne Chamberlin (photocopy of Esquire article, Jan ?)
"close-up, Piet Hein Bestrides Art & Science, A Poet With a Slie Rule", by Jim Hicks (photocopy)
Correspondents:
Knuth, Donald

Furniture undated
Scope and Contents note
Magazine articles, mostly Danish

On Center of Curve & Other New Properties 1965-1976
Scope and Contents note
Correspondents:
Van Ammers, Anthony
Hogan, Bill
Hein, Piet
Cundy, Martyn
Black, Norton

Lame Curves (other exponents) 1965-1967
Scope and Contents note
Correspondents:
Muses, Charles
Frey, harvey
Shelton, J. Paul
Hogan, Bill
Hall, David
Golomb, Solomon
Hein, Piet

Tictacktoe
Tiling Plane with Polygons

Physical Description: 6 folder(s)

Scope and Contents note
3,4,5,6 sides
No article
Correspondents:
Smith, Cyril
Hitotumatu, Sin
Hirshhorn, Michael
Szekeros, George
Grunbaum, Branko

Scope and Contents note
Correspondents:
Niven, Ivan
Schattschneider, Doris
Rice, Marjorie

Kershner - Papers, Letters 1975-1976
Scope and Contents note
Information on how he did analysis on pentagonal tilings, where he made mistakes, and some suggestions on how it should be done
Correspondents:
Kershner, R.

James New Pentagon! 1975-1977
Scope and Contents note
Analysis by Doris Schattschneider
Correspondents:
Bomford, Tony
James III, Richard E.
Kershner, R.
Coxeter, H.S.M.

Mrs. Rice's Patterns 1976-1978
Scope and Contents note
Rice's original drawings
comparison (by Schattschneider) of Rice & Kershner, and much analysis
(Note on Ammann's tiling in Schattschneider letter of 4 May, 1976)
Correspondents:
Schattschneider, Doris
Rice, Marjorie
Doris Schattschneider 1975-1979
Scope and Contents note
Details of history of pentagonal tilings interspersed in correspondance. Also several of her papers on pentagonal tiling.
Correspondents:
Schattschneider, Doris

Tiling with Polyominoes, etc.
Physical Description: 5 folder(s)

1975, August 1975-1978
Scope and Contents note
No article
"Puzzles for Christmas", by L.S. Penrose & Roger Penrose (reprint)
Error in statement of Conway Criterion
A Robert Reid tiling (with septominoes)

Polyomino tiling 1965-1975
Scope and Contents note
Lots of results and examples
Correspondents:
Klarner, David
Philpott, Wade
Harris, John
Bishop, Gregory
Conway, John
Conlan, Jim

Alternate Square and "Bracket" Heptomino 1975
Scope and Contents note
Lots of variations of tiling

Polyiamond Tiling 1965-1996
Scope and Contents note
Lots of examples & theorems on polyiamond tilings
Correspondents:
Harris, John
Bishop, Gregory
Wichman, Brian

Polyhex Tiling 1965
Scope and Contents note
Just a letter and drawings of tilings through 5 (pentahexes?)
Correspondents:
Bishop, Gregory

Time Stopping
1979, March 1979-1988
Scope and Contents note
"The Nature of Time", by Henry Lambert
"An Investigation of Hypertime Physics", by Frank Drummond (typescript)

Time Travel
Physical Description: 5 folder(s)

1974, May 1974-1994
Scope and Contents note
Notes & Short articles & adds for T.T. books (and limericks)
Audio tape: J. Richard Gott & Paul Nahin with Ira Flatow on "Talk of the Nation" (Science Friday), NPR program. (About 10 minutes of Car talk at beginning; Mathematics interview at end.)
Correspondents:
Sagan, Carl
Park, David

T.T. in Fiction, Drama 1974
Scope and Contents note
Lots of references plus a few stories
"Who's Cribbing", by Jack Lewis
"The Killer", by J. T. Oliver
Correspondents:
Propp, James

Time Travel Articles [1 of 2] 1974-1975
Scope and Contents note
Many articles, popular, philosophical, scientific (1953-1989)
Correspondents:
Horwich, Paul
Meiland, Jack

Scope and Contents note
Correspondents:
Weitzel, Donald

My Old Time Travel Story undated
Scope and Contents note
Notes on time travel (by MG)
Story, with annotations: "Lost Blue Eyes", by MG (typescript)

Topological Models
Topological Models

1957, June 1957
Scope and Contents note
Curious figures descended from the Moebius Band
Photos of wood models
Correspondents:
McClellan, John

Topological Recreations

1958, October 1958
Scope and Contents note
Gale (game)
Pencil Straw and Shoe String (Stewart Judah)
ring on Card puzzle
Network tracing puzzle
Ring Tie (Eddie Joseph)
Correspondents:
Grant, U.F.
Judah, Stewart

Topology

Physical Description: 3 folder(s)

Scope and Contents note
Many articles, some science fiction stories
Two "Trimobius" handkerchiefs, in separate envelope
Correspondents:
O’Beirne, Thomas
Tuckerman, L (from MG)
Encyclopedia Britannica
Leverett, Bill
Pitzel, Michael

1992
Scope and Contents note
Correspondents:
Marynov, Saken

Klein Bottle and Cross Cap 1963-1999
Scope and Contents note
Notes on paper models
Correspondents:
Stoll, Cliff
Harrison, Kent
Chaplin, Albin
**Trapdoor Ciphers**

**Physical Description:** 15 folder(s)

**box 40, folder 15**

**1977, August 1977-1988**

Scope and Contents note

Partial article

Some articles from "Cryptologia" magazine on Poe's cipher

Many readers solutions to Poe cipher

Various newspaper & magazine articles on cryptography

Correspondents:

Rivest, Ronald

Winkel, Brian

**box 40, folder 16**

**Lattice Ciphers undated**

Scope and Contents note

Article: "Hiding in Lattices", by Ivars Peterson (Science News, Vo. 152, July 5, 1997)

**box 40, folder 17**

**Biham & Shamir (DEA - Defective Fault Analysis) undated**

Scope and Contents note

Photocopy of New Scientist article from 9 Nov, 1996, "'Unbreakable' Code Cracked Wide Open", by Robert Mathews

**box 40, folder 18**

**Big Numbers 1992-1993**

Scope and Contents note

"Big Numbers & Little Secrets: PUblic Key Encriptography For the Hobbyist", by T. Kaliszewski, 1982 (book with floppy disk)

Correspondents:

Kaliszewski, T.

**box 41, folder 1**

**Articles [1 of 2] 1984**

**Articles [2 of 2] undated**

**box 41, folder 2**

**News Reports 1982**

**box 41, folder 3**


Scope and Contents note

Much correspondence between MG & Rivest, along with several papers by Rivest & others.

A packet of materials from RSA Data Security, Inc.

Correspondents:

Rivest, Ronald

**box 41, folder 4**

**Rivest, et. al. [2 of 2] undated**

Scope and Contents note

More articles, papers, announcements, newsletters, etc, on RSA encryption

**box 41, folder 5**

**Cracking SA Message RSA-129 undated**

Scope and Contents note

Mostly articles, from newspapers and magazines

**box 41, folder 6**
box 41, folder 7

Diffie & Hillman 1977
Scope and Contents note
Long articles & papers by and about Diffie-Hillman
Correspondents:
Weeks, Dennis

box 41, folder 8

Merkle [1 of 2] 1977
Scope and Contents note
Mostly version 8 of "Secure Communications over Insecure Channels", by Ralph Merkle, 28 pages (paper)

box 41, folder 9

Merkle [2 of 2] 1979
Scope and Contents note

box 41, folder 10

Simmons 1977-1983
Scope and Contents note
Correspondents:
Simmons, Gustavus

box 41, folder 11

Spinoffs 1978-1979
Scope and Contents note
Tossing a coin by mail
Dice by mail
Poker by mail (inspired by dice)
Zero knowledge proofs!
Computer network security
"The Albanian Generals Problem", by L. Lamport et.al., 1979 (SRI International Report CSL-97)
Correspondents:
Floyd, Robert
Rivest, Ronald
Lamport, Leslie

---

Tree Graphs

box 19, folder 23

1968, February 1968
Scope and Contents note
Correspondents:
Knuth, Donald
Kruskal, Joseph
Prentiss, Thomas
Asimov, Isaac

---

Tree-Plants (N in a Row)

Physical Description: 4 folder(s)
Game files Series 1
Tree-Plants (N in a Row)

box 37, folder 3  
Scope and Contents note  
No article.  
Photocopies of puzzle from 1821 book by John Jackson  
Correspondents:  
Macmillan, R.H.  
Grunbaum, Branko  
Sloane, N.J.A.

box 37, folder 4  
Scope and Contents note  
Correspondents:  
Van Teeseling, Tom  
Grunbaum, Branko  
Farrell, Jeremiah

box 37, folder 5  
Material Relating to Tree-Plant Patterns 1967-1976  
Scope and Contents note  
Legard's game  
Correspondents:  
Trigg, Charles  
Legard, A.R.

box 37, folder 6  
History U.S. Flag 1976  
Scope and Contents note  
Pictures of early flags.

Triangle  
Physical Description: 3 folder(s)

box 22, folder 24  
Scope and Contents note  
Correspondents:  
Charosh, Mannis  
Trigg, Charles

box 22, folder 25  
Five-con Triangle's ("Almost Congruent") undated  
Scope and Contents note  
Articles

box 22, folder 26  
Spot & Equilateral Triangle 1967-1986  
Scope and Contents note  
"Circus Triangles", by Herbert Grimsey & Donald Entwisle (photocopy of typescript)  
Correspondents:  
Waldvogel, Jorg  
Grimsey, A.H.R.

Trisection  
Physical Description: 3 folder(s)
1966, June [1 of 2] 1966
Scope and Contents note
Correspondents:
Keeler, Donald

Crank Trisection 1974-1987
Scope and Contents note
Correspondents:
Dudley, Underwood

Trivalent Graphs
Physical Description: 8 folder(s)

1976, April 1996
Scope and Contents note
Incomplete column

Published Papers on Snarks [1 of 2] 1976-1980
Scope and Contents note
Many papers, offprints, typescripts, etc.
Correspondents:
Beraha, Sami
Secrest, Don

Scope and Contents note
More articles, etc

The Graph "Super Task" 1976
Scope and Contents note
Correspondents:
Kaufman, richard

Isaacs' Letters 1975-1978
Scope and Contents note
Rufus Isaacs
Rufus' correspondence with various letter writers, on Snarks

Corrections (Federico) undated
Scope and Contents note
Photocopy of (original S.A.) article
Several (old) articles, referenced in Federico letter
Correspondents:
Federico, P.J.
<table>
<thead>
<tr>
<th>Box/Folder</th>
<th>Description</th>
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</table>
| 36, Folder 10 | **Reader Response on Snarks 1976-1979**  
Scope and Contents note  
Correspondents:  
Wilson, Robin  
Harary, Frank  
Thomas, J.M. |
| 36, Folder 11 | **The Hamiltonian Path, etc. 1976**  
Scope and Contents note  
Correspondents:  
Isaacs, Rufus |
| 24, Folder 1 | **TTT**  
**1971, August undated**  
Scope and Contents note  
Ticktacktoe (see separate TTT folder)  
Just the article (not complete) |
| 23, Folder 22 | **Turing Machines & Game**  
**1971, June 1991** |
| 46, Folder 1 | **Unit Fractions (Reciprocals) (Egyptian)**  
Physical Description: 3 folder(s)  
**1978, October [1 of 3] 1980**  
Scope and Contents note  
Incomplete article.  
Many articles on unit fractions  
"Egyption Fractions", by Nicola Franceschine, III, Thisis (Sonoma State) 1978  
Correspondents:  
Wells, David  
Hitotumatu, Sin |
Scope and Contents note  
Many readers letters with examples.  
MG notes.  
Correspondents:  
Hitotumatu, Sin |
Scope and Contents note  
Correspondents:  
Hitotumatu, Sin  
Guy, Richard  
Graham, Ron  
Bleicher, Michael |
Unsolved Problems

Physical Description: 3 folder(s)

box 25, folder 8
1972, June - Chromatic No. of Plane 1966-1972
Scope and Contents note
Incomplete article
Correspondents:
Golomb, Solomon
Ulam, Stanislav
Smith, David

box 25, folder 9
Slither (Standard) 1971-1974
Scope and Contents note
Analyses
Correspondents:
Miller, George
Read, Ronald
Beeler, Michael
Silverman, David
Anderson, L.William, Jr.

box 25, folder 10
Slither (Misere) 1972-1997
Scope and Contents note
Correspondents:
Beeler, Michael
Selfridge, Oliver
Santos, Bernardo

Walk With Dr. Matrix

box 21, folder 1
1969, January 1968-1969
Scope and Contents note
Correspondents:
Cheney, Fitch
Abramson, Harvey

Waring Problem (& "Easier" problem)

Physical Description: 4 folder(s)
Waring Problem (& "Easier" problem)

**box 28, folder 1**

1973, December 1973

Scope and Contents note
No article.
MG notes.
Articles, bibliographies
Correspondents:
Shanks, Daniel
Tuckerman, Bryant
Meally, Victor
Klarner, David
Sluizer, Allan

**box 28, folder 2**


Scope and Contents note
"Tables of Solutions of the Diophantine Equation x3 + y3 = z3 -d", by V.L. Gardiner, R.B. Lazarus, & P.R. Stein, LA-5463-MS, Nov, 1973
Correspondents:
Stein, Paul R.

**box 28, folder 3**


Scope and Contents note
MG notes.
Correspondents:
Fuchs, Wolfgang
Wright, Edward M.
O'Shaughnessy, P.S.

**box 28, folder 4**


Scope and Contents note
Correspondents:
Shombert, George
Card, L.E.
Hansen, Wilfred
Berenson, R.S.
Cordray, R.E.
Stein, Paul R.

**Wheel**

Physical Description: 4 folder(s)

**box 23, folder 1**


Scope and Contents note
No article
Mostly articles & clippings on wheel
Correspondents:
Gutgasz, Hiram Fuller
box 23, folder 2  **Wankel Engine 1967-1977**
Scope and Contents note
Clippings and articles.

box 23, folder 3  **Epi- & Hypo-Cycloids 1976**
Scope and Contents note
Analysis of Hypocycloid of Three Cusps (Gutgasz letter)
Correspondents:
Gutgasz, Hiram Fuller

box 23, folder 4  **Cardoid & Nephroid undated**
Scope and Contents note
Pictures, problems, articles, model

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**Word Play**
Physical Description: 2 folder(s)

box 13, folder 11  **1964, September 1964**
Scope and Contents note
Correspondents:
Borgmann, Dmitri
Bird, Byron

box 13, folder 12  **Anagrams of LBJ & BMG 1964**
Scope and Contents note
Lyndon Baines Johnson and Barry Morris Goldwater
Correspondents:
Owens, David
Robinson, Raphael
Borgmann, Dmitri

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**Worm Paths**
Physical Description: 5 folder(s)

box 27, folder 13  **1973, November 1973-1985**
Scope and Contents note
No article
Correspondents:
Wyvill, Geoff
Beeler, Michael
Tenney, Bob
Bell, John
box 27, folder 14  **Spirolaterals 1971**  
Scope and Contents note  
Correspondents:  
Odds, Frank  
Beeler, Michael  
Thompson, Hugh  
Thomas, James  
Wolfram, Steven  
Foxwell, Harry

box 27, folder 15  **Mike Beeler [1 of 3] 1973**  
Scope and Contents note  
"Patterson's Worm", by Michael Beeler (Artificial Intelligence Memo No. 290, June 1973, MIT A.I. Laboratory)

box 27, folder 16  **Mike Beeler [2 of 3] 1973**  
Scope and Contents note  
Continuation of Beeler paper

box 27, folder 17  **Mike Beeler [3 of 3] 1973**  
Scope and Contents note  
End of paper, also microfiche of the paper, notes and correspondence abut the paper  
Correspondents:  
Beeler, Michael

**Wythoff's Game & Fib. Nos.**  
Physical Description: 4 folder(s)

Scope and Contents note  
"A Generalization of Wythoff's Game", by M. E. Hoggatt, Jr, et. al. (photocopy of typescript)  
Correspondents:  
Hitotumatu, Sin

box 39, folder 14  **Silber's Papers 1976-1977**  
Scope and Contents note  
Reprints of Silber's articles in Fibonacci Quarterly  
Correspondents:  
Silber, Robert

box 39, folder 15  **Beatty Sequences 1976-1978**  
Scope and Contents note  
Some articles by Ron Graham, by Kenneth Stolarsky, Solomon Golomb, and E.N. Gilbert  
Correspondents:  
Stolarsky, Kenneth  
Hoggatt, Vernon
Scope and Contents note
Description of Tianshidsi, a generalization of Wythoff's Game
Correspondents:
Fraenkel, Aviezri

Subject files  Series 2

3 Dimensional Objects
Physical Description: 29 folder(s)

box 73, folder 1  From Box 10, Folder 4: Plane Dissections
Scope and Contents note
1. 8 piece dissection of square or rhombus, from Bill Gosper
2. 10 piece pentagram dissection and 5 piece pentagon dissection, from Gwen Roberts
3. Tetrods, by Alex Randolph, from Ed Pegg, Jr
4. Pentagonia (1 pentagon to 5 pentagons), from Stan Isaacs
5. Word Pack (pack letters into rectangle), from Peter Winkler

box 73, folder 2  From Box 10, Folder 4: Plane Dissections
Scope and Contents note
1. 8 piece dissection of square or rhombus, from Bill Gosper
2. Trigram Set "Exploring Trigonometry with Dr. Super's Trigrams", Product # 462, Stokes Publishing Company
3. 2D Geometric Put-Together Puzzles, from Tom McElhany
   a. Model G2 - latin cross to square Set 1G
   b. Model G6 - 6 point star to hexagon 
   c. Model G9 - square to swastika

box 73, folder 3  From Box 13, Folder 5: Curves & Art (Equations Graphed)
Scope and Contents note
Set of postcards "Pictorial Mathematics", Series B, Nos. 1-32 (not complete)

box 73, folder 4  From Box 14, Folder 7: Tesselations (Mosaics) [3 of 3]
Scope and Contents note
Plastic tiles, 2 pentagonal shapes, from Ed Pegg, Jr.

box 73, folder 5  From Box 15, Folder 9: Tesselations
Scope and Contents note
Plastic shapes from tessellations, 10 shapes, 2 of each, colored.

box 73, folder 6  From Box 15, Folder 12: Solid Geometry
Scope and Contents note
Cardboard model of dodecahedron, advertising "The Restless Earth" television show, 10 faces with photos

box 73, folder 7  From Box 17, Folder 1: Rotating Tetrahedral Rings
Scope and Contents note
IsoAxis - Cardboard sheet that folds to IsoAxis model
<table>
<thead>
<tr>
<th>Box/Folder</th>
<th>Description</th>
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</thead>
</table>
| 73, 8      | **From Box 17, Folder 1: Rotating Tetrahedral Rings**  
  Scope and Contents note  
  Tumbli - sheet of 32 triangles (plus tabs) that folds to a ring of 8 tetrahedra that rotates |
| 73, 9      | **From Box 24, Folder 10: Weighing Problems**  
  Scope and Contents note  
  2 calculators for 3 false-coin puzzles, from Emmet J. Duffy |
| 73, 10     | **From Box 25, Folder 10: Weighing Problems**  
  Scope and Contents note  
  15 pennies for sliding-coin puzzles, by Erik & Martin Demaine |
| 73, 11     | **From Box 27, Folder 3: MacMahon's Color Hexagons**  
  Scope and Contents note  
  4 sets of Voz Tiles (7 hexagons, each of 6 out of 7 colors) |
| 73, 12     | **From Box 29, Folder 7: Necktie Paradox & Variants**  
  Scope and Contents note  
  Cassette tape - radio interview with Nathan Davinsky (mathematician & chess player), including in the first section the Necktie Paradox (as: Should we exchange envelopes with money.) |
| 73, 13     | **From Box 30, Folder 3: Dice Probability Problems**  
  Scope and Contents note  
  Set of 3 Magic Dice (non-transitive dice) |
| 73, 14     | **From Box 33, Folder 8: Hexagonal Tessellation Games**  
  Scope and Contents note  
  Hexcheckers Game (gameboard, counters, instructions) |
| 73, 15     | **From Box 47, Folder 9: Kohl, Herb**  
  Scope and Contents note  
  5 inch floppy disk with polyomino demo |
| 73, 16     | **From Box 51, Folder 4: Fondos' Red/Green Device**  
  Scope and Contents note  
  Mechanical model of device |
| 74, 1      | **From Box 51, Folder 13: Logic Cards**  
  Scope and Contents note  
  a. Logic cards (3 kinds: Jevons' system; Red&Blue squares in square windows; circle windows)  
  b. First set of T-Value cards  
  c. Cards for determining all valid conclusions of any two premises  
  d. Syllogis machine, by C.C. Foster |
| 74, 2      | **From Box 53, Folder 7: Pentominoes (Misc)**  
  Scope and Contents note  
  Modest Hexominoes Puzzle, by Dick Hess, 1997  
  Fill-Agree - A punctured polyomino puzzle, by Kate Jones |
box 74, folder 3  From Box 53, Folder 13: Hexominoes
  Scope and Contents note
  Complete set of green pentominoes & red hexominoes, in plastic, solved as a 15x18 rectangle

box 74, folder 4  From Box 54, Folder 13: Polyaboloes
  Scope and Contents note
  Cardboard cutouts of 14 tetraboloes

box 74, folder 5  From Box 56, Folder 1: Polyhex
  Scope and Contents note
  1 cardboard set of tetra-hexes

box 74, folder 6  From Box 56, Folder 10: Magic Square Magic Tricks
  Scope and Contents note
  "The Ultimate Magic Square", deck of 16 cards (a number on each side) plus instructions (in German), by Christoph Wasshuber (Chris the Magician)

box 74, folder 7  From Box 57, Folder 10: Magic Hexagons
  Scope and Contents note
  Magic Hexagon Puzzle (magnetic), by Signal

box 74, folder 8  From Box 60, Folder 4: Paper Folding[2 of 3]
  Scope and Contents note
  Several "Rabbit in the Hat" examples

box 74, folder 9  From Box 60, Folder 4: Paper Folding[2 of 3]
  Scope and Contents note
  Wire portrait of Martin Gardner, mounted on cardboard

box 74, folder 10  From Box 74, Folder 10: Paper Cutting & Tearing
  Scope and Contents note
  3 folded papers, each to be cut (once)
  2 results after cut
  Result seems to be several stars, strung together

box 74, folder 11  From Box 60, Folder 7: Paper Cutting & Tearing
  Scope and Contents note
  Haskell's new paper cut (3 copies)

box 74, folder 12  From Box 60, Folder 8: Math. Origami, History of
  Scope and Contents note
  Package of paper for Origamics exercise

box 74, folder 13  From Box 63, Folder 7: Japanese Puzzles
  Scope and Contents note
  1990 calendar from Puzzle City (Toyo Glass)
  1992 calendar from Puzzle City (Toyo Glass)
Subject files Series 2

666

Physical Description: 13 folder(s)

box 69, folder 7  

666-Main Properties 1978-2000
Scope and Contents note
Lots of notes, letters, articles, etc. with properties of 666
Magic trick: The Devil's Prare-Book, by Rhett Bryson

box 69, folder 8  

Scope and Contents note
Many notes, letters, articles, etc.

box 69, folder 9  

Scope and Contents note
"The super Deceiver of the World Horizon", by James C. Hollenbeck, 1953 (18th ed),
63pp (booklet)

box 69, folder 10  

666 and 777 1982-1997
Scope and Contents note
Computer program and output relating to Gardner articvla in Asimov magazine on
"The Number of the Beqast", July, 1983

box 69, folder 11  

Proctor & Gamble Logo 1982-1997
Scope and Contents note
Charges that P&G logo was Satanic, & refutations

box 69, folder 12  

666- SDA & Jehovah's Witnesses 1975-1976
Scope and Contents note
Seventh Day Adventists & Njehovah's Witnesses

box 69, folder 13  

666- and Names 1960-1999
Scope and Contents note
Correspondents:
Hein, Piet (Hoebens)
Stueben, Michael

box 69, folder 14  

Scope and Contents note
Many articles

box 70, folder 1  

Scope and Contents note
More articles

box 70, folder 2  

Scope and Contents note
More articles

box 70, folder 3  

SDA Literature 1952-1993
Scope and Contents note
Mostly mail flyers, one article
Subject files Series 2

Whisenant's 88 Reasons - For 1988 1988-1989
Scope and Contents note
Articles about prophacy, not the actual reasons (about the second coming, End-of-the-World)

Recent Failed Prophecies 1989-2000
Scope and Contents note
Articles about End-Of-World (Second Coming) prophecies

Algebra
Physical Description: 10 folder(s)

Algebra 1965-1995
Scope and Contents note
Several good algebra problems.

Graphs 1977

Clock Puzzles 1964-2000
Scope and Contents note
Correspondents:
Spahn, Mark

Speed, Distance 1959-1995
Joint-Effort Prob's (work, grass, eating, etc) 1954-1966
Linear Programming (Siimplex, & Khachian) 1979-1990
Scope and Contents note
Reports on the Khachian "controversy."

Karmarkar's Algorithm 1984-1989
Scope and Contents note
Linear Programming.

Radon Transform (& CAT) 1986-1988
Scope and Contents note
(Also Fermat's Lawst Theorem, and Yoichi Miyaoka's proof (not correct) of it.)
Correspondents:
Gleick, James

Scope and Contents note
Abeles, Francine

Matrix Theory 1992

Arithmetic Numbers
Physical Description: 32 folder(s)
Subject files Series 2
Arithmetic Numbers

box 4, folder 1  Numbers (Arith) [1 of 3] 1951-1976
Scope and Contents note
"On Products of Factorials", by P. Erdos & R. Graham (typescript)
"Nonnegative Digit Sets in Positional Number Systems", by A.M. Odzyzko (typescript)
Lots of problems involving integers.
Correspondents:
Nelson, Harry
Silverman, David

Scope and Contents note
"One Plus Two Equals Three", by William Blewett (typescript)
"A New Representation of the Rational Numbers for Fast Easy Arithmetic", by E. Hehner & R. Horspool (typescript)
Correspondents:
Oliver, Barney
Knuth, Donald

box 4, folder 3  Numbers (Arith) [3 of 3] 1990-2002
Scope and Contents note
Hiroimono, Ziggurats and many other integer problems.
"Strong Law of Small Numbers", by Richard Guy (reprint)
"Zifferntreue Vielfache", by Hans Determann, 1998 (in German)
Correspondents:
Vos Savant, Marilyn
Santora, Norman
Arisawa, Makoto
Knuth, Donald
Wainwright, Robert

box 4, folder 4  Notation 1981-1982
Scope and Contents note
2 articles, one on notation ambiguities & differences between authors and cultures, the other on Roman numerals.

box 4, folder 5  Numbers With all 9 (or 10) Digits 1976-1985
box 4, folder 6  End Digit Transposals 1970-2000
Scope and Contents note
Correspondents:
Card, L.E.

box 4, folder 7  123456789 & 987654321 1961-2001
Scope and Contents note
"Krypto" game.
Correspondents:
Angstrom, Knut
Patton, Robert
Brainerd, Walter
Hastings, Don
Hein, Piet
Knuth, Donald
box 4, folder 8  

Age Puzzles of all Types 1963-1991  
Scope and Contents note  
(Originally "Ford" type, Ford is crossed out.)  
"Ford" must be Lester Ford.  
Correspondents:  
Ford, Lester  
Theimer, Ernst

box 4, folder 9

The 4 No's (abs. Difs.) [Ducci] curiosity 1966-1992  
Scope and Contents note  
Correspondents:  
Meyers, Leroy

box 4, folder 10

The Looping Formulas 1973-1991  
Scope and Contents note  
"On Periodic Sequences Defined by Recurrences", by Conway & Graham (photocopy)  
Correspondents:  
Liu, Stanley Wu-Wei  
Graham, Ron  
Bosch, Warren  
Conway, John  
Eberhard, Steven  
Lenard, Andrew

box 4, folder 11

Josephus Problem 1960-1972  
Scope and Contents note  
Correspondents:  
Kaplansky, Irving

box 4, folder 12

Rep-A Decimals 1961-1994  
Scope and Contents note  
Recurring decimals?  
Correspondents:  
Spat, Melvin  
Morris, Scot

box 4, folder 13

Arith. Shortcuts 1956-1972  
Scope and Contents note  
Many MG notes.  
Correspondents:  
Smith, Cedric

box 4, folder 14

Cryptarithms 1959-1998  
Scope and Contents note  
Lots of examples; variations, other bases, etc.  
Correspondents:  
Cheney, Fitch  
Kruskal, Martin  
Computer Art & Graphics [1 of 2], Don  
Kahan, Steven
box 4, folder 15
box 4, folder 16

From Alan Wayne (Cryptarithms) 1975-1989
Numbers as Words (Cryptarithms) 1968-1994

Scope and Contents note
... and foreign language.
Correspondents:
Piel, Gerard
Yoshagihara, Nob
Gordon, Leonard

box 5, folder 1

Skeleton Puzzles 1939-1994

Scope and Contents note
Cryptarithms with all (or some) numbers starred.
Correspondents:
O’Beirne, Thomas

box 5, folder 2

Fractions 1961-2000

Scope and Contents note
"Numerous Numberals", by James Henly, NCTM, 1975 (pamphlet)
"Minimidy Modules", by Samuel Yates, 1978 (draft)
Correspondents:
Henle, James

box 5, folder 3

 Continued Fractions 1952-1996

Scope and Contents note
Correspondents:
Gosper, Bill
Hill, F.S.
Allison, Marvin

box 5, folder 4

Continued Square Roots 1995

Scope and Contents note
Correspondents:
Clawson, Calvin

box 5, folder 5

Binary System Items 1954-1993

Scope and Contents note
Digicomp (plastic toy digital computer) c.1964.
Bar Codes article.
Lots of MG notes, many small items.
Correspondents:
Hansson, Sven-Ove

box 5, folder 6

Duodecimal & Other Systems 1959-1971

Scope and Contents note
Publications of the Duodecimal Society of America, including several Duodecimal Bulletins.
"Others" are a short article on Octal Number System, and one on Hexadecimal numbers.
box 5, folder 7  **Metric System 1972-1987**  
Scope and Contents note
Several metric calculators.
Several articles on whether to switch or not.
Correspondents:
Knuth, Donald

box 5, folder 8  **Mixed Radix Notation 1975**  
Scope and Contents note
"Variable Number Base", by Francis Miles (typescript with cover letter.)

box 5, folder 9  **Multiplication (Rapid) (& Napier's Bones) 1967-1975**  
Scope and Contents note
MG notes.
Correspondents:
Healey, Tim
Flanagan, Dennis (to Knuth)

box 5, folder 10  **Euler's Gamma Constant (& Function) & Relation to Factorials 1959-1972**  

box 5, folder 11  **Logarithms 1973-1978**  
Scope and Contents note
"Logarithms", by N. David Mermin (typescript)
Correspondents:
Mermin, N.D.
Lanterman, W.F.

box 5, folder 12  **Tarry-Escott Problem 1937-1965**  

box 5, folder 13  **Moebius Strip Slide Rule for complex Numbers 1978**  
Scope and Contents note
Correspondents:
Kofman, Gil

box 5, folder 14  **Numbers Without 1's Problem (Steve Kuhn) 1987**  
Scope and Contents note
Correspondents:
Kuhn, Steven

box 5, folder 15  **Bar Codes 1991**  

box 5, folder 16  **Partition Theory 1959-1000**  
Scope and Contents note
Many MG notes.
"The Division of a Number into Parts So That The Product ... Maximum", by Harry Lawther (manuscript photocopy)
Correspondents:
Andrews, George
Lawther, Harry
Halliburton, Jack
<table>
<thead>
<tr>
<th>Box, Folder</th>
<th>Title</th>
<th>Series Date</th>
<th>Physical Description</th>
<th>Scope and Contents Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>box 45, folder 12</td>
<td>Recognizing Faces</td>
<td>1995</td>
<td>13 folder(s)</td>
<td>1 article, from Discover</td>
</tr>
<tr>
<td>box 45, folder 13</td>
<td>Art. Intell. (AI)</td>
<td>1960-1993</td>
<td></td>
<td>Many articles, technical &amp; popular, and references &amp; notes on AI</td>
</tr>
<tr>
<td>box 45, folder 14</td>
<td>Turing Machine</td>
<td>1967-1989</td>
<td></td>
<td>Articles, mostly technical</td>
</tr>
<tr>
<td>box 45, folder 15</td>
<td>Turing Game</td>
<td>1950-1973</td>
<td></td>
<td>Turing Game is &quot;imitation game&quot; or &quot;Turing Test&quot;</td>
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<td>Several technical articles</td>
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<td>&quot;Computing Machinery and Intelligence&quot;, by A.M. Turing, Mind, 1950</td>
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<tr>
<td>box 45, folder 16</td>
<td>Can Computers &quot;Think&quot;, be &quot;Conscious&quot; - etc (Searle, etc)</td>
<td>1971-1991</td>
<td></td>
<td>Several articles, technical as well as popular, mostly philosophical</td>
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<td>(Subject of June, 1971, Mathematical Games column)</td>
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<td>Correspondents:</td>
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<td>Sekal, Alan</td>
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<td>Gunderson, Keith</td>
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<td>Hawton, Michael</td>
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<tr>
<td>box 45, folder 17</td>
<td>M. Adler on Computers &amp; Al</td>
<td>1968</td>
<td></td>
<td>Long typescript review by MG, of Mortimer Adler's work</td>
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<td>MG notes</td>
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<td></td>
<td>&quot;New York Review&quot; review of 2 Adler books (not by MG)</td>
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<tr>
<td>box 45, folder 18</td>
<td>The Human Brain - Simulation of Life, etc</td>
<td>1955-1987</td>
<td></td>
<td>Many articles, mostly popular, some technical</td>
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<td></td>
<td>&quot;Mathematical Models for the Living Brain&quot;, by N.G. de Bruijn, 22pp (typescript)</td>
</tr>
<tr>
<td>box 45, folder 19</td>
<td>Pattern Recognition &amp; Perceptrons</td>
<td>1966-2002</td>
<td></td>
<td>A few popular articles</td>
</tr>
<tr>
<td>box 45, folder 20</td>
<td>Induction Programs</td>
<td>1981-1985</td>
<td></td>
<td>Several articles</td>
</tr>
</tbody>
</table>
Subject files Series 2
Artificial Intelligence (AI)

<table>
<thead>
<tr>
<th>Box 45, Folder</th>
<th>Description</th>
</tr>
</thead>
</table>
| 45, 21         | **LISP 1983**  
Scope and Contents note  
3 S.A. articles (Hofstadter) |
| 45, 22         | **Talking Computers 1972-1988**  
Scope and Contents note  
Several articles |
| 45, 23         | **Translating Languages 1956-1989**  
Scope and Contents note  
Several articles |
| 45, 24         | **Robotics 1951-2000**  
Scope and Contents note  
MG references and notes  
Lots of articles  
Correspondents:  
Helmers, Carl |

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**Bible**

Physical Description: 6 folder(s)

<table>
<thead>
<tr>
<th>Box 69, Folder</th>
<th>Description</th>
</tr>
</thead>
</table>
| 69, 1          | **Bible & Numerology 1954-1993**  
Scope and Contents note  
Correspondents:  
Borgmann, Dmitri |
| 69, 2          | **Gematria (Cabbala) & Medieval 1959-1997** |
| 69, 3          | **Panin 1934-1983**  
Scope and Contents note  
Ivan Panin, a Russian fundamentalist & numerologist |
| 69, 4          | **The 144,000 Saints 1975-1988**  
Scope and Contents note  
Seventh Day Adventist views  
Jehovah's Witnesses views |
| 69, 5          | **Elvin Lee 1982-1984**  
Scope and Contents note  
Correspondance with autobiographical information, mathematics problems & puzzles, and biblical numerology  
Amicible numbers |
| 69, 6          | **Norman Bloom 1976**  
Scope and Contents note  
2 copies of "The New World", publication by Norman Bloom, from Aug. 8, 1976 and Nov. 15, 1976 |

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**Board Games**

Physical Description: 27 folder(s)
box 32, folder 10  

**Board Games [1 of 2] 1961-1975**

Scope and Contents note
Many games described or analysed, including:
- Jews & Arabs
- Coprime Nim
- Kercheck (Maxey Brooke) ("Retreat")
- Switch
- Games on Shogi board
- Lines of Action
- Tromino Go
- Jungle
- Null
- Laska
- Knight Chase
- Fez
- Towers
Correspondents:
- Conway, John
- Penszko, Marek
- Abbott, Robert
- Shepherd, Wilfred
- Sackson, Sid
- Thayer, John
- Scott, Gini
- Randlett, Samuel
- Feather, Martin

box 32, folder 11  


Scope and Contents note
- Senet
- Kensington
- Square Off
- Dodge
- Terrorist Attach 101
Correspondents:
- Shahshahani, S.
- Walton, Dale
- Abbott, Robert
- Parkin, Robert
<table>
<thead>
<tr>
<th>Box Folder</th>
<th>Title</th>
<th>Description</th>
</tr>
</thead>
</table>
| box 32, folder 12 | **Solomon Game 1982-1992** | Scope and Contents note  
Combinatorial board  
A game by MG, subtitled "A Game of Peace"  
"Solomon: The Game of Peace", by Martin Gardner, 26pp (typescript) - Description, history, strategy & variations for the game  
Correspondents:  
Schmittberger, Wayne  
Jones, Kathy |
| box 32, folder 13 | **Soloman Puzzles 1984** | Scope and Contents note  
MG notes on puzzles from game of Solomon |
| box 33, folder 1 | **Go 1970-1998** | Scope and Contents note  
Correspondents:  
Wells, David  
Wynn, Stephen |
| box 33, folder 2 | **Mastermind (& Bulls & Cows) 1966-1977** | Scope and Contents note  
Several attempted analyses  
Correspondents:  
Rasper, John  
Morgan, Dennis  
Gittings, Thomas |
| box 33, folder 3 | **Simple Games - Solution Known & Unknown 1956-1996** | Scope and Contents note  
Tiger and Elephants  
Winemanship  
"Theorem on Certain Types of Games, with Applications", by Herbert Salzer (typescript); includes Nim, Kayles, Cornering the Pig  
"Cheap, Middling, or Dear", by V. Chuatal (typescript)  
"Silverman's Game on Intervals", by Ronald Evens (typescript)  
Correspondents:  
Silverman, David  
Salzer, Herbert  
Liu, Andy |
| box 33, folder 4 | **Phutball 1974-1978** | Scope and Contents note  
Correspondents:  
Conway, John  
Knuth, Donald  
Atwater, Thomas |
<table>
<thead>
<tr>
<th>Box/Folder</th>
<th>Description</th>
<th>Scope and Contents note</th>
<th>Correspondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>33, folder 5</td>
<td><strong>Mancala Games 1894-1978</strong></td>
<td></td>
<td>Abbott, Robert</td>
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<td>Weinberg, Gerald</td>
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<tr>
<td>33, folder 6</td>
<td><strong>McCue's Automata (Tanks) Game 1974</strong></td>
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<td>McCue, Brian</td>
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<td>33, folder 7</td>
<td><strong>Logiquad (Marbles) 1974</strong></td>
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<td>Pos, Norman</td>
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<tr>
<td>33, folder 8</td>
<td><strong>Hexagonal Tessellation Games (Chinese Checkers, etc.) 1964-1983</strong></td>
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<td>Koontz, John</td>
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<td></td>
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<td>Shepherd, Wilfred</td>
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<td></td>
<td><strong>Hexcheckers (game in different folder)</strong></td>
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<td><strong>Agon &amp; Queens Guard</strong></td>
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<td><strong>Hex-A-Board</strong></td>
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<td><strong>Surround (Edward Weed)</strong></td>
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<td><strong>Wargame simulations in John Koontz letter</strong></td>
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<td><strong>Koontz, John</strong></td>
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<td><strong>Shepherd, Wilfred</strong></td>
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<tr>
<td>33, folder 9</td>
<td><strong>Marek Penszko 1969-1983</strong></td>
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<tr>
<td></td>
<td>**Various games &amp; puzzles, printed on card stock, including Mini Krzyzowki,</td>
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<td></td>
<td><strong>Teczowy Krwiat, Waz, Wi Row Ka, Harcaby, Kratkownica, &amp; Nakrywanka</strong></td>
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<tr>
<td>33, folder 10</td>
<td><strong>Triangular Bridg-it 1964</strong></td>
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<tr>
<td>33, folder 11</td>
<td><strong>Twixt &amp; Variants 1969-1978</strong></td>
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<tr>
<td>33, folder 12</td>
<td><strong>Rithmomachy 1946-1989</strong></td>
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<td></td>
<td>**&quot;Boissiere's Pythagorean Game&quot;, by John F.C. Richards, 1946 (pamphlet</td>
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<td><strong>reprint)</strong></td>
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<tr>
<td>33, folder 13</td>
<td><strong>Monopoly 1973-1996</strong></td>
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<td></td>
<td><strong>Shortest Monopoly game</strong></td>
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<tr>
<td></td>
<td>**Many newspaper articles about history, lawsuits, and other related</td>
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<tr>
<td></td>
<td><strong>Monopoly happenings</strong></td>
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<td><strong>Correspondents</strong></td>
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<td></td>
<td><strong>Cave, James</strong></td>
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<td><strong>Hoffman, Paul</strong></td>
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</tr>
</tbody>
</table>
Subject files Series 2
Board Games

box 33, folder 14  Laska 1980
Scope and Contents note
Sixstaxs, a solitaire (peg jumping) puzzle from Laska
Correspondents:
Lushbaugh, Warren

box 33, folder 15  Backgammon 1980-1981
box 33, folder 16  Nost 1967
Scope and Contents note
Knights of the Square Table

box 33, folder 17  Epaminodas (Abbott) 1974
Scope and Contents note
Correspondents:
Abbott, Robert

box 33, folder 18  Holt's "Mem" 1968
box 33, folder 19  Simulation Games 1971-1983
Scope and Contents note
Many ads for various simulation games

box 34, folder 1  War Games 1962-1982
Scope and Contents note
Articles on war games and war gaming
Correspondents:
Schwartz, Benjamin

box 34, folder 2  Chinese Checkers (Hist.) 1994
Scope and Contents note
Issue of quarterly journal, Hedge Apple and Devil's Claw, Spring, 1994, by John Brewer. Contains several stories and articles by him, including his attempts to trace the history of Chinese Checkers.

box 34, folder 3  Lewis Carroll Game 1990-1997
Scope and Contents note
Word game by MG, based on an idea of Lewis Carroll, played on a chess board
Correspondents:
Jones, Kathy
Knuth, Donald

box 34, folder 4  Dots & Squares 1958-2001
Scope and Contents note
Analyses by B.B. Compton Crick, Robert Rubinstein, Newark State College, J.P. Ballantine, Greg Chaitin, Ronald Wiener, and more.
Also some variations: Cubes, Q-Bickles, Dots & Triangle's, & hexagons.
Correspondents:
Berlekamp, Elwyn
Crick, M.F.Compton
Chaitin, Greg
Wiener, Ronald
Chess

box 58, folder 1


Scope and Contents note

Many articles on Fischer, mostly newspaper, and mostly on the 1972 match with Boris Spassky

box 58, folder 2


Scope and Contents note

More articles

box 58, folder 3

Polgar Sisters 1993-1994

Scope and Contents note

2 popular articles

box 58, folder 4

Checkerboard Puzzles (The board itself, no chess pieces) 1957-1982

Scope and Contents note

Mostly checkerboard dissections. Much analysis, by MG & others.

Different board sizes, etc.

Impossibility proofs

2 or 4 congruent halves or quarters

Polyomino dissections

Cut & re-arrange

Correspondents:

Marlow, T.

Golomb, Solomon

Scott, Dana

Morris, Lockwood
Queen Tours - & Dot Problems (& King Tours) 1962-1999

Scope and Contents note

Graphs on point lattices

"Minimum Segment Polygonal Paths on Point Lattices", by Solomon Golomb (typescript)

Many problems and solutions, and some analysis

Correspondents:

Golomb, Solomon

Superposable Queens 1962-1984

Scope and Contents note

n sets of n queens on nxn board, each set one color, so no queen attacks another of the same color. Also "Pegboard Problem", and "Hoo-Doo"

MG idea for marketable version (order 7)

Impossibility proof of n=8

Queen Problems (Static) 1960-1998

Scope and Contents note

Various queen problems, mostly attacking cells on chessboard

Queens on hexagonal board, on a cylinder, on a torus, etc.

"On the Queen Domination Problem", by Charles Grimstead, et.al. (typescript)

The Non-Attacking Queens (& 3-Spacde Cases) 1962-2001

Scope and Contents note

"The Unexpected Two Dimensional Space-Group Containing Seven of the Twelve Basic Solutions to the 8 Queens Problem", by David Hollander, 1972 (typescript)

"A Linear Time Algorithm for Constructing a Solution to the N-Queens Problem", by Bruce Abramson & Mordechai Yung, 1984 (typescript)

"Queen Squares", by David Klarner, 1978 (report) - 3D cases

Clyde Minton - Queen Tasks, Etc. 2000

Scope and Contents note

Guide to the Martin Gardner Papers SC0647
"Generalizing a Classic Statical Chess Board Puzzle", by C.C. Minton, 91pp (typescript)

Correspondents:

Minton, Clyde

box 58, folder 10

**Misc. Chess Puzzles 1961-1998**

Scope and Contents note
Many chess problems and references

“Chess and Mathematics Bibliography”, by Loren Larson, 1974 (mimeo)

Correspondents:

Harris, John
Charosh, Mannis
Stover, Mel

box 58, folder 11

**Nonattacking Rooks 1962-1996**

Scope and Contents note
Problems and formula for how many

Correspondents:

Larson, Loren
Golomb, Solomon
Charnley, Donald

box 58, folder 12

**Costas Arrays 1984**

Scope and Contents note

1 articles (by Solomon Golomb)

box 58, folder 13

**Rook, Bishop tours 1948-1999**

Scope and Contents note

MG notes
Several problems & analyses
Correspondents:
Austin, A.K.
Guertin, Richard

box 58, folder 14

Rooks, Bishops, Kings (Static) 1971-1990

Scope and Contents note
Problem of attacking all squares
Much MG analysis & notes

box 58, folder 15

Kriegspiel 1962-1980

Scope and Contents note
"Kriegspiel and Phantom Chess", by Robert Abbott (computer printout)
Also called "The Chess War Game"
Various descriptions & sets of rules

box 58, folder 16


Scope and Contents note
Many reader solutions to 8 pieces attacking maximum or minimum number of squares

box 58, folder 17

Smullyan - Chess Problems 1973-1978

Scope and Contents note
Correspondance about Smullyans books on retrograde chess problems
Some Smullyan monochromatic-move problems
Correspondents:
Smullyan, Raymond

box 59, folder 1

Knight Problems 1967-1999

Scope and Contents note
"A Linear Algorithm For Computing the Knight's Domination Number of a KxN Chessboard", by E.O. Hare & S.T. Hedetniemi (typescript)

Correspondents:
Philpott, Wade

box 59, folder 2

**Knight Tours 1967-1999**

Scope and Contents note
Lots of MG notes
Knuth's typefont for knights tours
Correspondents:
Francis, Darryl
Knuth, Donald
Jelliss, G.P.

box 59, folder 3

**Fairy Piece Tours Undated**

Scope and Contents note
1 article, by Pickover

box 59, folder 4

**Curious "Mate in -" Problems 1965-1985**

Scope and Contents note
Many problems & notes of problems
Correspondents:
Moser, Leo
Charosh, Mannis

box 59, folder 5

**Minimal Mating Sets on Infinite Boards 1975**

Scope and Contents note
1 letter/analysis, by S.P. Gobel

box 59, folder 6
Chess-Misc. (Fiction, Philos, Etc) 1954-1975
Scope and Contents note
A couple of stories, several story references & descriptions

box 59, folder 7
Is Chess NP-Complete 1981
Scope and Contents note
One article, by Aviezri Fraenkel

box 59, folder 8
Fairy Chess 1960-2002
Scope and Contents note
Lots of discriptions of variant chess rules and variant pieces
Several “Stovers Side Show” columns
Correspondents:
Abbott, Robert
Boyer, Joseph
Pritchard, David

box 59, folder 9
3-D Chess 1952-1994
Scope and Contents note
Many discriptions of 3-D chess versions
Manuscript ofr book on 3-D chess, by Peter-Rene Tottger, ~44 pp, in German, many color pictures, 1994

box 59, folder 10
Minimum Short Games 2000
Scope and Contents note
1 page from Mario Velucchi

box 59, folder 11
6-Tuplet & 7-Tuplet Pawns 1976-1977
Scope and Contents note
Subject files Series 2
Board Games

Correspondents:
Nelson, Harry
Kirtley, Mark
Rubin, Sidney

box 59, folder 12

Mathematics of the Chessboard 2002
Scope and Contents note
Manuscript of book by John Watkins, 16pp, 12 figures, sent to MG for review (but he declined)

box 59, folder 13

Scope and Contents note
Many articles, mostly popular, on computer chess
Correspondents:
Moss, Moe
Lasker, Edward

box 59, folder 14

Scope and Contents note
“Computable Sub-Games of Chess”, by Donald Michie, 1978 (draft)
Correspondents:
Michie, Donald

box 59, folder 15


Combinatorics
Physical Description: 62 folder(s)
<table>
<thead>
<tr>
<th>Box and Folder</th>
<th>Title</th>
<th>Scope and Contents Note</th>
<th>Correspondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>box 22, folder 16</td>
<td><strong>Combinatorics Problems [1 of 2] 1964-1987</strong></td>
<td>Many problems, solutions, and analyses</td>
<td>Feldman, Anatol, Knuth, Donald, Hein, Piet, Narayanan</td>
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<td>&quot;Theory of Combinatorial Arrangements(no author, no date), 10pp, (Photocopy)</td>
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<td>box 23, folder 2</td>
<td><strong>NP-Complete [Complexity Theory] 1976-2000</strong></td>
<td>Complexity Theory (outline by MG?) (typescript)</td>
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<td>Many articles</td>
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<td>box 23, folder 3</td>
<td><strong>Zero-Knowledge Proofs 1986-1996</strong></td>
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<td>&quot;Unconditionally Secure Protocols&quot;, (no author, no date), 6pp (typescript)</td>
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<td>&quot;Expected Value Payment Method ....&quot;, patent application by Michael Rossides, 1991</td>
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<td>(draft typescript)</td>
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<td>box 23, folder 4</td>
<td><strong>Traveling Salesman 1954-1995</strong></td>
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<td>Dwyer, David</td>
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<tr>
<td>box 23, folder 5</td>
<td><strong>Lin's Traveling Salesman Max 1985</strong></td>
<td>Mostly articles, analyses, and results on best path between the 48 state capitals</td>
<td>Lin, Shen, Padberg, Manfred</td>
</tr>
<tr>
<td>box 23, folder 6</td>
<td><strong>Knapsack Problems 1974-1991</strong></td>
<td>Several MG suggestions of ways to present simple knapsack problems as puzzles.</td>
<td>Johnson, David</td>
</tr>
</tbody>
</table>
box 23, folder 7 Min. & Max. Adjacent Cells of Squares, N-cubes, Torus, etc 1964-1985
Scope and Contents note
MG notes on various problems
"On Mappings from 2 to 1 Dimensions which Minimize the Separation of Images of Adjacent Points", by Graeme Mitchenson & Richard Durbin (typescript)
Correspondents:
Liu, Andy
Trigg, Charles
Golomb, Solomon

Scope and Contents note
Game analyses (Concentration; Red or Black; Mind Poker, etc)
Many MG problems, analyses, suggestions
"Ten Card Poker Deal", by Jon Racherbaumer
Poker tricks, ESP tricks
Correspondents:
Avallone, Robert
Hein, Piet
Diaconis, Persi
Harkleroad, Leon

box 23, folder 9 The 31 Card Game (also Die) 1974-1985
Scope and Contents note
Variations & analyses of summing numbers from 1-6, to make 31
Booklets on the game (and variations)
Correspondents:
Van Note, Peter

box 23, folder 10 Non-Messing-Up Theorem 1971
Scope and Contents note
Booklet by David Gale & Richard Karp, 1971
Correspondents:
Gale, David

box 23, folder 11 Young Tableaux & Non-Mess Theorem; Ferrer's Graph 1976-1995
Scope and Contents note
MG notes
"Young Tableaux", by Richard Stanley (27 pp) (typescript)
Correspondents:
Wilf, Herbert
Schensted, Craig
box 24, folder 1
Card Sorting 1978-1995
Scope and Contents note
Several different sorting problems, and several different algorithms to solve them.
"Nontrivial Improvements to the Hwan-Lin Merging Algorithm", by Glenn Manacher (typescript)
"Choosing Fair Teams", by Larry Carter & John Gill (typescript)
Correspondents:
Manacher, Glenn
Jackson, Bradley

box 24, folder 2
Scope and Contents note
Discussions & results on this (still unproved) problem.
"The Towers and Triangles of Professor Claus", by David Poole (typescript)
Correspondents:
Manacher, Glenn
Maurer, Stephen
Rivest, Ronald
Poole, David

box 24, folder 3
Panex Puzzle 1983
Scope and Contents note
Notes from the manufacturer
"Some Results on the Panex Puzzle", by Mark Manasse, Danny Sleator, Victor Wei (typescript)
Correspondents:
Hess, Richard
Nokihara, Hiroshi
Graham, Ron

box 24, folder 4
Scope and Contents note
Photocopies of Lewis Carroll letters to St.-James Gazette, on Lawn Tennis Tournaments (6 letters, all 1883).
Many articles.
"Quasigroups and Tactical Systems", by Ronald Baker, 1995 (typescript)
"Tournament Configuration and Weighted Voting", by B.E. Wynne & T.V. Narayama (typescript)
"Regular Tournament Design", by E. Mendlesohn, 1977 (typescript)
Correspondents:
Asmus, Ed
Penrose, Roger
Mendelsohn, Eric

box 24, folder 5
Scope and Contents note
Many articles, several on voting paradoxes.
"Some Unsolved Problems", by David Singmaster (typescript)
Subject files Series 2
Combinatorics

box 24, folder 6  Spouse-Free Tennis Tournament 1960-1975
Scope and Contents note
Equivalent to Self-orthogonal Latin squares.
Correspondents:
Wilson, Richard

Scope and Contents note
31 game.
Dice problems based on structure of faces.
Dice Rolling [to?s]
"A Mathematical Analysis of the Game of Thirty-One", by Richard Steinberg
(typescript)
Oriental Dice
Correspondents:
Diaconis, Persi
Celko, Joe
Steinberg, Richard
Towler, Don
Kobon
Friedland, Aaron

Scope and Contents note
Correspondents:
Cammann, Schuyler
Thorp, Edward
Epstein, Richard
Maven, Max

box 24, folder 9  Petals Around Rose 1976-1989
Scope and Contents note
Also "Roots", and "Missed the Boat"
Roll dice, figure number they represent

box 24, folder 10  Bingo 1963-1973
Scope and Contents note
Correspondents:
Knuth, Donald
Lessing, Ronald
Lansing, Cornelius

Scope and Contents note
Many different weighing problems, including many false-coin problems, and
mathematical analysis of problems.
2 false coin puzzles from Emmet Duffy, along with cardboard calculators for each (and
the original 12-coin problem) & instructions for use. (Calculators in separate folder.)
Correspondents:
Duffy, Emmet
Tanner, Leslie
Scope and Contents note
"The False-Coin Problem - a Colorful Approach", by Uri Leron, Technion Preprint MT443, 1979

box 24, folder 13  12 Coins 1955-2001
Scope and Contents note
Variations, references.
Solutions using words (12 different letters).
Correspondents:
Card, L.E.
O’Beirne, Thomas
Cheney, Fitch
Riecker, Carl Jr.
Wiley, Roland

box 25, folder 1  Median Algebra (& Cards) (Craig Schensted) 1978
Scope and Contents note
Long letter from Schensted that develops Algebra of Medians, discusses its relationship to Boolean Algebra & Calculus of Propositions, and gives a couple of card tricks based on it.
Correspondents:
Schensted, Craig

box 25, folder 2  Stable Marriage, & College Admissions Problem 1962
Scope and Contents note
Original article (by Gale & Shapley), plus MG notes from Gilman’s lecture.

box 25, folder 3  The 21 "IDOO" Problem 1972-1975
Scope and Contents note
IDOO = Isolated Diamonds, Order One (in MacMahon Squares.)
Correspondents:
Fink, Federico
Harris, John

box 25, folder 4  The 9-Piece Subset of MacMahon 3-Color Squares (Torus) 1974-1975
Scope and Contents note
Using the 9 MacMahon pieces that show all 3 colors, match all edges toroidally.
Analysis of puzzle and game.
Correspondents:
Nelson, Harry
Philpott, Wade

box 25, folder 5  Finite Projective Planes 1961-1962
Scope and Contents note
2 articles, MG notes.
Scope and Contents note
3-color cubes
Coloring of sides, faces of figures.
Tetrahedra.
Paths in Square City Blocks.
Intersecting lines.
Dissecting lines with points, plane with lines, etc.
"Region Count for Straight Line Cutting of Flat Figures", by W. Funkenbusch & R. Odendahl (typescript)
Mostly MG notes and calculations, plus some articles.

box 25, folder 7  Pell Equation undated
Scope and Contents note
"Pell's Equation - A Tool For the Puzzle Smith", by Mogens Esron Larsen (typescript)

box 25, folder 8  Counters (Place or Move) (Cards, Etc.) [1 of 2] 1959-1985
Scope and Contents note
Slide & Jump puzzle (Leap Frog)
Some peg jumping games.
"Pegboard Games", by D. G. Tabta, Mathematical Teaching Pamphlet No. 13, 1967
Hanky Panky (Forming piles).
Color exchanges on 2-D boards
... and many more similar puzzles & games
Correspondents:
Kaplan, Philip

Scope and Contents note
Penny-dime problems (permuting the order)
Correspondents:
Gombert, Jan Martin
McNear, John

box 25, folder 10  Sliding Penny Puzzles 1995-2002
box 25, folder 11  Alternating Coins OoOoOo & Variants 1960-1998
Scope and Contents note
Paper on Penny-dime problems, by Gombert (typescript)
Analysis, articles, MG notes.
Correspondents:
Liu, Stanley Wu-Wei
Gombert, Jan Martin
Hitotumatu, Sin
Bergerson, Howard

Scope and Contents note
Correspondents:
Liu, Andy
Murray, Jason
<table>
<thead>
<tr>
<th>Box/Folder</th>
<th>Title</th>
<th>1965-1972</th>
<th>Notes</th>
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</table>
MG notes, references.  
Many algorithms for fair division, both in letters and articles.  
Correspondents:  
Brams, Steven  
Saemundsson, Th.  
Balinski, M.L.  
Cottingham, Charles |
Many more articles and algorithms. |
| box 25, folder 15 | Switching Puzzles 1987-1989 | | Scope and Contents note  
2 articles: reversing trains, and Dewdney article. |
| box 26, folder 1 | Firing Squad Problem 1965-1972 | | Scope and Contents note  
Synchronization problem with finite state machines.  
"The Firing Squad Problem", by W.F. Lunnon, 1970 (typescript) |
| box 26, folder 2 | Busy Beaver Problems 1981-1989 | | Scope and Contents note  
5-state Turing machine to print maximal no. of 1's.  
Correspondents:  
Gallimore, Nicholas |
| box 26, folder 3 | Postage Stamp Problem 1978-2000 | | Scope and Contents note  
Least amount that cannot be made with at most t stamps, each one valued at one of k denominations.  
Correspondents:  
Rogers, Douglas  
Guy, Richard |
| box 26, folder 4 | Pantactic 1965-1993 | | Scope and Contents note  
"Phagic Squares", by Ian Stewart, ~1972 (typescript).  
MG notes.  
Correspondents:  
Stewart, Ian  
Astle, Brian |
| box 26, folder 5 | Ising Problem 1971 | | Scope and Contents note  
1 article (by Harary) + 1 page MG notes. |
box 26, folder 6  The Circular Ruler 1973-1982
Scope and Contents note
MG notes.
Correspondents:
Grimsey, A.H.R.
James, David

box 26, folder 7  Checkers & Go are P Space Hard (& Chess results) 1978-1981
Scope and Contents note
Various articles.
Correspondents:
Johnson, David
Fraenkel, Aviezri

box 26, folder 8  Costas Arrays (2D "Rulers"), Golomb & Taylor 1982-1983
Scope and Contents note
2 Golomb articles (one with Taylor)

box 26, folder 9  The Condom Problem 1977-1989
Scope and Contents note
Correspondents:
Vardi, Ilan
Lipton, Richard
Ghijsen, Jacques

box 26, folder 10  Ferry (Crossing) Problems 1961-1997
Scope and Contents note
Many river crossing problems, analysis, MG notes, etc.

box 26, folder 11  Error Correcting Codes [1 of 2] 1950-1976
Scope and Contents note
Many articles, preprints, reprints, etc.

box 26, folder 13  Guess A Number Game 1972-1990
Scope and Contents note
Mediocrity
Bulls & Cows (numeric Mastermind) (Moo)
Silverman's Game
Guess a Number - With Lying
Toetjes Problem
Correspondents:
Hofstadter, Douglas
Eachus, Joseph
Hawkins, David
Subject files Series 2
Combinatorics

box 26, folder 14  
**Ulam's Guess a Number with Lies 1974-2001**
Scope and Contents note
Correspondents:
Hawkins, David

box 26, folder 15  
**Point-Set Coloring 1993**
box 26, folder 16  
**Self Avoiding Walks 1992-1994**
box 26, folder 17  
**Bay Restaurant 1974**
box 26, folder 18  
**Jeep Problem 1995**
box 26, folder 19  
**Pancake Problem 1995**
Scope and Contents note
Analysis by Leslie Upton
Correspondents:
Upton, Leslie

box 26, folder 20  
**Paper Fold (Andy Liu) 1999**
Scope and Contents note
"Group Folding and Groups Unfolded", by Andy Liu (typescript)

box 26, folder 21  
**Rolling Cubes undated**

Computers
Physical Description: 43 folder(s)

box 43, folder 1  
**Computer vs Hand Proofs (Experimental Math) 1978-1994**
Scope and Contents note
Several articles discussing computer proofs, especially in reference to 4-color theorem, mostly from a philosophic perspective
Correspondents:
Tymoczko, Thomas
Swart, Edward
Boas, R.P.

box 43, folder 2  
**History - Electronic Calculators 1964-1995**
Scope and Contents note
Mostly newspaper & popular science magazines

box 43, folder 3  
**Influence on Math 1977-1989**
Scope and Contents note
Discrete Mathematics, algorithms

box 43, folder 4  
**Early Mechanical Devices (& New Hardware) 1973-1993**
Scope and Contents note
Napiers Bones, Babbage, Adding machines, etc.
Package (but not item) of "Consul", the Educated Monkey, a calculator
Correspondents:
Williams, Michael
Luebbert, William
Harary, Frank
<table>
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<th>Box, Folder</th>
<th>Title</th>
<th>Scope and Contents Note</th>
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<tr>
<td>43, 5</td>
<td>Fluidics 1960-1998</td>
<td>Some articles (SA &amp; others)</td>
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<tr>
<td>43, 6</td>
<td>Automation, Cybernetics [1 of 2] 1948-1965</td>
<td>Many articles (newspaper, popular science) on automation, its' advantages &amp; its' dangers</td>
</tr>
<tr>
<td>43, 7</td>
<td>Automation, Cybernetics [2 of 2] 1938-1993</td>
<td>Collection of 1952 SA articles on automatic control, because the book based on them cut the articles and the pictures</td>
</tr>
<tr>
<td>43, 8</td>
<td>Analog Devices 1984-1985</td>
<td>2 SA articles by Dewdney</td>
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<tr>
<td>43, 9</td>
<td>Teaching Machines 1960-1963</td>
<td>Articles</td>
</tr>
<tr>
<td>43, 10</td>
<td>Computer &amp; Video Games 1974-1994</td>
<td>Several (mostly popular) articles</td>
</tr>
<tr>
<td>43, 11</td>
<td>Pocket Calculators 1972-1981</td>
<td>Several articles, popular &amp; technical</td>
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<tr>
<td>43, 12</td>
<td>Pocket Calculator Problems 1965-1980</td>
<td>Various ideas for calculator problems, many by MG</td>
</tr>
<tr>
<td>43, 13</td>
<td>Inverted Words 1974-1979</td>
<td>&quot;Dictionary and Games For Pocket Calculators&quot;, by David, Sarah, &amp; C. Peter Rosenbaum, 1975, 22p (typescript)</td>
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<td>Lots of examples</td>
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<td>Correspondents:</td>
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<td>Knuth, Donald</td>
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</table>
| 43, folder 14 | **Calculator Tricks & Stunts 1973-1983**  
Scope and Contents note  
Chinese Remainder Theorem  
ABCABC  
Many calculator magic tricks  
Correspondents:  
Lyons, L. Vosburgh  
Hudson, Charles  
Stover, Mel  
Altman, David  
Neale, Bob  
Golomb, Solomon |
| 44, folder 1 | **Pocket Calculator Games 1975-1976**  
Scope and Contents note  
Set of problems from the HP-65 Users Club (1975)  
Subtraction game from Lynn Yarbrough  
Correspondents:  
Yarbrough, Lynn |
| 44, folder 2 | **Endpaper (NYT) (Pocket Calculator 1975-1976**  
Scope and Contents note  
Notes & suggestions fro "Endpaper" column for the New YOrk Times  
Correspondents:  
Collins, Glenn |
| 44, folder 3 | **Dynamic Programming (Bellman) undated**  
Scope and Contents note  
SA article on Control Theory, by Richard Bellman |
Scope and Contents note  
Various ways to write numerals and letters in grids |
| 44, folder 5 | **Computer Poetry (& Relation to Literature, etc.) 1971-1983**  
Scope and Contents note  
3 articles on computer verse |
| 44, folder 6 | **Supercomputers (nonorganic) 1958-2000**  
Scope and Contents note  
Various articles, mostly popular science magazines & newspapers, on progress in supercomputing design & types of supercomputers  
"The Cosmological Limits on Computation", by Frank Tipler, 85pp (typescript) |
| 44, folder 7 | **Parallel Processing & Coming Supercomputers 1983-1996**  
Scope and Contents note  
Articles, mostly popular  
Also "Fifth Generation" |
<table>
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<tr>
<th>Box</th>
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<th>Folder Name</th>
<th>Years</th>
<th>Scope and Contents Note</th>
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<tr>
<td>44</td>
<td>8</td>
<td>Information Retrieval -- HGW's World Brain 1960-1998</td>
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<td>Many articles, technical and popular</td>
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<td>Correspondents:</td>
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<td>Lurker, Ernst</td>
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<td>Geckeler, Siegfried</td>
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<td>Badler, Norman</td>
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<td>O'Brien, James</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lambert, Frank</td>
</tr>
<tr>
<td>44</td>
<td>11</td>
<td>Word Processors 1981-1985</td>
<td></td>
<td>3 articles, 2 on authors switching to word processors, one on loss of corrected manuscripts to history</td>
</tr>
<tr>
<td>44</td>
<td>12</td>
<td>Molecular Computers (Nanotechnology) 1982-2001</td>
<td></td>
<td>Lots of articles, technical &amp; popular</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Correspondents:</td>
<td></td>
<td>Regis, Ed</td>
</tr>
<tr>
<td>44</td>
<td>13</td>
<td>Neural Neet Approach (Connectionism) 1987-1996</td>
<td></td>
<td>Many articles</td>
</tr>
<tr>
<td>44</td>
<td>14</td>
<td>Game Programs (General) 1998</td>
<td></td>
<td>Just 1 page, pointer to SA special on mind</td>
</tr>
<tr>
<td>44</td>
<td>15</td>
<td>Bridge Program undated</td>
<td></td>
<td>1 photocopy of bridge article, that computer programs can't play bridge well</td>
</tr>
<tr>
<td>44</td>
<td>16</td>
<td>Computer Simulations 1989</td>
<td></td>
<td>1 article, from Discover magazine, Oct. 1989</td>
</tr>
<tr>
<td>44</td>
<td>17</td>
<td>Computer Crime (&amp; Sabotage) 1976-1999</td>
<td></td>
<td>Lots of articles, on crime, viruses, worms, etc.</td>
</tr>
</tbody>
</table>
Scope and Contents note  
Several articles  

box 45, folder 1  "Virtual Reality" - Cyberspace 1989-1993  
Scope and Contents note  
Lots of popular articles, about virtual reality, art, Jaron Lanier, "Neuromancer", etc  

box 45, folder 2  Hypertext 1992-1993  
Scope and Contents note  
Several newspaper articles  

box 45, folder 3  DNA Computing 1995-1996  
Scope and Contents note  
Popular articles  

box 45, folder 4  Genetic Algorithms, Artificial Life 1989-2000  
Scope and Contents note  
Mostly articles  
Correspondents:  
Sallows, Lee  

box 45, folder 5  Digital Libraries 1995-2000  
Scope and Contents note  
2 articles (Lipkin, Science News, & NYT Magazine, Burdick)  

box 45, folder 6  Email & Publishing 1993  
Scope and Contents note  
2 articles, C&EN and TIME  

box 45, folder 7  Java Language 1997  
Scope and Contents note  
1 article, American Scientist, by Brian Hayes  

box 45, folder 8  Computer Proofs 1996-1997  
Scope and Contents note  
2 newspaper articles & 2 magazine articles (Nature, Science News)  

box 45, folder 9  Reverse Computing 1999  
Scope and Contents note  
1 newspaper article  

box 45, folder 10  Grading Machine! 1999  
Scope and Contents note  
1 article "New Word Order", by Clive Thompson, Lingua Franca, about software that could grade essays  

Scope and Contents note  
Many articles on quantum computers and quantum crypology
Diophantine

Physical Description: 13 folder(s)

box 9, folder 1  
Scope and Contents note
Many MG notes.
"Diophantine Equations and Electronic Calculators", by Rufus Isaacs, 46pp (typescript)

box 9, folder 2  
Scope and Contents note
"Tiling the Square With Rational Triangles", by Richard Guy, 1988, 57pp (typescript)
Correspondents:
Schoeder, Manfred
Guy, Richard

box 9, folder 3  
Heron Triangles 1971-1999
box 9, folder 4  
Integral Tetrahedron & Hexahedroa 1986-1997
Scope and Contents note
Correspondents:
Baker, Gerald
Coxeter, H.S.M.
Leech, John

box 9, folder 5  
Heibert's 10th 1970-1973
Scope and Contents note
Correspondents:
Sacerdote, George

box 9, folder 6  
Mordell's Conjecture 1983-1986
box 9, folder 7  
Euler's Conjecture - & Counter-example 1966-1993
Scope and Contents note
Correspondents:
Leech, John

box 9, folder 8  
Rectangle-with-border Problem in 2 & 3 Space 1970
Scope and Contents note
Correspondents:
Sleator, Daniel
Rowe, R.Robinson

box 9, folder 9  
The "Integral" Brick 1970-2001
Scope and Contents note
Correspondents:
Leech, John
Morris, David
Hess, Richard
Rathbun, Randall

box 9, folder 10  
Archimedes Cattle Problem 1965-1998
box 9, folder 11 The Rational 7 (was 6) Points (unsolved Problem) 1970-1985
Scope and Contents note
Correspondents:
Guy, Richard
Coxeter, H.S.M.
Diaconis, Persi
Honsberger, Ross
Liu, Andy

box 9, folder 12 The 6 Problems Involving Pairs of Figurate Numbers 1984
Scope and Contents note
"On Some Diophantine Equations{", by Saburo Uchiyama, 1984 (Lecture Notes)

box 9, folder 13 Crossed Ladders 1962-1999
Scope and Contents note
Correspondents:
ApSimon, H.G.
Harris, John
Hunter, J.A.H.
O'Beirne, Thomas
O'Shea, Owen

Dr. Matrix
Physical Description: 15 folder(s)

Scope and Contents note
Correspondents:
Karhausen, L.R.

box 67, folder 12 On "23" 1993
Scope and Contents note
"On the Synchoronicities of the Number 23", by Loren Goldner, 1993 (typescript)

Scope and Contents note
Lots of articles (newspaper and other) on numerology
Many notes for columns

box 67, folder 14 1/137 Fine Structure Constant 1972-1998
Scope and Contents note
Correspondents:
Clark, Arthur C.
Scope and Contents note
Lots of notes of individual number curiosities (mostly numbers 1-14)

Scope and Contents note
15 and miscellaneous larger numbers
Correspondents:
Dickson, Paul

box 68, folder 3  Numerology of Constants (Pi, e, Phi, Euler, etc.) 1959-2001

Scope and Contents note
Many of the items are biblical
Correspondents:
Sallows, Lee
Farrell, Jeremiah

box 68, folder 5  The Canadian Code Nickel 1946-1977
Scope and Contents note
"Victory" five cent Canadian coin, 1943 & 1944, with a message in International Morse Code around the edge
Correspondents:
Keeler, Donald

box 68, folder 6  Ideas For Future Matrix Columns 1976-1997
Scope and Contents note
Republican presidents are prime
Artificial language
Computers
Math art (Dr. M in SoHo)
Creative Adventure - randomness, coincidences, etc
Nuclear physicist - arrows of time
Chess (& Fibonacci)
St. Louis & catenary arch
Gambling casino (with bar bets)
Occult, Uri Gellar, EST, etc
Thoughts on Matrix novel
... & misc. notes & articles, etc.
Correspondents:
Hitotumatu, Sin
Stover, Mel
Sallows, Lee

box 68, folder 7  Dr. Matrix on - Math & Theology 1960-1982
Scope and Contents note
Various MG notes on theology, etc, for Matrix column
"Godel and God", by Andrew Riley, 11pp, 1978 (typescript)
Correspondents:
Meally, Victor
**Subject files Series 2**

**Dr. Matrix**

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**box 68, folder 8**

**Presidential Elections 1959-2000**

Scope and Contents note
Notes, letters, articles, etc. on President facts
"History Computed", by Arthur Finnessey, 1983, 24pp, 3 1/2 x 5 1/2 inches (pamphlet)
Correspondents:
Kruskal, William
Lindon, J.A.
Card, L.E.
Borgmann, Dmitri

---

**Matrix Release - on Garrison 1967-1971**

Scope and Contents note
Jim Garrison's numerology on Kennedy's assassination

---

**box 68, folder 10**

**Press RELEASES on Dr. Matrix - Presidential Cand. Names 1967-1968**

Scope and Contents note
Mostly press release on 1968 presidential candidates - Rockefeller, Romney, Reagan, Buckley, Shirley Temple (several copies), and comments on it
Correspondents:
Asimov, Isaac
Lindon, J.A.

---

**box 68, folder 11**

**Numbers (Misc) 1963-2002**

Scope and Contents note
Notes & articles on numbers
Book project on "gosh" numbers
Correspondents:
Gilbert, Edgar
Pohl, Frederick

---

**Fermat's Last Theorem**

Physical Description: 7 folder(s)

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**box 9, folder 14**

**Fermat's Last Theorem 1938-2000**

Scope and Contents note
Much history.
"On the Bounds of l in Fermat's Last Theorem", by Guy A.R. Guillette, 1972 (typescript of lecture)
"The Ripple in the Carpet, Fermat's Last Theorem, and Kasner's Kindergarden", by Herbert E. Salzer (typescript)

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**box 9, folder 15**

**Crank Proofs 1980-1997**

Scope and Contents note
Several "proofs", two as booklets, and some letters claiming proofs.
Correspondents:
Dudley, Underwood

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**box 9, folder 16**

**The Flawed 1988 Proof of Fermat's Last 1987-1993**

Scope and Contents note
Yoichi Miyaoka's
Wile's Proof 1993-1998
Scope and Contents note
Many articles, mostly popular, on Wile's proof, then the gap, and finally the fix; also history of FLT.
Some explanatory articles.
Correspondents:
Thurston, William
Hayes, Brian

Vos Savant Flap 1993-1997
Scope and Contents note
Much correspondence about MG endorsement of Vos Savant book, and MG embarrassment over it.
Also reviews and discussion of the book itself and the Parade column.
Correspondents:
Vos Savant, Marilyn
Gillman, Leonard
Goldberg, Steven
Huges, Brian
Asimov, Dan
Mazur, Barry

Beal's Problem 1998
Scope and Contents note
\[x^m + y^n = z^r\] has no whole number solutions where x, y, z have no common factor & m, n, r are greater than 2.
Single article (from Math Horizons) by Keith Devlin
Correspondents:
Beal, Andrew

E-Mail on FLT 1993
Scope and Contents note
Much e-mail on Vos Savant plus a couple of other photocopies, collected and sent to MG by Jerry Farrell.
Correspondents:
Farrell, Jeremiah

Fractals & Chaos
Physical Description: 14 folder(s)

Scope and Contents note
Many articles from popular science magazines.
Correspondents:
Mandelbrot, Benoit
<table>
<thead>
<tr>
<th>Box Folder</th>
<th>Description</th>
</tr>
</thead>
</table>
Scope and Contents note  
More articles and reviews.  
Selected bibliography (1988)  
Correspondents:  
Mandelbrot, Benoit  
Gosper, Bill |
Scope and Contents note  
Correspondents:  
Eaton, Leonard |
| 27, 8      | "Eternity Patterns" (Infinite Regress) 1973-2000  
Scope and Contents note  
"Criss-Cross Communications", Number One, 1974 (magazine) with tipped-in photos & silkscreens.  
Correspondents:  
Yanoff, Michael |
| 27, 9      | Snow Crystals 1973-1987 |
| 27, 10     | Chaos Theory [1 of 3] 1975-1987  
Scope and Contents note  
Many articles, popular & technical.  
Correspondents:  
Chaitin, Greg |
Scope and Contents note  
More articles.  
Scope and Contents note  
More articles. |
| 28, 3      | Amygdala [1 or 2] 1987-1990  
Scope and Contents note  
Issues 1-19  
Correspondents:  
Silver, Roland |
| 28, 4      | Amygdala [2 or 2] 1987-1990  
Scope and Contents note  
Slides from Amygdalas issues (incomplete). |
<table>
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<tr>
<th>Box and Folder</th>
<th>Description</th>
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<tbody>
<tr>
<td>28, Folder 5</td>
<td>Fractal Rep-Tiles (Ammann) 1976-1979</td>
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<tr>
<td>28, Folder 6</td>
<td>Pickover's Work (Chaos) 1987-1992</td>
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<tr>
<td>28, Folder 7</td>
<td>Mandelbrot Set 1985-1999</td>
</tr>
<tr>
<td>28, Folder 8</td>
<td>Quasi-Fractals (TTT &amp; Sheffer Stroke) 2000</td>
</tr>
<tr>
<td>32, Folder 1</td>
<td>Shannon Switches 1996</td>
</tr>
<tr>
<td>32, Folder 2</td>
<td>Klemperer's Games (Chess Tracks) 1948-1983</td>
</tr>
<tr>
<td>32, Folder 3</td>
<td>Glass's Toroidal TTT (&amp; Peak, Pass, Deep Theorem) 11972-1973</td>
</tr>
<tr>
<td>32, Folder 4</td>
<td>Near-Sighted Hunter 1979</td>
</tr>
</tbody>
</table>
box 32, folder 5  Conway's "Sylver Coinage" Game 1966-1987
Scope and Contents note
Correspondents:
Conway, John
Guy, Richard
Silber, Robert

box 32, folder 6  Beanstalk & Conway's Beans-Don't-Talk 1986
Scope and Contents note
Article by Guy

Scope and Contents note
Many examples, much analysis
Correspondents:
McAllister, Stephen
Filman, Robert
Cook, R.S.
Mertz, Robert
Silverman, David
Parkin, Robert
Hein, Piet

Scope and Contents note
Correspondents:
Melf, Frank
Isaacs, Rufus
Hoggatt, Vernon
Lenstra, H.W.
Sibert, William
Fulves, Karl
Guy, Richard

Scope and Contents note
Correspondents:
Fraenkel, Aviezri

box 31, folder 8  Parrando's Paradox 1980?
Scope and Contents note
Single newspaper article
box 31, folder 9  
**Prisoner's Dilemma 1967-2000**  
Scope and Contents note  
Many articles  
Correspondents:  
Verhoeff, Tom

box 31, folder 10  
**Game Theory 1955-2000**  
Scope and Contents note  
Many articles  
Correspondents:  
Fraenkel, Aviezri

box 31, folder 11  
**Simple Games To Which Game Theory Applies 1959-1995**  
Scope and Contents note  
Correspondents:  
Riker, William  
Becker, Joseph

box 31, folder 12  
**Game Theory Applications in S.S. & Ethics 1954-1982**  
Scope and Contents note  
(S.S. = Social Sciences)

box 31, folder 13  
**Games & Anthropology 1959-1970**  
Scope and Contents note  
Correspondents:  
Roberts, John

box 31, folder 14  
**Decision Theory 1953-2000**  
Scope and Contents note  
Dollar auction  
Supermarket paradox  
Prisoners Dilemma  
4 papers by Maya Bar-Hillel & Ruma Falk (1978-1980)  
Correspondents:  
Gale, David  
Trigg, Charles  
Brams, Steven  
Woods, Donald  
Lyons

box 31, folder 15  
**Penny Pinch Paradox 1991**

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**Graphs**  
Physical Description: 26 folder(s)
box 21, folder 1  **Digraphs (Directed) 1959-1992**
Scope and Contents note
Directed graphs - MG notes.
"Equivalence of Topological Markov Shifts", by Ray Adlar et.al. (typescript).
"Networks of Sounds: Graph Theory Applied to Studying Rhymes", by James Joyce (typescript)
"Oedipus Loves His Mother", by Frank Harary, 1979 (typescript)
Correspondents:
Conway, John
Adler, Ray
Harary, Frank

box 21, folder 2  **Parallel Climbers 1995**
Scope and Contents note
Single article by Alan Tucker

box 21, folder 3  **Graphs 1935-2002**
Scope and Contents note
"One Dimensional Analysis Situs", by James Singer, Galois Lecture, 1935 (copy)
Many articles, notes, problems, etc.
"A Telephone Dialing Question", by Benjamin Schwartz, 1992 (typescript)
Correspondents:
Ragland, Earl

box 21, folder 4  **Path Tracing Puzzles 1961-1999**
Scope and Contents note
Many puzzles.
Sam Loy’s Chines Puzzles (Sam Loyd?) - from newspaper.
Correspondents:
Kim, Scott

box 21, folder 5  **Hamiltonian Paths & Circuits 1960-1991**
Scope and Contents note
Mostly MG notes.
Correspondents:
Mullin, Ronald

box 21, folder 6  **My Hypercube Hamiltonian Path Puzzle 1985**
Scope and Contents note
"The Spelling Superbee"

box 21, folder 7  **Graph Induction Program 1983**
Scope and Contents note
INGRID: A Software Tool for Extremal Graph Theory; Research by Ronald Dutton & Robert Brigham (Primer and Users manual, and a compilation of results from the program.)
<table>
<thead>
<tr>
<th>Box and Folder</th>
<th>Description</th>
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</table>
| box 21, folder 8 | **Utilities Problem 1975-1979**  
Scope and Contents note  
Water, Gas, and Electricity problem (K3,3).  
Mostly trying to track down the history of this problem.  
Correspondents:  
Federico, P.J. |
| box 21, folder 9 | **Signed & Marked Graphs & Nets 1977-1983**  
Scope and Contents note  
3 articles & pre-prints, by Frank Harary & others. |
| box 21, folder 10 | **Perfect Tree Problem (Leech) 1974-1978**  
Scope and Contents note  
Correspondents:  
Leech, John  
Taylor, Herbert  
Hitotumatu, Sin |
| box 21, folder 11 | **Packing Trees in Complete Graphs undated**  
Scope and Contents note  
Single typescript about packing sequential stars & paths into a complete graph, by Honsberger. |
| box 21, folder 12 | **Left-Right Paths 1973-1977**  
Scope and Contents note  
Analysis by Joseph Malkevitch, and another by H. Shank  
Correspondents:  
Malkevitch, Joseph |
| box 21, folder 13 | **Map Coloring of Independent Notes (or edges) 1962-1997**  
Scope and Contents note  
Much Minty correspondence and papers, and some of his comments on other graph theorists.  
Correspondents:  
Minty, George |
| box 21, folder 14 | **Graph Coloring 1961-1996**  
Scope and Contents note  
Game of Exchange.  
Correspondents:  
Golomb, Solomon  
White, Neil |
| box 21, folder 15 | **Reconstruction Conjecture undated**  
Scope and Contents note  
1 jpage MG notes. |
<table>
<thead>
<tr>
<th>Box/Folder</th>
<th>Description</th>
<th>Scope and Contents note</th>
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<tbody>
<tr>
<td>21, 16</td>
<td><strong>Fraenkel's Directed Graph Games [1 of 2] 1974-1977</strong></td>
<td>Many papers by Aviezri Fraenkel, on games and their analysis.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Traffic Jam Games.</td>
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<td>Correspondents:</td>
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<td>Fraenkel, Aviezri</td>
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<td></td>
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<td>Cannibals</td>
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<td>Arrows</td>
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<td>The Particles &amp; Antiparticles Game</td>
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<td>22, 1</td>
<td><strong>Rectangular Maps 1993</strong></td>
<td>1 article, by Colin Bell</td>
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<tr>
<td>22, 2</td>
<td><strong>Blanche Descartes 1978-1979</strong></td>
<td>Bibliography of her work</td>
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<td></td>
<td></td>
<td>&quot;The Twelve Coin Problem&quot;, a poem</td>
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<td>Correspondents:</td>
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<td></td>
<td>Steinberg, Richard</td>
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<tr>
<td>22, 3</td>
<td><strong>Harmonious Graphs 1980</strong></td>
<td>1 article, by Ron Graham &amp; Neil Sloane</td>
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<tr>
<td>22, 4</td>
<td><strong>Slope Problems (Rob Jameson, Clemson) 1983-1984</strong></td>
<td>Correspondents:</td>
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<tr>
<td></td>
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<td>Jamison, Robert</td>
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<td>Trigg, Charles</td>
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<td>22, 5</td>
<td><strong>Random Graphs 1990-2000</strong></td>
<td>Articles, by Joyce Justicz, Edward Scheinerman &amp; Peter Winkler; by Fan Chung; by</td>
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<tr>
<td></td>
<td></td>
<td>Brian Hayes</td>
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<td>22, 6</td>
<td><strong>Kuratowski's Theorem Generalized 1984-1987</strong></td>
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<td>22, 7</td>
<td><strong>Toothpick Problems 1986-1987</strong></td>
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<tr>
<td>22, 8</td>
<td><strong>Orthogonal Trees 1991</strong></td>
<td>1 article, by Coxeter</td>
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<tr>
<td>22, 9</td>
<td><strong>Engel's &quot;Spin Curves&quot; 1993</strong></td>
<td>Correspondents:</td>
</tr>
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<td></td>
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<td>Engel, Douglas</td>
</tr>
</tbody>
</table>

**Scope and Contents note**

- Many papers by Aviezri Fraenkel, on games and their analysis.
- Traffic Jam Games.
- Correspondents: Fraenkel, Aviezri
- More papers.
- Cannibals
- Arrows
- The Particles & Antiparticles Game
- 1 article, by Colin Bell
- Bibliography of her work
- "The Twelve Coin Problem", a poem
- Correspondents: Steinberg, Richard
- 1 article, by Ron Graham & Neil Sloane
- Correspondents: Jamison, Robert
- Trigg, Charles
- Articles, by Joyce Justicz, Edward Scheinerman & Peter Winkler; by Fan Chung; by Brian Hayes
- 1 article, by Coxeter
- Correspondents: Engel, Douglas
Higher Dimensions

Physical Description: 9 folder(s)

**Fourth & Higher Dimensions 1956-1997**
Scope and Contents note
Lots of MG notes and references.
"Escaping Three Dimensional Thinking: Explorations in the Fourth Dimension", by Steve Johnson, Ben Shneiderman, Richard Steele, 1976 (typescript)
"The Rise of Higher Space", by Robert Muir Wood (synopsis & outline)
"Pebbling in Hypercubes", by Fan Chung (typescript)
Correspondents:
Shneiderman, Ben
Wood, Robert
Rucker, Rudy

**4-Space in Theology & Occultism 1961-1974**
Scope and Contents note
Lots of MG notes & references
"4D & Theology", MG summary of various 4D explanations

**Computer Displays 1974-1986**
Scope and Contents note
Several images of and articles about Tom Banchoff
Correspondents:
Schenck,, Hilbert

**TTT Problem (Scott Kim) 1976**
Scope and Contents note
About anti-tic-tac-toe (analysis by Scott Kim)

**4-D in Physics 1946-1967**
Scope and Contents note
Correspondents:
Bork, Alfred

**The "Fake R-4" 1982**
Scope and Contents note
An alternative 4-space discovered, and its relationship to space-time (Michael Freedman's work)
Correspondents:
Renz, Peter
Stewart, Ian

**Phase Spaces & Use Of 1995**
Scope and Contents note
One article, from New Scientist (by Ian Stewart) (photocopy)
<table>
<thead>
<tr>
<th>Box Folder</th>
<th>Description</th>
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<tbody>
<tr>
<td>18, 8</td>
<td>Hypersolids (Regular &amp; Otherwise) 1961-2000</td>
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<td>Scope and Contents note</td>
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<tr>
<td></td>
<td>Note from Leo Moser (on 1-D lengths in n-D cube)</td>
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<tr>
<td></td>
<td>Coxeter's classification of Zonahedra</td>
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<tr>
<td></td>
<td>Floppy Disk: 4D version 4.2, Rotations of 4D objects in 3 space, by Peter Turney</td>
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<td>Correspondents:</td>
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<td>Knuth, Donald</td>
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<td>Olshersky, George</td>
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<td></td>
<td>Robertson, Douglas</td>
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<tr>
<td>18, 9</td>
<td>Dean Zimmerman on 4-D 1997</td>
</tr>
<tr>
<td>19, 2</td>
<td>Knots, Links</td>
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<td>Physical Description: 24 folder(s)</td>
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<td>19, 3</td>
<td>References 1988-2001</td>
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<td>Scope and Contents note</td>
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<tr>
<td></td>
<td>Lots of references (MG and others), as well as some articles and pamphlets about knots</td>
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<td>Correspondents:</td>
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<td>Hayes, Brian</td>
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<td>Scope and Contents note</td>
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<td>Correspondents:</td>
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<td>Prat, Randall</td>
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<td>Scope and Contents note</td>
</tr>
<tr>
<td></td>
<td>Moebius strip turks-head knot (letter and model)</td>
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<td></td>
<td>MG notes</td>
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<td>Correspondents:</td>
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<td>Brown, Ronald</td>
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<td>Goetsch, Tim</td>
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<td>Rolfsen, Dale</td>
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<td>19, 6</td>
<td>Knot Theory &amp; Q.M. 1977-1997</td>
</tr>
<tr>
<td></td>
<td>Scope and Contents note</td>
</tr>
<tr>
<td></td>
<td>Few short articles on physics, quantum mechanics, etc, and knot theory</td>
</tr>
<tr>
<td>19, 7</td>
<td>Borromean Rings undated</td>
</tr>
<tr>
<td></td>
<td>Scope and Contents note</td>
</tr>
<tr>
<td></td>
<td>MG &quot;simpler presentation&quot; of Borromean magic trick, along with original effect &quot;Blink&quot;, by Terri Rogers</td>
</tr>
<tr>
<td>19, 8</td>
<td>Knot Puzzles 1981-1999</td>
</tr>
<tr>
<td></td>
<td>Scope and Contents note</td>
</tr>
<tr>
<td></td>
<td>Dai Vernon &quot;Rope Puzzle&quot; magic trick</td>
</tr>
<tr>
<td></td>
<td>Correspondents:</td>
</tr>
<tr>
<td></td>
<td>Matsuyama, Mitsunobu</td>
</tr>
<tr>
<td>Box and Folder</td>
<td>Title</td>
</tr>
<tr>
<td>---------------</td>
<td>-------</td>
</tr>
</tbody>
</table>
| box 19, folder 8 | **Ring & Rope Tricks [1 of 2] 1975-1976** | | Scope and Contents note  
Clifton's Ring Move (pamphlet)  
OffeRing, by Ron Vergilio (pamphlet)  
"The Ring & Rope Book", by Philip Reed Willmarth (large booklet)  
MG notes on tricks |
MG notes on tricks  
Many tricks  
"Melt-Thru" by Harvey Rosenthal (booklet) |
| box 19, folder 10 | **Knot & Link Magic Tricks [1 of 2] 1977-1996** | | Scope and Contents note  
Correspondents:  
Futagawa, Shigeo  
Matsuyama, Mitsunobu |
"Knots on the Square", by Joseph Schmidt (booklet) |
| box 20, folder 1 | **Louis Kauffman [1 of 3] 1995-1997** | | Scope and Contents note  
Several articles by Kauffman  
Correspondents:  
Kauffman, Louis |
Knot tricks - handwritten & drawn by Kauffman  
More Kauffman articles and notes  
Correspondents:  
Kauffman, Louis |
| box 20, folder 3 | **Louis Kauffman [3 of 3] 1995-1999** | | Scope and Contents note  
Reprints of various Kauffman articles |
| box 20, folder 4 | **Knots (L. Kauffman, Conway) 1979-1998** | | Scope and Contents note  
"Weaving Patterns and Polynomials", by Louis Kauffman (typescript)  
Kauffman notes and typescripts, plus some articles, generally dealing with Conway's polynomial  
Correspondents:  
Kauffman, Louis |
box 20, folder 5  Noninvertible Knots 1983
Scope and Contents note
Correspondents:
Trotter, Hale

box 20, folder 6  Classification by Crossings 1961-1998
Scope and Contents note
Some popular articles on knots.
Some technical articles on knot classification.
Typescripts of discussions of 10- and 11-crossing knots.
Correspondents:
Perko, Kenneth
Crowell, Richard
Fox, Ralph

box 20, folder 7  Shoelaces & Neckties 1996-2000
Scope and Contents note
Minimum length of shoelace with different patterns.
Mathematical study of ways to tie a necktie.

box 20, folder 8  Testing Equivalence 1938-1979
Scope and Contents note
"Knots", by James Singer, 1938: A lecture given at the Galois Institute of Mathematics, 18pp (typescript)
"Knot coding and Analysis", by D.R. Phillips (typescript)
MG notes on the 3-color test.

box 20, folder 9  Knots in N-spaces 1906-1995
Scope and Contents note
Correspondence on possibility of a knot in spaces of even dimension.
Correspondents:
Rolfsen, Dale
Coxeter, H.S.M.

box 20, folder 10  Trivial Knot Problem 1972-1982
Scope and Contents note
Is a given knot trivial (ie, unknot)?
Generalized Chefalo Knot trick, by Matsuyama.
"A Link Criterion for the Trivial Knot", by John Stillwell (typescript)
"The Compound Crossing Number of a Knot", by John Stillwell (typescript)
Correspondents:
Perko, Kenneth
Matsuyama, Mitsunobu
Poston, Tim
Stillwell, John

box 20, folder 11  Animals & Knots 1962-1968
Scope and Contents note
Hagfish, Leucothrix Mucor (bacterium)
Also, linked molecules (catenane)
Subject files Series 2
Knots, Links

box 20, folder 12  Links 1958-1997
Scope and Contents note
Several puzzles & magic tricks.
Several articles & tricks involving Borromean rings and generalizations.
Some correspondence without names, or only first name.
"Borromean Baffler", by Bob Neale (magic trick)
Correspondents:
Levinson, H.
Neale, Robert
Ransom, Tom

box 20, folder 13  Ring & 2 Knots Puzzle 1982
Scope and Contents note
Correspondents:
Hegde, Manjunath

box 20, folder 14  Sliding Knots 1982
Scope and Contents note
Magic tricks.
Curry letter about sliding knot effect, and "Touch".
Correspondents:
Curry, Paul

Life
Physical Description: 36 folder(s)

box 35, folder 11  Refs. on Cellular Automata 1964-2001
Scope and Contents note
Many articles
Stochastic Growth & Form
Kinematic & Tessellation Automata
Cellular Automata
Self-Replicating Systems
Correspondents:
Ulam, Stanislaw
Wolfram, Stephen

box 35, folder 12  Virtual Ants 1973-1995
Scope and Contents note
Tur-mites

box 35, folder 13  R. Rucker’s (CA) [1 of 2] 1989
Scope and Contents note
CA-Lab (Cellular Automata) instructions
Correspondents:
Rucker, Rudy

box 35, folder 14  R. Rucker’s (CA) [2 of 2] 1989
Scope and Contents note
2 floppy disks for CA-Lab from Autodesk, Inc (1 5-inch floppy & 1 3 1/2 inch floppy)
Subject files Series 2
Life

box 35, folder 15  Waterloo Group 1977
Scope and Contents note
Correspondents:
Raynham, Peter

box 35, folder 16  Linear Life 1978-1988
Scope and Contents note
HP-65 program & instructions
Some articles
Correspondents:
Havermann, Hans
Schwartz, Mordecai

Scope and Contents note
Evolution: A Game (by Vernon Nemitz)
Creation (Paul Axel)
Life91

box 35, folder 19  Life & Fractals 1982
Scope and Contents note
3 papers by Wolfram on life and fractals

box 35, folder 20  Conway Correspondence on Life 1970
Scope and Contents note
Many letters, mostly undated
Correspondents:
Conway, John

box 36, folder 1  Bob Wainright 1970-1982
Scope and Contents note
Correspondence from Wainright and MG to various publishers about a projected book
(by Wainright) about the game of Life, along with drafts, contents, etc.
Correspondence from Wainright to Conway, about projected "Life" newsletter "Lifeline".
Correspondents:
Wainwright, Robert

box 36, folder 2  Practical Uses for Life 1974-1991
Scope and Contents note
Peter Albin - Economic systems (book request)
Art Appel - Computer algorithm for hidden line removal
2 popular science magazine articles (Science Digest, Scientific American)
Logical & Philos. Aspects 1973-1978
Scope and Contents note
"Can computer Design Illuminate Spacetime Physics?", by John A. Wheeler, 1978 (typescript)
MG notes & quotes about Life
Correspondents:
Conway, John

Life Universal 1970
Scope and Contents note
Correspondents:
Smith, Alvy Ray

Fuses & Wicks 1970-1971
Scope and Contents note
Correspondents:
Tower, Steve
Hoel, Jeffrey
Wainwright, Robert
Beeler, Michael

Giders & Ships, Generators, Guns, & Collisions 1970-1990
Scope and Contents note
Many examples, with diagrams, computer printouts, photos, etc
Correspondents:
Gosper, Bill
McClelland, Keith
Collins, George
Woods, Donald

Misc. Life Forms 1972

Methuselahs 1985-1990
Scope and Contents note
Correspondents:
Trevorrow, Andrew

Gardens of Eden 1964-1970
Scope and Contents note
Correspondents:
Smith, Alvy Ray

R-Pentomino 1970-1971
Scope and Contents note
Many responses, most with computer printouts
box 36, folder 11  
**Rows 1970**  
Scope and Contents note  
Correspondents:  
Woods, Donald  
Taber, Arthur  
Friedman, George  
Goodman, Gary  

box 36, folder 12  
box 36, folder 13  
**5-5-5-5-5-5-5-5 1970**  
**Stretchers 1993**  
Scope and Contents note  
Photocopies of printouts from Life mailing list  

box 36, folder 14  
**Oscillators (& Flip-Flops) 1972**  
Scope and Contents note  
Correspondents:  
Hickerson, Dean  

box 36, folder 15  
**Still Lifes 1970**  
Scope and Contents note  
Correspondents:  
Read, Ronald  

box 36, folder 16  
**Fredkin Rule 1970-1975**  
Scope and Contents note  

box 36, folder 17  
**E. Roger Banks 1971**  
Scope and Contents note  
Correspondents:  
Banks, Roger  

box 37, folder 1  
**Articles on Life 1972-1997**  
Scope and Contents note  
Lots of articles, technical & popular  
"Statistical Mechanics of a Dynamical System Based on Conway's Game of Life", by L.S. Schulman & P.E. Seiden (typescript)  
Preliminary outline and preface for "The Book of Life", by Anthony Barcellow & Dean Hickerson, 1983  

box 37, folder 2  
**Computer Programs [1 of 2] 1976-1999**  
Scope and Contents note  
Life on a chip, from CMU, Carl Ebeling & Edward Frank, 1981  
Beyond Life Game, by Brian Silverman, 1985  
Color Life game, by Michael Day, 1988 (Floppy included, next folder)  
Life, by Justin White, 1992 (floppies included, next folder)
box 37, folder 3  **Computer Programs [2 of 2] 1986-1992**
Scope and Contents note
5 1/2 floppy disks:
V2080 CPeMulator version 3.21 & Color Life, Michael Day
LIFE, 1992, Justin White
Big-Calc Version 2.00, 1992, Justin White

box 37, folder 4  **LifeLines 1971-1980**
Scope and Contents note
Complete run of LIFELINE newsletter (1-11) plus re-activated LIFELINE (#12)
Correspondents:
Webb, William

box 37, folder 5  **Jim Jackson's IBM Disk 1985**
Scope and Contents note
About Jackson's disk (not disk itself), which contains Life & Relatives, FRED, GLife, & ZLIFE. Also "users manual" for programs
Correspondents:
Jackson, James

box 37, folder 6  **Poundstone's Book 1983-1984**
box 37, folder 7  **Byte Articles 1975-1992**
Scope and Contents note
Series of "Life Line" articles, 1-4, plus other articles (some photocopies) from Byte
Correspondents:
Helmers, Carl

box 37, folder 8  **Gosper's New Glider Gun & his Hashlife 1987-1988**
Scope and Contents note
Long reports by Gosper on some of his research

box 37, folder 9  **Dean Hickerson 1989**
Scope and Contents note
Copies of correspondence between Dean Hickerson and others

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**Logic**
Physical Description: 18 folder(s)

box 48, folder 1  **Logic 1960-2000**
Scope and Contents note
Many logic problems, from MG and from readers

box 48, folder 2  **Automath Language (De Bruijn) 1971-1974**
Scope and Contents note
"The AUTOMATH Mathematics Checking Project", by N.G. de Bruijn (11pp) (typescript)
"AUTOMATH, a language for mathematics", lectures by N.G. de Bruijn, notes by Barry Fawcell (60pp)
Subject files Series 2
Logic

box 48, folder 3  
**Who Owns Zebra? 1965-1978**
Scope and Contents note
The problem, from several sources. Also some variations, and solutions. No original source mentioned.

box 48, folder 4  
**Smith, Jones, Rob - Problems 1964-1983**
Scope and Contents note
Inferential problems (reasoning problems)
article on solving these with a matrix

box 48, folder 5  
**WFF’N PROOF 1961-1969**
Scope and Contents note
Reports on and ads for the ALL Project (Accelerated Learning of Logic), and their WFF’N Proof games
Correspondents:
Allen, Layman

box 48, folder 6  
**What’s On My Head? 1964**
Scope and Contents note
What’s That on my Head? game, and an idea (by MG) for What’s That on my Head Poker?
Correspondents:
Abbott, Robert

box 48, folder 7  
**Multi-Valued Logic & Other Wierd Logics 1953-1996**
Scope and Contents note
Short MG article on nonsense of “non-Aristotelion” logic (draft)
Several science fiction stories and SF magazine articles involving multi-valued logics
Some articles explaining multi-valued logics, and MG notes on articles

box 48, folder 8  
**Doubleday Book - Plagiarism 1975**
Scope and Contents note
Excerpts from “Vicious Circles & Infinity”, with sources from which they have been taken without quotes or references

box 48, folder 9  
**Lorenzen’s Logic as Game 1965-1966**
Scope and Contents note
“The Logic of Dialogues”, by Paul Lorenzen, 1965 (mimeo)

box 48, folder 10  
**Color Mixing - and Boolean Algebra (& Groups) 1976**
Scope and Contents note
Article from Math. Teacher, by William Orton
<table>
<thead>
<tr>
<th>Box Folder</th>
<th>Title</th>
<th>Years</th>
<th>Scope and Contents note</th>
</tr>
</thead>
</table>
| box 48, folder 11 | **Bertrand Russell Paradox 1971-1976** | Bertrand Russell's Paradox of set of all sets  
MG notes on paradox  
Set of letters between Paul Shildneck & others, on paradox  
Some articles on paradox  
Variations, from Mel Stover  
Correspondents:  
Shildneck, Paul  
Quine, W.V.  
Salmon, Wesley  
Shildneck, Keith |
| box 48, folder 12 | **Symbolic Logic Proofs of God 1958-1963** | Several "proofs", with some analysis |
| box 48, folder 13 | **Brown's Laws of Form [1 of 2] 1972-1986** | Several reviews and articles, and much material pro & con: people bringing "Laws of Form" to MG attention, & MG's skeptical replies. MG compares it to Carnap's "Aufbau", & Boolean algebra.  
"Balance and Self Reference", by Louis H. Kauffman (29pp)(typescript)  
Correspondents:  
Suppes, Patrick  
Heath, Peter  
Kauffman, Louis  
Church, Alonzo |
| box 48, folder 15 | **Logic Paradoxes 1961-1987** | Several articles  
MG references  
MG summary of 2 Lewis Carroll paradoxes (2 barbars; tortoise & Achilles) |
| box 49, folder 1 | **The Liar & Variants 1961-2001** | Correspondents:  
Quine, W.V.  
Clark, Arthur C. |
| box 49, folder 2 | **Self Reference 1964-1998** | Many articles |
### Logic Machines and Diagrams

<table>
<thead>
<tr>
<th>Folder</th>
<th>Description</th>
</tr>
</thead>
</table>
| box 49, folder 4 | **U. of C. Reprint 1967-1990**  
Scope and Contents note  
... of "Logic Machines and Diagrams", by University of Chicago Press  
Correspondence about the reprint, both of the contract for it and the contents of it  
Some royalty reports |
| box 49, folder 5 | **U. of C. Corrections, Revisions 1986** |
| box 49, folder 6 | **Chapter Revisions 1981-1998** |
| box 49, folder 7 | **Chapter 8 - Early Elect. Mach's 1981-1982** |
| box 49, folder 8 | **9. Artificial Intelligence undated**  
Scope and Contents note  
Early draft of new chapter 9, on Machine Intelligence |
| box 49, folder 9 | **Appendix 1981**  
Scope and Contents note  
Draft of new appendix  
"Testrolog Program", a relay circuit to demonstrate the difference between combinatorial and sequential circuits, from Starro Foudus |
| box 49, folder 10 | **Michie Letters (& Papers) 1981-1982**  
Scope and Contents note  
Correspondence with Michie about chapter (& forward)  
2 papers by Michie  
The forward, and chapter 9 with corrections from Michie  
Correspondents:  
Michie, Donald |
| box 49, folder 11 | **Reviews 1959-1983**  
Scope and Contents note  
Mostly of 1958 edition |
<p>| box 49, folder 12 | <strong>Royalty Statements (U.S.) (&amp; Contract) 1956-1974</strong> |
| box 49, folder 13 | <strong>Foreign Editions 1964-1983</strong> |</p>
<table>
<thead>
<tr>
<th>Box and Folder</th>
<th>Description</th>
<th>Details</th>
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</thead>
</table>
| box 49, folder 14 | **Log. Mach. & Diag. 1951-1983** | Scope and Contents note  
Early correspondence with publisher, sample chapter with comments  
Correspondents:  
Church, Alonzo  
Burkhart, William  
Carnap, Rudolf |
| box 49, folder 15 | **Dover Edition 1967** | Scope and Contents note  
Correspondence with Dover, contract, new preface, corrections |
| box 49, folder 16 | **Original Art (Orig. MSS Given - 1966 - to Robert Lund) undated** | Scope and Contents note  
Originals of the art work for Logic Machines and Diagrams book, plus original photo (of "An Electronic Logic Machine") |
| box 49, folder 17 | **Hilton's Plagiarism 1964-1965** | Scope and Contents note  
Correspondence about Alice Mary Hilton's plagiarism of Logic Machines & Diagrams" in her "Logic, Computing Machines and Automation" |
| box 49, folder 18 | **Advertising 1958-1960** | Scope and Contents note  
Pjress releases, book club announcements, etc |
| box 49, folder 19 | **Sc. Amer. Article - Logic Machines 1952** | Scope and Contents note  
The article itself "Logic Machines", plus notes and early draft |
| box 49, folder 20 | **Entry on Lull (For Sebeok Dict.) 1982** | Scope and Contents note  
Typescript of article on Lull, for "Encyclopedic Dictionary of Semiotics"  
Correspondents:  
Sebeok, Thomas |
| box 50, folder 1 | **Modern Revival of Lull 1956-1975** | Scope and Contents note  
Think Tank, Synectics, DeBono and other modern methods for creative thinking  
"Ars Magica Inventorium", rotating disks model, probably MG (1956)  
Zwick's "Morphological" Method  
Correspondents:  
deBono, Edward  
Newell, Allen |
**Lull 1957-1995**

Scope and Contents note

Articles & notes about Raymund Lull (Raimundi Lulli?)
Photostats of some of his work (in Ars Magna)
Correspondents:
Roberts, Don
Goldstein, Henry
Odier, Marc
Walker, John Powell

**For Revision 1958-1985**

Scope and Contents note

Corrections to Logic Machines and Diagrams, and correspondance with publishers about some corrections
Some articles (Plochmann, Ketner) relating to subjects of book
Correspondents:
Ketner, Ken
Plochmann, George Kimball
Mays, Wolfe

**Logic Diagrams 1960-1981**

Scope and Contents note

Various diagrammatic methods:
Cross-marks and dots method
Worlds-diagrams for propositional logics
Two-dimensional writing scheme
... and more
Correspondents:
Swartz, Norman
Lazier, Morley
Denberg, Robert
Zellweger, Shea

**Encyclopedia Articles 1961-1967**

Scope and Contents note

Drafts, corrections, correspondance about the articles, and several copies of the articles themselves.

**L. Carroll's Method 1963-1966**

Scope and Contents note

His (Lewis Carroll's) diagrams, from "The Game of Logic", and some examples applied to MG book.
<table>
<thead>
<tr>
<th>Box, Folder</th>
<th>Collection</th>
<th>Date Span</th>
<th>Description</th>
<th>Correspondents</th>
</tr>
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<tbody>
<tr>
<td>50, 8</td>
<td>Dohmann 1958-1962</td>
<td>Scope and Contents note</td>
<td>2 articles (in German), by Dohmann</td>
<td>Dohmann, Karl</td>
</tr>
<tr>
<td>50, 9</td>
<td>Pierce 1955-1992</td>
<td>Scope and Contents note</td>
<td>Pierce's logic diagrams &amp; MG's search for them</td>
<td>Roberts, Don; Williams, Thyllis; Burks, Arthur</td>
</tr>
<tr>
<td>50, 10</td>
<td>Dr. Caesar's Method 1965-1967</td>
<td>Scope and Contents note</td>
<td>Diagrammatic interpretation fo Quine's &quot;Methods of Logic&quot;, by G. J. Caesar (photocopy in English, booklet, &amp; typescript in German)</td>
<td>Caesar, Gunter</td>
</tr>
<tr>
<td>50, 12</td>
<td>Network Method 1951-1960</td>
<td>Scope and Contents note</td>
<td>Diagrams for Truth-Function logic, developed by MG</td>
<td>Sacksteder, William</td>
</tr>
<tr>
<td>50, 13</td>
<td>G.M. Mes (S. Africa) 1960-1981</td>
<td>Scope and Contents note</td>
<td>Early correspondance with Dr. Mes, about his logic machine (with photo's), and his article on logic with diagrams. Later correspondance with Mrs. Mes and T. Blakeley, about publishing Dr. Mes's books and papers</td>
<td>Blakeley, Thomas; Mes, Marie; Mes, Gerrit</td>
</tr>
</tbody>
</table>
Scope and Contents note
Many papers, articles & notes on Venn diagrams of various types
"Connected Logic Diagrams", by nSolomon Golomb, 1966 (typescript)
Correspondents:
Dyregrov, David
Myers, Steve
Kaphan, Shel

Scope and Contents note
More articles
Correspondents:
Edwards, A.F.
Hu, Stephen

Edwards - On Venn 1988-1993
Scope and Contents note
"Ven Diagrams for Arbitrary Numbers of Sets", by A.W.F. Edwards (typescript)
Correspondents:
Edwards, A.W.F.

Scope and Contents note
Logic device & method by Stavros Foundos, called "Testrologic" (or "Testrolog"), he applies to making decisions in business ventures (using decision tree diagrams) - with patent (actual device in 3-D box)
Correspondents:
Foundos, Stavros


Joe Celko 1964-1965
Scope and Contents note
Much correspondence between MG & Joe Celko, about Celko's diagrams and physical abacus "SLABACUS", to solve logic problems. Also his National Science Fair paper "A Matrix Diagram For Symbolic Logic"
Correspondents:
Celko, Joe

Strict Implication 1951-1957
Scope and Contents note
MG notes (typed) about Strict Implication, mostly based on Lewis and Langford, and Carnap
Correspondents:
Lewis, C.I.
<table>
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<tr>
<th>Box, Folder</th>
<th>Title</th>
<th>Scope and Contents Note</th>
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<tr>
<td>51, 8</td>
<td><strong>Stanhope 1952</strong></td>
<td>Photostat of article from Mind, 4/122, April 1879, on The Stanhope Demonstrator</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Correspondents:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Carnap, Rudolf</td>
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<td></td>
<td></td>
<td>Russell, Edward</td>
</tr>
<tr>
<td>51, 9</td>
<td><strong>Jevons 1951-1973</strong></td>
<td>Notes &amp; articles about Jevons logic machine</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Correspondents:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mays, D.</td>
</tr>
<tr>
<td>51, 10</td>
<td><strong>Marquand 1953-1984</strong></td>
<td>Photostats of &quot;A New Logical Machine&quot;, by Allan Marquand, 1885, and other articles</td>
</tr>
<tr>
<td>51, 11</td>
<td><strong>Macaulay 1913</strong></td>
<td>Patent for logic machine</td>
</tr>
<tr>
<td>51, 12</td>
<td><strong>Pastore 1907-1951</strong></td>
<td>Notes &amp; articles on Annibale Pastore</td>
</tr>
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<td></td>
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<td>Correspondents:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Williams, Donald</td>
</tr>
<tr>
<td>51, 13</td>
<td><strong>Logic Cards 1951-1968</strong></td>
<td>Lots of versions of cards for proving logic syllogisms, many by MG, and notes on others</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Many examples (some in 3-D file)</td>
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<td>Correspondents:</td>
</tr>
<tr>
<td></td>
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<td>Cundy, Martyn</td>
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<td>Moser, Leo</td>
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<tr>
<td>52, 1</td>
<td><strong>Syllogism Program “Lewis Carroll” 1979</strong></td>
<td>Article by Orlove</td>
</tr>
<tr>
<td>52, 2</td>
<td><strong>Electronic Syllogism Machines 1949-1976</strong></td>
<td>Article by Benjamin Burack, and some notes about an Electrical Logic Machine</td>
</tr>
<tr>
<td>52, 3</td>
<td><strong>Electric Logic Machines 1950-1975</strong></td>
<td>Many articles on various early logic machines</td>
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<tr>
<td>Box and Folder</td>
<td>Description</td>
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</tbody>
</table>
| 52, folder 4  | Kalin-Burkhart Machine 1956-1976  
Scope and Contents note  
MG notes on Kalin-Burkhart Logical-Truth Calculator, & pictures, & correspondance  
Correspondents:  
Burkhat, William  
Kalin, Ted |
| 52, folder 5  | Burroughs 1957  
Scope and Contents note  
Correspondance to get photos of the Burroughs Truth Function Evaluator (which uses Lukasiewicz' (Polish) notation) |
Scope and Contents note  
3 articles by M.E. Maron on his machine for Sentential Calculus  
Correspondents:  
Maron, M.E. |
| 52, folder 7  | Many-Valued Machines 1963-1974  
Scope and Contents note  
2 papers on models of multi-valued logic  
Ads for 5th International Symposium on Multiple-Valued Logic, 1975 |
| 52, folder 8  | Minimizing Methods & Machines 1957-1977  
Scope and Contents note  
Minimizing Problem - to minimize Boolean functions, and therefor the number of relays in circuits  
Veitsch Chart  
Loomis' Grid  
Flow Diagrams  
Decision-accounts Table  
Correspondents:  
Nadler, Morton  
Loomis, Lynn  
Darwood, N. |
| 52, folder 9  | Toy Computers (Cardboard, Think-A-Dot, Etc.) 1966-1994  
Scope and Contents note  
Mostly articles analyzing Think-A-Dot  
Correspondents:  
O'Beirne, Thomas |
| 52, folder 10 | Martha Bertman's Cubes & Balls 1975-1981  
Scope and Contents note  
Cubes to simulate Boolean operations |
Burk's History of Switches 1987
Scope and Contents note
"The History of Early Computer Switching", by Arthur W. Burks and Alice R. Burks, 42pp (typescript)
Correspondents:
Burks, Arthur

Mebane's 64 Syllogisms 1999-2000
Scope and Contents note
Articles on Christine Ladd-Franklin and her work on syllogistic logic, by I. Susan Russinoff
A syllogism chart, showing 64 possible syllogisms, 48 possibly valid, 24 actually valid, 12 "traditional", by Alexander Mebane
Correspondents:
Mebane, Alexander

Macmahon's Color Polygons
Physical Description: 4 folder(s)

Corner-Color Squares (Nitty-Gritty, Odier, etc) 1970-1984
Scope and Contents note
Duodomino, Nitty Gritty
Correspondents:
Philpott, Wade
Zimmerman, J.J.
Westerink, G.J.
Fink, Federico
Odier, Marc

Corner-Color Trangles (Odier) 1959-1975
Scope and Contents note
La Trioker
Patent applications for Marc Odier games.
Also various other related patents.
Correspondents:
Harris, John
Odier, Marc

Macmahon Color Hexagons 1971-1978
Scope and Contents note
Sets of hexagons to make edge-matched shapes, by L. Vossburgh Lyons, by Leslie Shader (XIX & CXX), and "Drive You Nuts".
Notes on Voz (L. Vossburgh Lyons) after his death.
Correspondents:
Prichodjko, Alexander
Philpott, Wade
Lyons, L. Vossburgh (Voz)
Subject files Series 2
Macmahon's Color Polygons

box 27, folder 4 3D Forms undated
Scope and Contents note
Several edge matching 3D puzzles.
Correspondents:
Shader, Leslie

Magic Squares, Etc.
Physical Description: 23 folder(s)

Scope and Contents note
MG notes
"Fantasies in Figures, Mathematic Mysteries and Magic Squares", in Treasury of Folklore, by "Meloc" (Stanley Jackson Coleman), 1956 (mimeograph booklet)
"Report on Considerations Concerning Magic Squares and Their Use in Digital Design", by J.H. White, 38pp (mimeo, stapled)
Correspondents:
Laposky, Ben
Helbing, Edgar

Scope and Contents note
More notes, letters and articles on magic squares

box 56, folder 6 Order-3 Square 1958-2001
Scope and Contents note
MG notes
Puzzles based on order-3 squares
Articles, analyses, etc
Correspondents:
Trigg, Charles

box 56, folder 7 Anti-Magic Squares 1965-1971
Scope and Contents note
MG notes
Articles
Correspondents:
Mercer, Leigh

box 56, folder 8 Order-4 Square (Diabolic) 1938-1998
Scope and Contents note
MG notes
Articles
Pandiagonal magic squares (by Ollerenshaw)
Correspondents:
Walker, Robert
Sallows, Lee
Ollerenshaw, Kathleen
Durer's Melancholia undated
  Scope and Contents note
  MG notes

Magic Square Magic Tricks 1942-1997
  Scope and Contents note
  MG notes
  The Magic Square, Bert Allerton (simplified version, 1942)
  The Magic Square, Phil Burns, 1956
  Birthday Magic Squares, Max Katz, 1962
  Patterns of Perfection, Sam Dalal, 1993
  Some Stewart James predictions
  The Ultimate Magic Square, by Christoph Wasshuber (Chris the Magician)

The Order-5 Square 1962-1975
  Scope and Contents note
  Program for counting order 5 magic squares: Bill Gosper, Richard Schroeppel, Michael Beeler, 1973

Orders &gt; 5 (Squares) 1963-1997
  Scope and Contents note
  Franklin's Square
  Pandiagonal Magic Squares of the Seventh Order (mimeo)
  Other algorithms
  Correspondents:
  Ollerenshaw, Kathleen

The 32x32 Trimagic Square 1973-1976
  Scope and Contents note
  Material on it by William H. Benson
  Correspondents:
  Benson, William
  Madachy, Joseph
  Coxeter, H.S.M.
  Klarner, David

Magic Stellated Dodecahedron 1976
  Scope and Contents note
  "Whitchcraft, or Perfect Magic Icosapentacles", by Bayard Wynne, 19pp (typescript)
  Wynne calls the small stellated dodecahedron "Icosapentacles"

Magic Graphs 1964-1980
  Scope and Contents note
  Magic Octagons (French)
  Various shapes and structures
  Correspondents:
  O'Beirne, Thomas
  Trigg, Charles
box 57, folder 5  **Antimagic Triangles & Other Forms 1980-1981**  
Scope and Contents note  
MG notes  
3 articles by Charles Trigg (typescript)  
Correspondents:  
Trigg, Charles

box 57, folder 6  **Enumeration of 6, 7, & 8 1966-1988**  
Scope and Contents note  
Correspondents:  
Domergue, A.  
Moldon, Alan  
Montgomery, Coralie  
Ulrich, E.J.  
Roubicek, Juan  
Seare, S.A.

box 57, folder 7  **Sallows' Complex 3x3 Squares 1996-1997**  
Scope and Contents note  
Correspondents:  
Sallows, Lee

box 57, folder 8  **Magic Triangles 1957-1992**  
Scope and Contents note  
Correspondents:  
Piersel, W.Guthrie  
Trigg, Charles

box 57, folder 9  **Alphamagic (Lee Sallows) 1986-1997**  
Scope and Contents note  
Correspondents:  
Sallows, Lee

box 57, folder 10  **Magic Hexagons (Aug/63) 1924-1992**  
Scope and Contents note  
MG notes  
Much reader correspondence  
Only 3rd order magic hexagons exist: proof  
Magic Hexagon Puzzle - (in 3D box)  
Correspondents:  
Tapson, Frank  
Adams, Clifford  
Fabel, Karl  
Trigg, Charles  
Lindgren, Harry
box 57, folder 11 **Magic Rectangles 1998-2000**
Scope and Contents note
2 articles by Hadedorn (typescript)
Summary & chapters from book by Gil Lamb
Couple of other articles
Correspondents:
Hadedorn, Thomas
Lamb, Gil

box 57, folder 12 **Other Types 1966-1994**
Scope and Contents note
Magic Circles
The Missing Fifth (magic trick)
Correspondents:
Lyons, Vosburgh (VOZ)

box 57, folder 13 **Multiplying Squares 1963-1997**
Scope and Contents note
Correspondents:
Golomb, Solomon
McKay, Angus

box 57, folder 14 **Magic Stars 1964-2002**
Scope and Contents note
MG notes
Correspondents:
Graham, Arthur
Chadosch, Robert
Lindgren, Harry

box 57, folder 15 **Venn Diagrams 2000**
Scope and Contents note
Bernardo Recaman on Magic Venn Diagrams
Correspondents:
Recaman, Bernardo

---

**Maps**
Physical Description: 7 folder(s)

box 40, folder 1 **4 Color Conjecture & Equivalents [1 of 2] 1959-1973**
Scope and Contents note
References
Many articles
Correspondents:
Bernhart, Frank

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Guide to the Martin Gardner Papers SC0647
<table>
<thead>
<tr>
<th>Box and Folder</th>
<th>Description</th>
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<tr>
<td>box 40, folder 3</td>
<td>Map &amp; Set Coloring (Misc) 1957-1996</td>
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<td>box 40, folder 4</td>
<td>Heawood's Conjecture 1890-1970</td>
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<td>box 40, folder 5</td>
<td>Spenser-Brown's 4-color &quot;Proof&quot; 1977-1978</td>
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<tr>
<td>box 40, folder 7</td>
<td>3-Color Map Problem 1992-1993</td>
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Mathematicians (Alphabetical)

Physical Description: 71 folder(s)
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<th>Box/Folder</th>
<th>Correspondent</th>
<th>Year(s)</th>
<th>Scope and Contents note</th>
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<td>box 37, folder 10</td>
<td>Adelman, Leonard</td>
<td>1994</td>
<td>Scope and Contents note 1 article</td>
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<td>box 37, folder 11</td>
<td>Bankoff, Leon</td>
<td>1992</td>
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<td>box 37, folder 12</td>
<td>Ball, W.R.R.</td>
<td>undated</td>
<td>Scope and Contents note Biography &amp; bibliography, by David Singmasster (typescript)</td>
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<td>box 37, folder 14</td>
<td>Berlekamp</td>
<td>1994</td>
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<td>box 37, folder 15</td>
<td>Bennett, Chas.</td>
<td>1987-1992</td>
<td>Scope and Contents note Various articles by Bannett, on Maxwell's Demon, Complexity, etc.</td>
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<td>box 37, folder 16</td>
<td>Bernoulli</td>
<td>1992</td>
<td>Scope and Contents note Article, book revies on Bernoulli brothers</td>
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<tr>
<td>box 37, folder 17</td>
<td>Bourbaki</td>
<td>1957-1976</td>
<td>Scope and Contents note Several articles about Bourbaki Some references (MG)</td>
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<td>box 37, folder 18</td>
<td>Cantor, G.</td>
<td>1988-1995</td>
<td>Scope and Contents note Several articles on Cantor</td>
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<td>box 37, folder 19</td>
<td>Chung, Fan</td>
<td>undated</td>
<td>Scope and Contents note 1 article</td>
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<td>box 37, folder 20</td>
<td>Cipra, Barry</td>
<td>1997</td>
<td>Scope and Contents note 1 short newspaper article Correspondents: Cipra, Barry</td>
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<td>box 37, folder 21</td>
<td>Benjamin, Arthur</td>
<td>1998</td>
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<td>Cartwright, Mary</td>
<td>1999</td>
<td>Scope and Contents note 1 article</td>
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<td>W.K. Clifford: Life and Philosophy, about 52 pages (typescript), ND, no author</td>
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<td>&quot;The Ethics of Belief&quot;, by W.K. Clifford, 5pp (photocopy)</td>
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<td>Box 37, Folder 24</td>
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<td><strong>Conway 1970-2001</strong></td>
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<td>Many magazine and newspaper articles on Conway</td>
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<td>2 long letters from Conway to MG</td>
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<td>Correspondents:</td>
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<td>Conway, John</td>
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<td>Several articles</td>
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<td><strong>Danzig, George 1994</strong></td>
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<td><strong>De Bruijn undated</strong></td>
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<td><strong>Dewdney, Kee 1986-1987</strong></td>
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<td>2 articles</td>
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<td><strong>Diaconis, Persi 1977-1990</strong></td>
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<td><strong>Elkies, Noam 1997-1998</strong></td>
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<td><strong>Erdos 1969-2000</strong></td>
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<td>Many interviews with and articles about Erdos</td>
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<td>Reviews of books about Erdos</td>
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<td>Discussions of Erdos number</td>
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<td>Box 38, Folder 8</td>
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<td><strong>Euler undated</strong></td>
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<td>Excerpt from book &quot;Euler, The Master of us All&quot;, and article by Harary</td>
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<td><strong>Fisher, Irving undated</strong></td>
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<td>1 article (book review of his biography, by Robert Allen)</td>
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Subject files Series 2
Mathematicians (Alphabetical)

box 38, folder 10  
Scope and Contents note  
References  
Rotating Universe & Time Travel  
Photocopy of "Godel Meets Einstein", by Palle Yourgrau, Open Court Press, 1999 (252 pages)  
Some articles on Godel's incompleteness theorem

box 38, folder 11  
Scope and Contents note  
Articles on Godel's incompleteness theorem  
MG notes on Godel's proof  
Some biographical articles  
Correspondents:  
Chaitin, Greg  
Rucker, Rudy

box 38, folder 12  
Scope and Contents note  
Several articles by Has Wang (a friend of Godel) on Godel  
Several biographical articles  
Articles about ideas stemming from Godel, and the Foundations of Mathematics  
Correspondents:  
Ulam, Stanislaw

box 38, folder 13  
**Goldberg, Michael 1990**  
Scope and Contents note  
Letter from his son, Jefemy, plus short biography

box 38, folder 14  
**Golomb 1996-2000**  
Scope and Contents note  
Solomon golomb  
USC article on Golomb's appointment ot Viterbi Chair in Communications  
Golomb articles on Mathematics 40 years after Sputnik  
Correspondents:  
Golomb, Beatrice

box 38, folder 15  
**Gosper 1995**  
Scope and Contents note  
William Gosper  
Letter from MG recommending Gosper for MacArthur Fellowship

box 38, folder 16  
**Ron & NFan Graham 1981-1997**  
Scope and Contents note  
Several articles on Ron Graham, one on Fan Chung Graham

box 38, folder 17  
**Guy, Berlekamp, Selfridge 1993**  
Scope and Contents note  
2 photos of the 3 of them, plus interview with Guy
<table>
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<th>Box Folder</th>
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<td>box 38, folder 18</td>
<td><strong>Halmos 1980-1985</strong>&lt;br&gt;Scope and Contents note&lt;br&gt;&quot;Applied Mathematics is Bad Mathematics&quot;, by Paul Halmos (typescript draft)&lt;br&gt;Interview&lt;br&gt;Correspondents:&lt;br&gt;Halmos, Paul</td>
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<td>box 38, folder 19</td>
<td><strong>Harary 1993</strong>&lt;br&gt;Scope and Contents note&lt;br&gt;Extensive bibliography &amp; Curriculum Vitae of Harary&lt;br&gt;Correspondents:&lt;br&gt;Harary, Frank</td>
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<td>box 38, folder 20</td>
<td><strong>Huffman, David 1991</strong>&lt;br&gt;Scope and Contents note&lt;br&gt;1 profile (SA)</td>
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<td>box 38, folder 21</td>
<td><strong>Kaczynski (Unibomber) undated</strong>&lt;br&gt;Scope and Contents note&lt;br&gt;List of 10 mathematical papers by Caczynski</td>
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<td>box 38, folder 22</td>
<td><strong>Don Knuth 1960-2001</strong>&lt;br&gt;Scope and Contents note&lt;br&gt;Interview and many articles&lt;br&gt;Many Xmas cards&lt;br&gt;Potrzebie system&lt;br&gt;Many recreational mathematics references in letters&lt;br&gt;Correspondents:&lt;br&gt;Knuth, Donald</td>
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<td>box 39, folder 1</td>
<td><strong>Kraitchik 1957</strong>&lt;br&gt;Scope and Contents note&lt;br&gt;Obitury (in French)&lt;br&gt;Correspondents:&lt;br&gt;Kraitchik, Maurice</td>
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<td>box 39, folder 2</td>
<td><strong>Kruskal, Martin 1993-1994</strong>&lt;br&gt;Scope and Contents note&lt;br&gt;2 short articles.</td>
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<td>box 39, folder 3</td>
<td><strong>Lehrer, Tom 1997</strong>&lt;br&gt;Scope and Contents note&lt;br&gt;1 article (Math Horizons) with &quot;That's Mathematics&quot; words and music</td>
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<td>box 39, folder 4</td>
<td><strong>Littlewood 1978-1996</strong>&lt;br&gt;Scope and Contents note&lt;br&gt;John E. Littlewood&lt;br&gt;Several articles &amp; reviews (of &quot;Littlewood's Miscellany&quot;)</td>
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<td>Box 39, Folder 5</td>
<td>Liberi's Course in RM (&amp; Others) 1974-1984</td>
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<td>Scope and Contents note</td>
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<td>Several outlines for a course in recreational mathematics taught by Albert Liberi in New York</td>
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<td>Moore, Charles</td>
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<td>Liberi, Albert</td>
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<th>Box 39, Folder 6</th>
<th>Scott Morris 1987</th>
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<th>Box 39, Folder 7</th>
<th>Leo Moser 1959-1972</th>
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<td>Correspondence &amp; notes about a proposed book by Moser and MG on mathematical humor.</td>
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<td>Reprints of various Moser problems</td>
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<td>Moser, William</td>
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<td>Moser, Leo</td>
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<td>Stover, Mel</td>
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<td>Several newspaper &amp; magazine articles on Nash, both his Nobel Prize and the book about him.</td>
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<td>(Also Kaczynski, the Unibomber, &amp; Erdos books)</td>
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<td>2 letters, about his death</td>
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<td>Much correspondence between MG and Pickover, about his books &amp; blurbs for them.</td>
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<td>Several book reviews.</td>
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<td>2 book reviews (&quot;Poincare and the Three Body Problem&quot;)</td>
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<td>1 biography, photocopied from &quot;Golden Age of Science&quot;</td>
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<td>Curriculum Vita, letter of recommendation (by MG)</td>
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<td>Various articles by Richards</td>
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box 39, folder 14  
**Robinson, Julia & Constance Reid 1992-1996**  
Scope and Contents note  
2 articles

box 39, folder 15  
**Rogers, Douglas 1998**  
Scope andContents note  
2 letters from Rogers to MG, & 1 reply  
Correspondents:  
Rogers, Douglas

box 39, folder 16  
**Rota 1997**  
Scope and Contents note  
1 article

box 39, folder 17  
**Rucker, Rudy 1982-1999**  
Scope and Contents note  
Much correspondence  
Correspondents:  
Rucker, Rudy

box 39, folder 18  
**Doris Schattschneider 1990**  
Scope and Contents note  
1 picture & short biography

box 39, folder 19  
**Sloane, Neil 1990**  
Scope and Contents note  
2 articles & picture

box 39, folder 20  
**Smale 1984-1999**  
Scope and Contents note  
2 articles & book review

box 39, folder 21  
**Smullyan, Raymond 1978-1994**  
Scope and Contents note  
1 article (Smithsonian) & a little correspondence  
Correspondents:  
Smullyan, Raymond

box 39, folder 22  
**Steuben, Mike 1984**  
Scope and Contents note  
1 short article (Discover)

box 39, folder 23  
**Ian Stewart 1992**  
Scope and Contents note  
Stewart's prefance to one of his books, and MG introduction

box 39, folder 24  
**Sylvester 1987-1997**  
Scope and Contents note  
3 articles (technical)  
"The Laws of Verse, or Principles of Versification", by J.J.Sylvester, 1870(152 photocopied pages)
Tarski, Alfred 1991-1999
Scope and Contents note
Photocopy from "From Dedekind to Gödel" on Tarski
2 articles (M. Intellegencer)

Tukey, John Wilder 2002
Scope and Contents note
1 article (Notices of AMS)

Ulam 1981-1990
Scope and Contents note
Interview (2-year CMJ)
Long biography by Gian-Carlo Rota (1987)
Couple of articles

Van der Waerden 1997
Scope and Contents note
1 article, Notices of AMS

Von Neumann 1964-1998
Scope and Contents note
Many articles
"The Legend of John von Neumann", by P.R. Halmos, 1973 (reprint)
Photocopy of "Proceedings of Symposia in Pure Mathematics, Vol. 50" on The Legacy of
John von Neumann, 1990 (10 articles)

Wang, Hao 1996
Scope and Contents note
1 article, form "Gödel '96"

Weil, Andre 1998-1999
Scope and Contents note
Obituary
1 short article

Wiener, Norbert 1995
Scope and Contents note
Several articles

Wolfram, Stephen undated
Scope and Contents note
Several newspaper articles

Women 1965-1996
Scope and Contents note
Several articles on women in mathematics in general
Some articles on gender in math
Sophie Germain article (form Sci. Am.)
Ruth Lawrence (short, from Time)
Subject files Series 2

Mazes

Physical Description: 6 folder(s)

box 22, folder 10  Adrian Fisher Mazes 1986-1999
Scope and Contents note
Many articles by and about Adrian Fisher, including several copies of his "Maze News"
MG introduction for Fisher's book (typescript)

box 22, folder 11  Maze Solving Techniques 1957-1997
Scope and Contents note
Chemical method (Science News article)
Several articles of mathematical methods (2 in French)
Correspondents:
Lee, C.Y.
Abbott, Robert

box 22, folder 12  Maze Books 1970-1989
Scope and Contents note
MG report on out-of-print maze books (for Dover)
Many book reviews and newspaper articles
Correspondents:
Brightfield, Rick
Ransom, Tom

box 22, folder 13  Mazes 1962-2001
Scope and Contents note
Lots of mazes!
MG letter (to Judy-Lynn del Rey) with detailed 3-D maze suggestion
Correspondents:
Friedman (Efjif, Inc)
Eliot, William
Pegg, Ed Jr.

box 22, folder 14  Outdoor Mazes 1981-1994
Scope and Contents note
Articles, pictures, a little history

box 22, folder 15  Bob Abbott 1988-1995
Scope and Contents note
Manuscripts & original drawings of some of Abbott's mazes
Correspondents:
Abbott, Robert

Mechanical Puzzles

Physical Description: 23 folder(s)
<table>
<thead>
<tr>
<th>Box and Folder</th>
<th>Description</th>
</tr>
</thead>
</table>
| 62, folder 1 | **Mechanical Puzzles [1 of 3] 1900-1990**  
- Scope and Contents note  
- Many descriptions of mechanical puzzles, mostly in catalogs, and a few magazine articles  
- "The Ego Activation Method", by Melvin Weiner, 1980 (reprint), using puzzles as part of psychotherapy  
- Strand Magazine article (1900) on "Chinese Puzzles, Tricks, and Traps, by James Scott Yashimoto Cube, Nos. 1,2,3 (descriptions, 1971)  
- Polygonzo, 1990 (Howard Jay Fleischer)  
- Puzzle World #3, by Dale Overy  
- Puzzlelets  
- Correspondents:  
  - Golomb, Solomon  
  - Overy, Dale  
  - Dalgety, James  
  - Van Delft, Pieter  
  - Coffin, Stewart  
  - Singmaster, David |
- Scope and Contents note  
- More puzzle descriptions, in catalogs and articles  
- IDI (I.O. Development Institute, Ewe Meffert, 1990  
- Interlocking Puzzles  
- World Puzzle Congress (Zagreb, 1991) announcement & program  
- Bill Cutler  
- Magic Cubes 1991, Christoph Bandelow  
- Gantt's Wood Things  
- Ishi Press  
- General Symmetrics, Inc (Doug Engel) |
- Scope and Contents note  
- Tim's Toy Report, Nos. 2,3,4, 2994  
- Various catalogs  
- Short articles on: Spinout, Double Dovetail, Japanese Secret Box, Frank Armbrusster, Panex Puzzle, Reversible Nesting Box  
- "Ruan Liuqi, The Ingenious Puzzle Craftsman of Suzhou", by Wei Zhang & Peter Rasmussen, 1998, 9pp (booklet) |
- Scope and Contents note  
- Puzzle News: 1979  
- Puzzle descriptions: Nova, Seven Woods, Spider Slider, Star, Cuckoo Nest, Locked Nest (with pictureA), Pin Hole  
- Puzzle Craft: Vol 1, No. 1; No 2; No 3; No 4; No 5; No 6 |
Scope and Contents note
2 fine Woodworking articles (1979, 1984)
Puzzle descriptions: Six-Piece Burr, Burr #305, Cornucopia
Catalog sheets: 1981
"Puzzling World of Polyhedral Dissection", by Stewart Coffin (Rough draft, 1986)
Correspondents:
Coffin, Stewart

Jerry Slocum 1955-1995
Scope and Contents note
Article from Jeux & Strategie (in French) (photocopy) - about Jerry Slocum
"Making and Solving Puzzles, by Jerry Slocum, 1955
Article from Science & Mechanics Magazine
Compendium of Mechanical Puzzles From Catalogs, by Jerry Slocum, 1977 (Just the intro and references)
Several diagrams of various burr puzzles
Correspondents:
Slocum, Jerry
Duffy, Mike

The LA Puzzle Exhibit 1984-1986
Scope and Contents note
Printout of orientation panels
NEH application for grant

Rubik's Cube & Other Rubik Items 1986-1995
Scope and Contents note
2 articles on solving (cube and clock)
Some ads for other items

Pyraminx 1981
Scope and Contents note
MG notes on solutions of various patterns
A 14 page analysis of Pyraminx, nd, possible by Turner-Smith
Disclosure document to patent office, for Impossible Polyhedron, an invention by James Pearce, with photographs. (Seems to be an Impossiball.)

Pentangle Line 1972-1988
Scope and Contents note
A few Pentangle catalogs & sales sheets
Correspondents:
Dalgety, James

Orb-It 1981-1982
Scope and Contents note
MG intro to Warnecks book on Orb-It (photocopy)
Correspondents:
Werneck, Tom
box 63, folder 3  **Tom Ransom Project 1977-1978**
Scope and Contents note
Correspondance about possible book
Correspondents:
Ransom, Tom

box 63, folder 4  **T.Q. Rowett 1984-1998**
Scope and Contents note
Correspondents:
Rowett, Timothy

box 63, folder 5  **Phoney Baloney 1970-1971**
Scope and Contents note
Correspondents:
O’Beirne, Thomas
Bernhart, Frank

box 63, folder 6  **NYC Rec. Math Shop (?) 1939-1980**
Scope and Contents note
Math-E-Magics - the store where Math is Fun

box 63, folder 7  **Japanese Puzzles 1990-1993**
Scope and Contents note
2 Toyo Glass calendars
Puzzletopia No. 11 (from Nob Yoshigahara)
Catalogs from Puzzland, Kikimi, Toyo Glass, Matsuya Ginza, Ishi Press
Some interviews with Nob Yoshigahara

box 63, folder 8  **Joel Langer’s Wire Knots 1981-1983**
Scope and Contents note
Why Knots
Correspondents:
Langer, Joel

box 63, folder 9  **Sam Cornwall 1994**
Scope and Contents note
Photos & stories of his puzzles
Correspondents:
Cornwall, Sam

box 63, folder 10  **Bill Cutler 1994-1995**
Scope and Contents note
Some puzzle designs, and some catalogs
Correspondents:
Cutler, William

box 63, folder 11  **Puzzle Cards undated**
Scope and Contents note
Photocopies
box 63, folder 12  Poly-Spheres - Tut’s Tomb - Anagog undated
   Scope and Contents note
   MG notes of Tut’s Tomb (Mag-Nif)
   Instructions & solutions (photocopy) of Anagog (by Piet Hein)

box 63, folder 13  Wire Puzzles 1991-1993
   Scope and Contents note
   “Analysis of ring Puzzles”, by Richard Hess, 4”x5”, bound, 1993
   Perry Horton catalog (with drawings), 1991
   Tavern Puzzles
   Photocopy of other mwire puzzles (Richard Hess?)

box 63, folder 14  Loony Loop 1968-1993
   Scope and Contents note
   Puzzle history, and some photocopies of old catalogs with it
   Controversy over who invented it
   Correspondents:
      Knuth, Donald
      Swinford, Paul
      James, Stewart
      Sutton, C.R.
      Armbruster, Frank
      Neale, Robert
      Conway, John
      Dyckman, Howard

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**Misc. Math**

Physical Description: 12 folder(s)

box 66, folder 10  Math Bibliography for NYR 1987-1990
   Scope and Contents note
   Various versions of bibliography for mathematics books, as well as one for
   computers and artificial intelligence books
   Correspondents:
      Schaaf, William

box 66, folder 11  The "New Math" 1958-1984
   Scope and Contents note
   Lots of articles about the New Math, for and against
   Correspondents:
      Page, David
box 67, folder 1  **Strens Collection 1983-1986**  
Scope and Contents note  
(Sallows letters: see Pangram folder, 2/65/7  
Correspondents:  
Strens, Pascal  
Sallows, Lee  
Knuth, Donald  
Guy, Richard

box 67, folder 2  **Sets, Metamath, Etc. 1958-1968**  
Scope and Contents note  
Several articles about mathematics itself, and how to organize its parts  
Set theory

box 67, folder 3  **Foundations (Schools) [1of2] 1961-1989**  
Scope and Contents note  
Many technical papers and articles on foundations of mathematics, particularly  
constructionist (intuitionism), axiomatics (formalism), logicism, etc.

box 67, folder 4  **Foundations (Schools) [2of2] 1988-1998**  
Scope and Contents note  
More articles  
"Randomness in Arithmetic and the Decline and Fall of Reductionism in Pure  
Mathematics", by G.J. Chaitin, 1992 (lecture transcript)

box 67, folder 5  **Nomograms & Triangle-Square Dissection 1943-1965**  
Scope and Contents note  
Some articles on nomogramphs and nomograms  
Dudeneys triangle to square dissection

box 67, folder 6  **Operations Research 1957-1971**  
Scope and Contents note  
Articles, mostly popular

box 67, folder 7  **Baywood Series 1978**  
Scope and Contents note  
Preliminary plans for books based on Journal of Recreational Mathematics  
Correspondents:  
Schwartz, Benjamin

box 67, folder 8  **Math & Postage Stamps 1963-1982**  
Scope and Contents note  
Some articles, some pictures, some stamps (with mathematical content)  
Also a couple of articles on stamp errors

box 67, folder 9  **How to Catch a Lion 1968-1973**  
Scope and Contents note  
2 articles on mathematical methods of big game hunting
box 67, folder 10  Pure vs. Applied 1997

Scope and Contents note
Typescript of Golomb's talk "Mathematics Forty Years After Sputnik"
Correspondents:
Golomb, Solomon

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Misc. Problems

Physical Description: 35 folder(s)

box 40, folder 8  Words & Letters 1974-1998

Scope and Contents note
Kangaroo Words
Strike-Outs
Much from Word Ways magazine, and from Games Magazine
Lots of small word puzzles and games
Correspondents:
Woods, Donald
Browne, Owens Hand
Swinford, Paul

box 40, folder 9  Quickies [1 of 2] 1964-1983

Scope and Contents note
Many short problems, from various sources and correspondence.
Correspondents:
Lindberg, Gene
Ransom, Tom


Scope and Contents note
More short problems.

box 41, folder 1  Omitted From Sterling Bk 1994

Scope and Contents note
Proposal for a math puzzle book for children, 5-10 years old. Puzzles all answered by numbers (which would be the next page to read.) Lots of such problems. (Possilbe title: A Mathematical & Magical Puzzle Story.)

box 41, folder 2  XEROR - 51 Puzzle Slides 1974

Scope and Contents note
Numbered, not in order
Subject files Series 2

Misc. Problems

box 41, folder 3  Number Items (Dr. Matrix) [1 of 2] 1965-1982
Scope and Contents note
Many short number puzzles, problems, and oddities, many used in Dr. Matrix columns
Nuclear numbers (number of electrons in each shell)
Correspondents:
Anastaplo, George
Dudley, Underwood
Halstead, Tom
Nagaraj, S.T.

box 41, folder 4  Number Items (Dr. Matrix) [2 of 2] 1971-1994
Scope and Contents note
Math. Curiosities: Algebraic, Numeric, Oddest odd number (153), squares & cubes, upside down magic squares, cannonball number, etc.
"The Bard And The Bible", by Allan Slaight, 1966 (typescript)
Correspondents:
Stueben, Michael
Bergerson, Howard
Morris, Scot

box 41, folder 5  My Favorite Funny Quickies (For 4-Star Puzzler) 1982-1983
Scope and Contents note
Several issues of "The 4-Star Puzzles", including one with MG article

box 41, folder 6  Quickies From Martin Gardner undated
Scope and Contents note
(spiral bound booklet)

box 41, folder 7  Task Problems 1968-1998
Scope and Contents note
Many ideas fro a task puzzle (story to be written)
Many task problems.
Task problem: do some task using unlikely objects
Correspondents:
Gillman, Leonard

box 41, folder 8  Wordles 1952-1999
Scope and Contents note
Word arrangement representing a phrase. Also: "Wacky Wordies", "Word Play", "Phrenetic Phrases", and more.
Lists of phrases, titles, etc. to be made as wordles.
Many examples
Correspondents:
Halmos, Paul

box 41, folder 9  MatheMADics (Wordles) 1967-1999
Scope and Contents note
(Wordles of mathematics terms.)
Correspondents:
Bankoff, Leon
box 41, folder 10  **Fallacies (All Types) 1958-1996**
Scope and Contents note
Correspondents:
Knapp, Merville
Dante, William Michael

box 41, folder 11  **Day Punch (Tony Wightman) 1989**
Scope and Contents note
Information about Dayunch Punchboard Calendars.

box 41, folder 12  **Match (Toothpick) Items 1977-2001**
Scope and Contents note
Correspondents:
Stover, Mel
Royce, James

box 41, folder 13  **Riddles 1918-1993**
Scope and Contents note
Many riddles, old and new.
"Riddles for the Nursery", Second Series, No. 3, N.Y., Kiggins & Kellogg, 16pp, 2 1/4" x 3 3/4", booklet (ND)
"How Many 3-Cent Stamps in a Dozen", by Herman Hover, Price/Stern/Sloan, 1976, 5"x6" (booklet)

box 41, folder 14  **How Come? Project 1960-2002**
Scope and Contents note
Funny quickies, brain teasers
Correspondence (with Bob Singler about MG-supplied "How Comes").
"Play How Come!", by Robert Singer, 1985 (booklet)
"How Come - Again?", by Agnes Rogers & Richard Sheehan, 1960, 71pp (bound photocopy)
"Quisters", by John Zax, 1994, 55pp (photocopy)
Correspondents:
Singer, Robert

box 42, folder 1  **Misc (Adults Mainly) 1971-1997**
Scope and Contents note
Various puzzles from various magazines, including Games Magazine, Omni, Discover, etc.
MG notes for puzzles

box 42, folder 2  **Optical, Rotate, Etc. (For Kids) 1976-1996**
Scope and Contents note
Both pictures and words.
Correspondents:
Sakane, F.

box 42, folder 3  **MAD Puzzle Spoofs 1966-1995**
Scope and Contents note
And a few others
Subject files Series 2
Misc. Problems

box 42, folder 4  Blue Math Humor 1992-1993
Scope and Contents note
"Mathematical Atrocities & Other Cool Stuff", by Michael Steuben, 8pp, 1992 (3 copies)

box 42, folder 5  America Illustrated Puzzles 1972-1973
Scope and Contents note
Correspondence with America Illustrated magazine about supplying 10 (or 12) puzzles.
Not the puzzles themselves.

box 42, folder 6  Geography, Maps 1975-1988
Scope and Contents note
Geographic puzzles
Correspondents:
McCarthy, John
Roosevelt, Cornelius Van S.

box 42, folder 7  Typewriter 1962-1994
Scope and Contents note
4 "Typewri-Toons", from Mad Magazine
Pictures with typewriter letters
Emoticon-like combinations
And a few more typewriter items

box 42, folder 8  Playing Cards 1994
box 42, folder 9  Catches 1966-1995
Scope and Contents note
Questions with tricky or surprising answers, bar bets

box 42, folder 10  Blue Brain Teasers, etc. 1957-1958
box 42, folder 11  S.W. Brain Teasers 1958-1960
Scope and Contents note
For Science World
About 75 (numbers, some may be left out) from Science World column, possibly somewhat classified (not in numeric order.)
Some miscellaneous other short problems

box 42, folder 12  CD (Children's Digest) - Brain Teasers 1951-1965
Scope and Contents note
Many short brain teasers, catches, etc.
Large number cut from Children's Digest between 1951 & 1960

box 42, folder 13  JPictographic Words 1967-1983
Scope and Contents note
Also words within words, self-descriptive words
Many form Mad Magazine

box 42, folder 14  15 Favorites (97) 1997
Scope and Contents note
Puzzles for Games Magazine (and published article)
Also, 20 "How Comes" (undated)
<table>
<thead>
<tr>
<th>Box 42, Folder 15</th>
<th><strong>10 Favorite B. Teasers 1977-1984</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Scope and Contents note</strong></td>
</tr>
<tr>
<td></td>
<td>Contribution for article in Games Magazine, and the article itself (with reprint correspondence)</td>
</tr>
<tr>
<td>Box 42, Folder 16</td>
<td><strong>Quiz Show Ideas 1985</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Scope and Contents note</strong></td>
</tr>
<tr>
<td></td>
<td>Various short task problems, including some math and coin problems</td>
</tr>
<tr>
<td>Box 42, Folder 17</td>
<td><strong>10 B. Teasers #2 1978</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Scope and Contents note</strong></td>
</tr>
<tr>
<td></td>
<td>Correspondence and article</td>
</tr>
<tr>
<td>Box 42, Folder 18</td>
<td><strong>Unsolved Probs 1970-1979</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Scope and Contents note</strong></td>
</tr>
<tr>
<td></td>
<td>&quot;Problems in Discrete Geometry&quot;, w. Moser, 4th ed, 1979 (photocopy) - 28 problems</td>
</tr>
<tr>
<td></td>
<td>Some lists of unsolved problems.</td>
</tr>
</tbody>
</table>

**Music**

Physical Description: 7 folder(s)

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Scope and Contents note</strong></td>
</tr>
<tr>
<td></td>
<td>Many articles, both technical &amp; popular, on both the mathematics of music and the relationship of music to mathematics</td>
</tr>
<tr>
<td></td>
<td>Digital recording methods</td>
</tr>
<tr>
<td></td>
<td><strong>Scope and Contents note</strong></td>
</tr>
<tr>
<td></td>
<td>More articles about relationships between music and mathematics</td>
</tr>
<tr>
<td>Box 71, Folder 15</td>
<td><strong>Bell Ringing 1972-1987</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Scope and Contents note</strong></td>
</tr>
<tr>
<td></td>
<td>Several articles on bell ringing</td>
</tr>
<tr>
<td>Box 71, Folder 16</td>
<td><strong>Curious Music Instruments 1975</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Scope and Contents note</strong></td>
</tr>
<tr>
<td></td>
<td>The Pyrophone (1 article, by M. Dunant), the Theramin (MG note)</td>
</tr>
<tr>
<td>Box 71, Folder 17</td>
<td><strong>Cage &amp; Others 1958-1993</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Scope and Contents note</strong></td>
</tr>
<tr>
<td></td>
<td>Lots of articles about John Cage and his music, mostly from newspapers</td>
</tr>
<tr>
<td></td>
<td>Also a little on George Crumb</td>
</tr>
</tbody>
</table>
### Computers & Music 1956-1993
- Scope and Contents note
- Newspaper & popular science articles
- Information theory
- Computer-generated music
- Computers playing music, electronic music
- John Mehagan music
- Iannis Xenakis music

### Auditory Illusions 1973-1985
- Scope and Contents note
- Sound of 1 hand clapping
- Ever-Accelerating rhythm (Knowlton)
- Endless octave
- Fractal waveform auditory paradox

**Correspondents:**
- Knowlton, Kenneth
- Dalal, Sam
- Kim, Scott

### Oragami
- Physical Description: 11 folder(s)

### Paper Fold Kit ~1952
- Scope and Contents note
- Several simple origami folds, notated by MG, originals from some childrens magazines (Children's Digest, more) & Family Fun section of another magazine, etc, seemingly examples for a proposed box of paper folds, for "Fun With Paper Folding" (or another name.)

### Paper Folds & Cutting 1971-1983
- Scope and Contents note
- Many MG notes
- Many models

**Correspondents:**
- Barr, Steven
- Neale, Robert
- Legman, Gershon
- Randlett, Samuel
- Oppenheimer, Lillian
- Frydendahl, Bo

Scope and Contents note

"Bibliography of Paper-Folding", by G. Legman, 1952 (preprint)
"Paperfolding in Japan, by David Lister, 1968 (draft of article)
MG intro to Samuel Randlett's "Best of Origami" (draft)

Some magic articles & tricks

Correspondents:
Legman, Gershon
Lister, David
Oppenheimer, Lillian
Andrus, Jerry
Marshall, Jay


Scope and Contents note

Correspondents:
O'Beirne, Thomas
Erlich, Frederic
Randlett, Samuel
Oppenheimer, Lillian


Scope and Contents note

"The Nature of Paper Folding", by J.S. Smith, 27pp (draft)

**EB Article on Paper Folding 1959-1967**

Scope and Contents note

Correspondents:
Encyclopaedia Britannica,
Legman, Gershon

**Paper Cutting & Tearing 1954-1974**

Scope and Contents note

Various tricks with paper that involve folding and then cutting or tearing
Stars
Cubes
Haskell paper cut
Hugard
Bowell's "Squircle"
many more
Various examples from "Made With Paper" exhibit

Correspondents:
Engel, Peter

**Mathematical Origami - History of 1971-2002**

Scope and Contents note

Early articles on history of origami applied ot mathematics, in Italian with translations, by F.J. Jacobs (1871), Giovanni Vacca (1930), Dionysius Lordnan (1840), and others (photocopies of articles, typescript of translations)

"Brief Introduction to Origamics", by Naoki Takashima, 21002, 2003 (photocopies)
Box 60, folder 9

**Folding Regular Polygons of Maximum Size from a Square (Pentagon, Hexagon, etc.) 1979-1995**

Scope and Contents note

Correspondents:

Morassi, Robert

Box 60, folder 10

**Paper Airplanes 1965-1988**

Scope and Contents note


Correspondents:

Peck, Charles

Box 60, folder 11

**Dollar Bill Folds 1984-1990**

Scope and Contents note

Correspondents:

Duncan, Fred

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**Oversize**

Box 75, folder 1

From Series 1, Box 15, Folder 1: The Superellipse

Scope and Contents note

Magazine: Inspiration 68", Fritzhanser-Furniture (oversize)

Box 75, folder 2

From Series 1 Box 34, Folder 10: On Harrison

Scope and Contents note

1. Perspective maps

2. "This Troubled World" (color maps from newspaper)

Box 75, folder 3

From Series 2 Box 14, Folder 3: Designs by Paulus

Scope and Contents note

“Symblocks” puzzle: Alphabet “jigsaw” puzzle, cut from cardboard and painted. 14 1/2 x 11 1/2 inches.

Box 75, folder 4

From Series 2, Box 27, Folder 2: Corner Color Triangles

Scope and Contents note

Gameboard for Triokeer game - Hexagonal shapes with 52 + 21 triangles.
From Series 2, Box 65, Folder 3: Knock Knock


Perfect, Amicable & Sociable

Physical Description: 9 folder(s)

Perfect 1953-1997

Scope and Contents note
"Perfect Numbers", by Richard W. Shoemaker, NCTM pamphlet, 1973
Correspondents:
Fogel, Joshua

Properties of Odd Perfects (if exist!) 1957-1997

Scope and Contents note
"Odd-Perfect-Number Tree to 1036 ...", by Bryant Tuckerman, IBM Research Report RC4695, 1974

Variants on Perfects 1966-1989

Scope and Contents note
Almost perfects, perfects +- 1, Abundant, Wierd, ...
"Primitive Abundant Numbers", by B.L. Schwartz, typescript
Correspondents:
Schwartz, Benjamin


Scope and Contents note
Much material on large amicable numbers, by Elvin Lee
Correspondents:
Lee, Elvin


Scope and Contents note
This is the first part of Amicables box, not in folders.
List of 1039 amicable pairs of numbers in numberical order, factored, and referenced, compiled & edited by Elvin Lee, put in numberical order by Joseph Madachy (photocopy).
Also (long) computer printout of 977 pairs of Amicable numbers, by Elvin Lee, 1969
Correspondents:
Lee, Elvin
Madachy, Joseph
box 3, folder 8  
**Amicables [3 of 3] 1913-1987**

Scope and Contents note
This is the second part of Amicables box, not in folders. Various articles, old & new.
Correspondents:
Lee, Elvin
Madachy, Joseph
Borho, Walter

box 3, folder 9  
**Edinburgh Computer Work on Amicables (McKay & Bartley) 1967**

Scope and Contents note
Correspondents:
McKay, John
Bratley, Paul

box 3, folder 10  
**My Conjecture & Lee's Disproof 1967-1983**

Scope and Contents note
"On Divisibility By Nine of the Sums of Even Amicable Pairs", by Elvin Lee, 1968 (draft)
MG notes on his conjecture (that even amicable Nos are divisable by 9.)
"The Discovery of Amicable Numbers", by E.J. Lee, 1969 (typescript)
Correspondents:
Lee, Elvin
Cheney, Fitch
Ore, Oystein
Guy, Richard

box 3, folder 11  
**Sociable Numbers 1969-1991**

Scope and Contents note
"Empirical Study of Aliquot Series", by Jack Alanen, Amsterdam, 1972 (publication of Mathematisch Centrum)
Correspondents:
Lee, Elvin
Cohen, Henri
Morris, Noah
Nelson, Harry
Shanks, Daniel
Fruit, Robert
Bergerson, Howard

Persons

Physical Description: 19 folder(s)
box 3, folder 11  | **Sociable Numbers 1969-1991**  
Scope and Contents note  
"Empirical Study of Aliquot Series", by Jack Alanen, Amsterdam, 1972 (publication of Mathematisch Centrum)  
Correspondents:  
Lee, Elvin  
Cohen, Henri  
Morris, Noah  
Nelson, Harry  
Shanks, Daniel  
Fruit, Robert  
Bergerson, Howard

box 46, folder 1  | **Barcellos, Tony 1984-1989**  
Scope and Contents note  
Correspondence on various projects, between MG, Tony Barcellos, and Neil Patterson  
Tentative names: Martin Gardner's Math Education Software, Doing Geometry with Martin Gardner  
Correspondents:  
Barcellos, Anthony

box 46, folder 2  | **Tom Dietterich 1981-1983**  
Scope and Contents note  
About Inductive Learning (in A.I.)  
2 papers by Dietterich  
Correspondents:  
Dietterich, Thomas

box 46, folder 3  | **Dreyfus & Searl 1968-1993**  
Scope and Contents note  
Just articles

box 46, folder 4  | **Edelman, Gerald M. 1993**  
Scope and Contents note  
1 review, N.Y. Review

box 46, folder 5  | **Fredkin 1988**  
Scope and Contents note  
Biographical notes by MG  
1 article about him, by Robert Wright, from Atlantic Monthly

box 46, folder 6  | **Brian Hayes 1983-1984**  
Scope and Contents note  
First 2 Scientific American columns (on computer recreations)  
Suggestions from MG for column  
Correspondents:  
Hayes, Brian
box 46, folder 7  **Hofstadter 1980-1999**
Scope and Contents note
CV, Christmas letters, pictures
Book reviews and other articles on Hofstadter
Correspondents:
Hofstadter, Douglass

box 46, folder 8  **Ada Lovelace 1973-1999**
Scope and Contents note
Articles & book reviews about Ada
Correspondence with Joan Baum about her book
Correspondents:
Baum, Joan

box 46, folder 9  **John McCarthy 1979-1983**
Scope and Contents note
Interview in Omni, article in Psychology Today, a reference

box 46, folder 10  **Minsky 1981-1995**
Scope and Contents note
Several articles on him

box 46, folder 11  **Moravec 1989-2000**
Scope and Contents note
Articles by and about Hans Moravec

box 46, folder 12  **Nelson, Theodore 1976-1987**
Scope and Contents note
Biographical correspondence of both MG & Nelson
Various articles and ads for Nelson and Xanadu Project
Correspondents:
Rivest, Ronald
Nelson, Theodore

box 46, folder 13  **Papert, Seymour 1973-1985**
Scope and Contents note
Several short articles about Papert, and an interview (Omni)

box 46, folder 14  **Shannon, Claude 1987-1990**
Scope and Contents note
Interview (Omni) and profile (Scientific American)

box 46, folder 15  **Shapiro (& Others) Ind. Programs 1980-1981**
Scope and Contents note
3 articles on Inductive Programs
"Inductive Inference of Theories From Facts", by Ehud Shapiro, Research Report 192, 1981, 50pp (typescript)
Subject files Series 2
Persons

box 46, folder 16  Shank, roger 1988
Scope and Contents note
1 article (Discover)

box 46, folder 17  Herbert Simon 1958-1994
Scope and Contents note
Many articles, about Simon's economics, and about his "Bacon" program, about A.I.
Articles by Simon
Correspondents:
Simon, Herbert
Newell, Allen

box 46, folder 18  Turing (Biographical) 1983-1999
Scope and Contents note
Biographical articles on Alan Turing

box 46, folder 19  Wolfram undated
Scope and Contents note
1 photocopy of newspaper artical on Stephen Wolfram

Pi
Physical Description: 21 folder(s)

box 70, folder 6  Pi & e Relations 1959-1979
Scope and Contents note
MG notes plus articles
Several close-to-integral relations

box 70, folder 7  Decimal Expansion - Pi [1 of 2] 1960-1986
Scope and Contents note
Notes, articles, letters, etc - History of claculation, formulas, randomness shown by, etc.
Correspondents:
Shanks, Daniel
Ore, Oystein
Singleton, C.R.
Wrench, John
Gosper, Bill
Knuth, Donald
Ford, Joseph

box 70, folder 8  Decimal Expansion - Pi [2 of 2] 1984-2001
Scope and Contents note
More on Pi
box 70, folder 9  Japanese Calculation 1981-1999  
Scope and Contents note  
A list of Pi calculations, by Akihito Shibata (Who did them, how many digits, etc, through time)  
Various formulas used, and reports on, the long Japanese calculations (billions of digits of pi)

box 70, folder 10  Chudnovsky Calculation 1989-1991  
Scope and Contents note  
Various articles on Chudnovsky brothers (David & Gregory) calculation of pi

box 70, folder 11  Sequences in Pi - Primes, Runs, Squares, Etc. 1979-1992  
Scope and Contents note  
Various notes and letters

box 70, folder 12  Pi Curiosities [1 of 2] 1965-1992  
Scope and Contents note  
Lots of articles, notes, and letters with curiosities about pi  
Correspondents:  
Shanks, Daniel  
Knuth, Donald  
Rehkopf, Donald


box 70, folder 14  Approximations 1961-1985  
Scope and Contents note  
Lots of approximations of pi, taken from articles, letters, etc.

box 71, folder 1  Castellanos Papers on Pi 1983-1984  
Scope and Contents note  
Dirio Castellanos:  
The Ubiquitous Pi - 1984  
Fibonacci Numbers, Tchebicheff Polynomials and the Number Pi - 1983  
Relative Size of Coefficients for Two Arc Tangent Series  
Correspondents:  
Castellanos, Dario

box 71, folder 2  Crockett Johnson 1968-1969  
Scope and Contents note  
"The Circle Squared", mathematical construction for a painting, with various calculations of the square root of pi  
Correspondents:  
Johnson, Crockett

box 71, folder 3  R. Wise on Pi As a Code 1977  
Scope and Contents note  
Long letter proving existence of God by a numerological interpretation of pi, humorous  
Correspondents:  
Wise, Raymond
Pi

Scope and Contents note
Various notes and articles

Pi Mnemonics 1961-1998
Scope and Contents note
Many mnemonics, in various languages
"How I wish I Could Recollect Pi", by Michael Keith, 1997 (The Compleat Book of Pi Mnemonics), 38pp (typescript)
Correspondents:
Swinford, Paul
Eckler, Ross

Pi Problems 1977-1980
Scope and Contents note
Correspondents:
Goldberg, Michael

Buffon's Needle (& Variants) 1953-2002
Scope and Contents note
Correspondents:
Mermin, David

Squaring the Circle (& Pi in general) 1950-1992
Scope and Contents note
Several "methods", and articles about squarers

Poems About Pi 1959-1962
Scope and Contents note
Half dozen short poems, from various sources

The INdiana Bill 1965-1993
Scope and Contents note
Articles on the history of the Indiana Bill No. 246, of 1897, that tried to set a legal value for pi

Formulas converging on Pi (Cont. Fractions, etc) 1976-1998
Scope and Contents note
Correspondents:
Lee, Elvin
Salamin, Eugene
Beeler, Mike

Primes in Pi 1992
Scope and Contents note
Correspondents:
Dubner, Harvey

Plane Geometry
Physical Description: 65 folder(s)
box 10, folder 4  Plane Dissections 1955-1997
   Scope and Contents note
   many physical puzzles from "Gathering for Gardner".
   Correspondents:
   Frederickson, Greg
   Reid, Robert
   Lundquist, Oliver
   McElhany, Tom
   Arrieta, Carlos

box 10, folder 5  Tiles with Surround No. 2 2002
   Scope and Contents note
   Article by Casey Mann.

   Scope and Contents note
   Several chapters from Frederickson's book on hinged dissections, and articles by him.

box 10, folder 7  Plane Geometry 1968-2000
   Scope and Contents note
   "College Life", by A.B. Paulson, story (photocopy).
   Lots of short geometric puzzles.
   Correspondents:
   Silverman, David
   Goldberg, Michael
   Paulson, A.B.

box 10, folder 8  Golden Ratio (& Sacred Cut) (Phi) [1 of 2] 1959-1995
   Scope and Contents note
   Golden Triangle of Anne Tyng
   Gnomons
   Corss of Lorraine
   Phyllotasis
   Correspondents:
   Tyng, Anne
   Knuth, Donald

   Scope and Contents note
   "Phyllotaxis as a Dynamical Sysstem", by Jay Kappraff (typescript), long chapter
   Correspondents:
   Kappraff, Jay
   Lundquist, Oliver
   Knuth, Donald
<table>
<thead>
<tr>
<th>Box/Folder</th>
<th>Description</th>
</tr>
</thead>
</table>
| box 10, folder 10 | **Phi Problems, Constructions, etc. 1959-2002**  
Scope and Contents note  
Many problems (on cards) involving phi (golden ratio)  
Some geometric models from Piet Hein  
Correspondents:  
Bankoff, Leon  
Hein, Piet  
Hoggatt, Vernon |
| box 10, folder 11 | **Frank Lonc undated**  
Scope and Contents note  
Lonc Relativity Constant (Phi?) - several of Frank Lonc publications |
| box 10, folder 12 | **String Art - Curve Stitching 1974-1976**  
**Phi Crankery [1 of 2] 1972-1992**  
Scope and Contents note  
Articles on misconceptions about golden ratio, and lots of articles furthering those misconceptions as well as new ones.  
Correspondents:  
Markowsky, George  
Fanning, John |
| box 10, folder 14 | **Phi Crankery [2 of 2] 1971-1993**  
**Polygons [1 of 2] 1962-1979**  
Scope and Contents note  
Nonagon-Star Creative Game, by Robert Dewar  
Dissections  
Negative polygons (with negative diagonals), "Hog on Ice" principle  
"Enumeration of Restricted Incongruent Cyclic K-gons", by Richard Reis (typescript)  
Correspondents:  
Dewar, Robert  
Silverman, David |
Scope and Contents note  
Correspondents:  
Knuth, Donald  
Lee, Elvin |
| box 11, folder 3 | **Counting Squares, Rectangles, Triangles 1962-1998**  
Scope and Contents note  
Many counting problems and ways to count them.  
Correspondents:  
Kwong, Harris |
| box 11, folder 4 | **Erdoz-Szekeres Theorem (Points & Convex Polygons) 1998**  
Scope and Contents note  
Announcement and MG notes of a talk. |
Box 11, Folder 5

**Polygon Loops 1995**
Scope and Contents note
1 article "Can You Do It with Heptagons", by Ann Hirst

Box 11, Folder 6

**Unlocking Polygons 2000**
Scope and Contents note
Article from Science News

Box 11, Folder 7

Scope and Contents note
Construction problems
Rotating equilateral triangle
VUX triangles
Ceva's theorem
... and many more
Correspondents:
Hoggatt, Vernon
Coxeter, H.S.M.

Box 11, Folder 8

Scope and Contents note
Many more puzzles, problems and facts
Heron's formula
Correspondents:
Coxeter, H.S.M.
Liu, Andy
Wainwright, Robert

Box 11, Folder 9

**The Isosceles Triangle Problem 1967-1997**
Scope and Contents note
Given various angles in an isosceles triangle with divided bottom angles, find other angles.
Correspondents:
ApSimon, H.G.

Box 11, Folder 10

**Triangle Tiling & Packing 1975-1994**
Scope and Contents note
"Dissections into Equilateral Triangles", by W.T. Tutte, 1979 (U. of Waterloo Research Report CORR 79-2)
"The Impossibility of Tiling a Convex Region With Unequal Equilateral Triangles", by Edwin Buchman (typescript)
Correspondents:
Pomerance, Carl
Knuth, Donald
Wainwright, Robert
Buchman, Edwin
<table>
<thead>
<tr>
<th>Folder</th>
<th>Subject</th>
<th>Date Range</th>
<th>Scope and Contents</th>
<th>Correspondents</th>
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<tbody>
<tr>
<td>box 11, folder 11</td>
<td>Steiner-Lehmus Theorem 1961-1998</td>
<td>Theorem: equal angle bisectors implies isosceles triangle</td>
<td>Many proofs</td>
<td>Zeitlin, Joel, Coxeter, H.S.M., Keeler, Donald</td>
</tr>
<tr>
<td>box 12, folder 1</td>
<td>Squares 1957-2001</td>
<td>Many square problems, of all kinds.</td>
<td>“The Kissing Number of the Square”, by M. S. Klamkin, 1993 (typescript)</td>
<td>Moser, Leo, Terman, Terence, Hoggatt, Vernon</td>
</tr>
<tr>
<td>box 12, folder 2</td>
<td>Lattices (Square, Triangular, Cubical, etc) 1965-1998</td>
<td>Geoboards Polysticks (Dan Gauteau (Ganteau?)) “Van der Waerden's Theorem Extended”, by G.T. Diderrick, 1974 (typescript)</td>
<td>Visibility &amp; invisibility problems.</td>
<td>DeWitt, Alan, Stewart, Bonnie</td>
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<tr>
<td>box 12, folder 3</td>
<td>Pick's Theorem 1976-1997</td>
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<td>box 12, folder 4</td>
<td>Diagonal rug 1959-2000</td>
<td>Carpen in room problem.</td>
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<td>Upton, Leslie</td>
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<tr>
<td>box 12, folder 5</td>
<td>Tarski's - Squaring Circle 1963-1996</td>
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<tr>
<td>box 12, folder 6</td>
<td>Moving Figure Around a Corner (Sofa Prob, etc) 1971-2002</td>
<td></td>
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<td>Van Dyk, F., Gerver, Joseph</td>
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<tr>
<td>box 12, folder 7</td>
<td>Art Gallery Theorems 1985-2000</td>
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<td>Conway, John, Robinson, Gordon, O'Rourke, Joseph</td>
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<td>Box, Folder</td>
<td>Description</td>
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<td>box 12, folder 8</td>
<td><strong>Worm Problems (Moser) 1973-2001</strong>&lt;br&gt;Scope and Contents note&lt;br&gt;Max distance between points in a square, cube, etc.&lt;br&gt;Curves fitting in a square, circle.&lt;br&gt;N-nominoes&lt;br&gt;(Also see box 12, folder 15)&lt;br&gt;Correspondents:&lt;br&gt;Moser, Leo</td>
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<td>box 12, folder 9</td>
<td><strong>Quadrilaterals - Area Determined by Given Sides 1928-1983</strong>&lt;br&gt;Scope and Contents note&lt;br&gt;Correspondents:&lt;br&gt;Lunnon, W.F.</td>
<td></td>
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<td>box 12, folder 10</td>
<td><strong>Heptagons 1997</strong>&lt;br&gt;Scope and Contents note&lt;br&gt;1 article: &quot;golden Fields&quot;, by Peter Steinbach (photocopy)</td>
<td></td>
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<tr>
<td>box 12, folder 11</td>
<td><strong>Irregular Regular Polygons 1995</strong>&lt;br&gt;Scope and Contents note&lt;br&gt;1 article, by Eric Carlson &amp; Sheldon Glashow</td>
<td></td>
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<td>box 12, folder 12</td>
<td><strong>Star Polygons 1971-1977</strong>&lt;br&gt;Scope and Contents note&lt;br&gt;Correspondents:&lt;br&gt;Mollerup, Per&lt;br&gt;Noton, David</td>
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<tr>
<td>box 12, folder 13</td>
<td><strong>Computer Growth Patterns 1971-1977</strong>&lt;br&gt;Scope and Contents note&lt;br&gt;&quot;Hexagonal Networks Generated by Branching&quot;, by Wilson Baker (typescript)&lt;br&gt;Correspondents:&lt;br&gt;Stokes, John&lt;br&gt;Baker, Wilson&lt;br&gt;Andrews, D.J.</td>
<td></td>
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<td>box 12, folder 14</td>
<td><strong>Fibonacci Residue Patterns undated</strong>&lt;br&gt;Scope and Contents note&lt;br&gt;&quot;Fibonacci Residue Cycles&quot;, by Loren Meissner (abstract, intro, some pictures)&lt;br&gt;(typescript)</td>
<td></td>
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<tr>
<td>box 12, folder 15</td>
<td><strong>Min. Coverings for Closed &amp; Open Curves of Length 1 1966-1996</strong>&lt;br&gt;Scope and Contents note&lt;br&gt;(also see box 12, folder 8)&lt;br&gt;Correspondents:&lt;br&gt;Moser, Leo</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| box 12, folder 16 | **Butterfly Problem (Circles) 1965-1987**<br>Scope and Contents note<br>Correspondents:<br>Bankoff, Leon
<table>
<thead>
<tr>
<th>Box and Folder</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>box 12, folder 17</td>
<td>Teathered Goats 1960-1998</td>
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<tr>
<td>box 12, folder 18</td>
<td>Projective Incidence 1965-1985</td>
</tr>
<tr>
<td>box 12, folder 19</td>
<td>Correspondents: Dorwart, Harrold</td>
</tr>
<tr>
<td>box 12, folder 20</td>
<td>Goosper's &quot;C&quot; Curve (Or Pythag. Curve) 1969</td>
</tr>
<tr>
<td>box 13, folder 1</td>
<td>Sylvester's Problem 1960-1992</td>
</tr>
<tr>
<td>box 13, folder 1</td>
<td>Scope and Contents note</td>
</tr>
<tr>
<td>box 13, folder 1</td>
<td>&quot;Mid-Circles and Loxodromes&quot;, by H.S.M. Coxeter, 1966 (typescript)</td>
</tr>
<tr>
<td>box 13, folder 1</td>
<td>Problems from Moser, Conway</td>
</tr>
<tr>
<td>box 13, folder 1</td>
<td>The Stranded Teddy Bear problem (&amp; refutation.)</td>
</tr>
<tr>
<td>box 13, folder 1</td>
<td>Correspondents: Coxeter, H.S.M.</td>
</tr>
<tr>
<td>box 13, folder 1</td>
<td>Cheney, Fitch</td>
</tr>
<tr>
<td>box 13, folder 1</td>
<td>Pedoe, Dan</td>
</tr>
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<td>box 13, folder 1</td>
<td>Bell, Alex</td>
</tr>
<tr>
<td>box 13, folder 2</td>
<td>Scope and Contents note</td>
</tr>
<tr>
<td>box 13, folder 2</td>
<td>Correspondents: Iles, Kim</td>
</tr>
<tr>
<td>box 13, folder 3</td>
<td>Packing Circles in Triangles 1993-1994</td>
</tr>
<tr>
<td>box 13, folder 3</td>
<td>Scope and Contents note</td>
</tr>
<tr>
<td>box 13, folder 3</td>
<td>&quot;Dense Packing of Equal Disks in an Equilateral Triangle: From 22 to 34 and Beyond&quot;, by R. L. Graham &amp; B.D. Lubachevsky, 1994 (typescript)</td>
</tr>
<tr>
<td>box 13, folder 4</td>
<td>Ellipses 1961-1976</td>
</tr>
<tr>
<td>box 13, folder 4</td>
<td>Scope and Contents note</td>
</tr>
<tr>
<td>box 13, folder 4</td>
<td>Correspondents: Abbott, Robert</td>
</tr>
<tr>
<td>box 13, folder 4</td>
<td>Silverman, Richard</td>
</tr>
<tr>
<td>box 13, folder 4</td>
<td>Iles, Kim</td>
</tr>
<tr>
<td>box 13, folder 4</td>
<td>Keeler, Donald</td>
</tr>
<tr>
<td>box 13, folder 5</td>
<td>Curves &amp; Art (Equations Graphed) 1959-1979</td>
</tr>
<tr>
<td>box 13, folder 5</td>
<td>Scope and Contents note</td>
</tr>
<tr>
<td>box 13, folder 5</td>
<td>Many examples: Hans Berlin, &quot;Nous&quot; (Nigel &amp; Sheila Walters)</td>
</tr>
<tr>
<td>box 13, folder 5</td>
<td>NOTE: Original of letter from Hans Berlin needs conservation work. Please just use photocopy.</td>
</tr>
<tr>
<td>box 13, folder 5</td>
<td>Pictorial Mathematics (set of postcards from Scripta Mathematica)</td>
</tr>
<tr>
<td>box 13, folder 5</td>
<td>Rutherford Boyd (Mathematical Ideas in Design)</td>
</tr>
<tr>
<td>box 13, folder 5</td>
<td>Ben Laposky</td>
</tr>
<tr>
<td>box 13, folder 5</td>
<td>Correspondents: Berlin, Hans</td>
</tr>
<tr>
<td>box 13, folder 5</td>
<td>Knuth, Donald</td>
</tr>
</tbody>
</table>
**Plane Geometry**

- **Lehmer's Module Patterns 1976**
- **The Crossed Ladders 1952-1999**
  - Scope and Contents note
  - Also longest ladder around a corner problem (see also box 12, folder 6).

- **Box & Single Ladder 1962-1990**
- **Curve-Drawing Machines (Spirography) 1964-1975**
- **Elsers "Concavexons" 1979**
  - Scope and Contents note
  - Game of Vex - A letter from Elser
  - Correspondents:
    - Elser

- **Table Covering undated**
  **Turtle Geometry 1984**
  - Scope and Contents note
  - Article from Feb. 1984, Scientific American (by Brian Hayes)

- **Bounce Problems undated**
  - Scope and Contents note
  - 2 pages MG notes.

- **Rosenwald's Xmas Star 1975-1976**
  - Scope and Contents note
  - Correspondents:
    - Rosenwald, Robert

- **Minimal Surfaces 1987-1988**
  - Scope and Contents note
  - 2 articles.

- **Inversion Geometry 1964-1992**
- **Symplectic Geometry 1990**
- **Cat Scan Problems 1990**
- **Linkages (Mechanical Curios) 1970-1998**
  - Scope and Contents note
  - Articles, MG notes for column.
  - "Move Form", by H. Tomura, a 30 bar linkage of pentgons with 20 tri-valent vertices.

- **Trigonometry 1994-1998**
  - Scope and Contents note
  - "Quantum Trigonometry: An Essay on Recreational Mathematics", by Erwin Anderdingen (E.C.Anderson) & Werner Arnoldenberg (James Arnold), satire (typescript)
  - Correspondents:
    - Anderson, Ernest
    - Sanchez, Michael

- **Shoelace Problems 1995**
  - Scope and Contents note
  - 1 article (Math. Intell.)
Subject files Series 2
Plane Geometry

box 13, folder 22  Getting Out of Forest undated
   Scope and Contents note
   1 article (Quantum)

box 13, folder 23  Chromatic No. of Plane 1994

Polycubes
   Physical Description: 15 folder(s)

   Scope and Contents note
   Many articles and booklets on Soma Cube
   Correspondance about Parker Bros. publishing Soma, patents, etc
   Inquirees about patents, sales, etc
   Interview of Piet Hein
   Correspondents:
   Atwater, Thomas
   Hein, Piet

   Scope and Contents note
   Adlai game
   Much information, patents, pictures etc of various 3x3x3 cubes, from Jerry Slocum
   Correspondents:
   Slocum, Jerry

box 55, folder 1  Soma Figures [1 of 2] 1958-1974
   Scope and Contents note
   Many figures to build, and proofs of impossibility of other figures
   Bound set of duplicate letters to MG (from GilOutterson)
   Correspondance between Outterson & Piet Hein about manufacturing Soma Cubes
   Much reader correspondance from 1958 S.A. column
   Correspondents:
   Hein, Piet
   Golomb, Solomon
   Lyons, Vossburgh (VOZ)
   Outterson, Gil
   Schwartz, Benjamin

   Scope and Contents note
   MG notes & original structures
   Nice, large-scale drawings of several figures
   Printouts of all solutions of the cube, raised cross, and crystal, from Sivy Farhi
   Correspondents:
   Farhi, Sivy
### Polycubes

**box 55, folder 3**

<table>
<thead>
<tr>
<th>3x3x3 Puzzles 1972-1992</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scope and Contents note</td>
</tr>
<tr>
<td>(Also see box 54, folder 22)</td>
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<tr>
<td>Diabolical Cube - MG notes, analysis</td>
</tr>
<tr>
<td>Lesk Cubes</td>
</tr>
<tr>
<td>Correspondents:</td>
</tr>
<tr>
<td>JPhilpott, Wade</td>
</tr>
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<td>Dye, Daniel</td>
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</tbody>
</table>

**box 55, folder 4**

<table>
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<tbody>
<tr>
<td>Scope and Contents note</td>
</tr>
<tr>
<td>Many MG notes, and others notes</td>
</tr>
<tr>
<td>&quot;Polycubes&quot;, from &quot;More Mathematical Puzzles&quot;, chapter 6 (by G.J. Westerink?), typed &amp; drawn</td>
</tr>
<tr>
<td>Notes on Alan Schoen visit</td>
</tr>
<tr>
<td>Class notes on Solving the Polycubes, by W.M. McKernan, 1973, 52pp (typescript)</td>
</tr>
<tr>
<td>Description of &quot;Adlai&quot; game</td>
</tr>
<tr>
<td>Correspondents:</td>
</tr>
<tr>
<td>McKeeman, William</td>
</tr>
<tr>
<td>Bird, David</td>
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<td>Guy, Richard</td>
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**box 55, folder 5**

<table>
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<tbody>
<tr>
<td>Scope and Contents note</td>
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<tr>
<td>More polycube designs and puzzles</td>
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<tr>
<td>Correspondents:</td>
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<tr>
<td>Klarner, David</td>
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**box 55, folder 6**

<table>
<thead>
<tr>
<th>Impuzzables 1972-1985</th>
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<tr>
<td>Scope and Contents note</td>
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<tr>
<td>Correspondents:</td>
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<tr>
<td>Slocum, Jerry</td>
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**box 55, folder 7**

<table>
<thead>
<tr>
<th>Tetracubes 1967-1992</th>
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<tr>
<td>Scope and Contents note</td>
</tr>
<tr>
<td>&quot;Wit's End&quot;, Putzl</td>
</tr>
<tr>
<td>Notes on &quot;Wit's End&quot; puzzle, by Martin Scullin (many figures)</td>
</tr>
<tr>
<td>&quot;The First Book of Putzl&quot;, by L.E. Minnick (typescript)</td>
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**box 55, folder 8**

<table>
<thead>
<tr>
<th>Pentacubes 1962-1993</th>
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<tr>
<td>Scope and Contents note</td>
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<tr>
<td>Besley patent (3,065,970), 1962</td>
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<td>Trimetropentomino, richard, Serena &amp; Beth Sutton</td>
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<td>Pentacube &amp; hexacube tilings</td>
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<td>Correspondents:</td>
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<tr>
<td>Farhi, Sivy</td>
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<tr>
<td>Jones, Kathy</td>
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</tbody>
</table>
box 55, folder 9  
**The 12 "Solid" Pentominoes 1958-1992**
Scope and Contents note
Several "Quint-Grams", from Kadon Enterprises (Nos 1-8, 12)
Marketed version of the pentominoes
Correspondents:
Jones, Kathy
Scott, Dana

box 55, folder 10  
**Hexacubes 1964-1973**
Scope and Contents note
Correspondents:
Baker, Jack
Bird, David
Card, L.E.
Bouwkamp, C.J.

box 55, folder 11  
**The Heptacubes 1972**
Scope and Contents note
Correspondents:
Klarner, David

box 55, folder 12  
**Non-cube Polyhedra (Splatts) 1987**
Scope and Contents note
Splatt is a truncated octahedron
1 article (from Eureka 47, by Mrk Owen & Mathew Richards)

box 55, folder 13  
**The 5x5x5 "Dorian" & a "Logical Subset" of Pentacubes 1972-1975**
Scope and Contents note
Correspondents:
Dorie, Joseph
Caffrey, John

---

**Polyhex**

box 56, folder 1  
Scope and Contents note
Analysis of pentahex (by Paul Himebaugh)
Hexahex enumeration
Many tetrahex solutions (from S.A. column), some by computer, and new patterns
Correspondents:
Coffin, Stewart

box 56, folder 2
Scope and Contents note
More solutions, analyses, and new patterns for polyhexes
Klarner's analysis
Correspondents:
Sharp, John
Klarner, David
Coffin, Stewart

box 56, folder 3

Scope and Contents note
More patterns and analysis
Diagrams of many (all?) pentahex solutions of rhombus (by Paul Himebaugh)
Correspondents:
Hitotumatu, Sin
Bird, David
Klarner, Robert

---

Polyhexes
Physical Description: 3 folder(s)

box 54, folder 8
Polyhex Enumeration 1967-1972
Scope and Contents note
Several enumerations, with some diagrams, of orders 4-12
Correspondents:
Gilbert, Walter
Travnicek, Edward

box 54, folder 9
Polyhex Tiling 1967 (?) - 1995
Scope and Contents note
A small number of problem solutions from Clarke, with proofs
Correspondents:
Clarke, Andrew
<table>
<thead>
<tr>
<th>Box/Folder</th>
<th>Description</th>
</tr>
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<tr>
<td>54, 10</td>
<td><strong>Triangular Lattice Problems 1990</strong>&lt;br&gt;Scope and Contents note&lt;br&gt;Several articles and typescripts of problems and solutions and proofs&lt;br&gt;MG notes&lt;br&gt;Correspondents:&lt;br&gt;Hanegraaf, Anton&lt;br&gt;Beeler, Michael&lt;br&gt;Golomb, Solomon&lt;br&gt;West, Donald</td>
</tr>
<tr>
<td>54, 7</td>
<td><strong>Polyiamonds undated</strong>&lt;br&gt;Scope and Contents note&lt;br&gt;No content; a couple of references</td>
</tr>
<tr>
<td>54, 11</td>
<td><strong>Polyobalos, Etc</strong>&lt;br&gt;Physical Description: 10 folder(s)&lt;br&gt;<strong>Polyabolo Tiling undated</strong>&lt;br&gt;Scope and Contents note&lt;br&gt;(Right-angled triangle pieces)&lt;br&gt;Also tetratans (tetrabolos), polyarcs</td>
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<tr>
<td>54, 12</td>
<td><strong>3-D Polyaboloes 1967</strong>&lt;br&gt;Scope and Contents note&lt;br&gt;Theory in letter form Andrew Clarke&lt;br&gt;Correspondents:&lt;br&gt;Clarke, Andrew</td>
</tr>
<tr>
<td>54, 13</td>
<td><strong>Polyaboloes 1965-1974</strong>&lt;br&gt;Scope and Contents note&lt;br&gt;Analysis from Tom O'Beirne, Wilfred Shepherd, James Taylor&lt;br&gt;MG notes&lt;br&gt;Shephard nomenclature (polytryngles, polyubes, etc)&lt;br&gt;Set of cardboard tetraboloes [[ in 3-D box ]]&lt;br&gt;Correspondents:&lt;br&gt;Bird, David&lt;br&gt;O'Beirne, Thomas&lt;br&gt;Taggart, Mary</td>
</tr>
<tr>
<td>54, 14</td>
<td><strong>Polyabolo Enumeration 1967</strong>&lt;br&gt;Scope and Contents note&lt;br&gt;Various counts by various people&lt;br&gt;Correspondents:&lt;br&gt;Brown, Spencer&lt;br&gt;Trigg, Charles&lt;br&gt;Philpott, Wade</td>
</tr>
</tbody>
</table>
box 54, folder 15  **Langford's 4-Piece Replication Problem 1963**
Scope and Contents note
Correspondents:
Cundy, Martyn
Mercer, Leigh
Povah, Maurice

box 54, folder 16  **The Tetrabolo Squares, Rectangles & Rhomboids 1967-1977**
Scope and Contents note
Many results from John Harris, Philpott, Trigg
Correspondents:
Harris, John
Philpott, Wade
Trigg, Charles
Shepherd, Wilfred
Taylor, James

box 54, folder 17  **Rhombiominos 1993**
Scope and Contents note
1 article/problem, from J.R.M. by Kate Jones

box 54, folder 18  **Rookominoes undated**
Scope and Contents note
1 MG notes and reference

box 54, folder 19  **Paving Stones 1994**
Scope and Contents note
1 reference

box 54, folder 20  **Misc. Variants 2001**
Scope and Contents note
From Ed Pegg Jr's Mathpuzzle.com website
References to CFF
Eternity Puzzle

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**Polyominos**
Physical Description: 25 folder(s)
Subject files Series 2
Polyominos

box 52, folder 13  General 1957-2002
Scope and Contents note
Problem: Tile 8x9 board with 11 1x6 bricks plus 1 2x3 rectangle
"Polyomino and Polyiamond Problems", by Wade Philpott, 1976 (typescript)
Description of MacPoly (from Sabaki Corp)
"Polyominones in a Random Tiling", by Michael Beeler, 1988 (typescript)
"Modest Polyominoes", by Richard Hess, Y. Kotani, & Robert Wainwright (typescript)
Correspondents:
Golomb, Solomon
Bush, V.
Philpott, Wade
Lerner, David
Beeler, Michael

box 52, folder 14  Polyomino Computer Programs 1958-1970
Scope and Contents note
Lots of programs for various polyomino problems
Correspondents:
Scott, Dana

box 52, folder 15  Polyomino Enumeration Problem 1958-1987
Scope and Contents note
Many articles & letters, especially by Grank Harary

box 52, folder 16  Dominos 1965-1995
Scope and Contents note
Several articles (mostly on covering rectangles with dominos)
Correspondents:
Isaacs, Rufus

box 53, folder 1  Domino (Bricks) (Cards) Overhangs 1964-1985
Scope and Contents note
Several articles & letters

box 53, folder 2  Trominoes 1971-1998
Scope and Contents note
Articles, letters, notes on problems involving trominoes

box 53, folder 3  Tetrominoes 1960-1998
Scope and Contents note
Several tetromino problems, in notes and letters and some articles
Correspondents:
Knuth, Donald
Scope and Contents note
"There is no Gap in a Diamond", by Mogens Esrom Larsen, 1986 (pamphlet)
Lots of Leigh Mercer correspondence
Many problems & solutions, in various articles & letters
Correspondents:
Liu, Andy
Garcia, Abel
Mercer, Leigh
Knuth, Donald
Philpott, Wade

Scope and Contents note
Many more problems, solutions, counts of numbers of solutions, etc
The 5 superposition problems
"A Pedestrian Approach to a Method of Conway, or, A Tile of Two Cities", by James Propp, 1993 (typescript)
Correspondents:
Digby, David
Liu, Andy
Propp, James

Pentomino "Farms" 1972-1990
Scope and Contents note
Correspondents:
Reid, Robert
Knuth, Donald
Feser, Victor
Kotani, Yoichi

Pentominoes (Misc) 1960-1998
Scope and Contents note
Many more puzzles & problems
Pentomino patents & trademark information and court case
MacPoly, short description (David Lerner, Sabaki Corp.)
Covering cubes with pentominoes
2339 solutions to 6x10 pentomino tiling, by Bethel Hooven
Inflated pentominoes
FILL-AGREE - A punctured polyomino puzzles by Kate Jones*
Modest Polyominoes Problems Book and Modest Hexominoes Puzzle, by Dick Hess*
[[ items marked "*" are in 3-D box ]]
Correspondents:
Clark, Arthur C.
Golomb, Solomon
Hunter, J.A.H.
Liu, Andy
Knuth, Donald
Hooven, Bethel
Kurchan, Rodulfo
box 53, folder 8  
**Pentomino 13-Hole Problem (& Other Hole Problems) 1969-1973**  
Scope and Contents note  
Various solutions  
Correspondents:  
Bouwkamp, C.W.  
Philpott, Wade  
Lindstedt, Christer

box 53, folder 9  
**Sawtooth Square Patterns 1960-1964**  
Scope and Contents note  
Solutions with empty square in a corner (or adjacent), and several proofs the hole cannot be in the middle

box 53, folder 10  
**Scott Taylor Pattern 1960-1963**  
Scope and Contents note  
Several proofs of impossibility

box 53, folder 11  
**Golomb's Pentomino Game 1963-1973**  
Scope and Contents note  
Rules (by Golomb) of his Pentomino Game  
Description of program, by S. Kurzba m & T. McBride to play pentomino game  
Correspondance about rights to pentomino game  
Correspondents:  
Golomb, Solomon  
McBride, Tom  
Miller, Donald

box 53, folder 12  
**Polyomino Games 1960-1978**  
Scope and Contents note  
Pan-Kai  
Kent Wadsworth game, one-sided pentomino pieces with values  
Cogito (French)  
Zim  
Skirrid  
Locus  
Copade (Kenneth Costa)
box 53, folder 13  
**Hexominoes 1962-1999**

Scope and Contents note
1-sided vs 2-sided discussion
Dr. Hex
Spear’s Multipuzzle
Complete set of pents & hexes, plastic, solved as a red 15x18 rectangle of hexominoes, with a contiguous green “Chess rook” of pentominoes in the center [[ in 3-D folder ]]
(D. Woods letter also contains "superparadoxes" and a chessboard problem)
Correspondents:
Bird, David
Woods, Donald
Philpott, Wade
Sherman, Henry
Golomb, Solomon

box 53, folder 14  
**Heptominoes (Order 7) 1955-1995**

Scope and Contents note
Lists of the pieces, and some problems & solutions
Correspondents:
Bird, David
Golomb, Solomon
Sherman, Henry
Klarner, David

box 53, folder 15  
**8-Ominoes & Higher 1972-1988**

Scope and Contents note
Monomino density
Interlocking polyominoes
Serial Isogons
Pi-sided polyominoes
Correspondents:
Liu, Andy
Bird, David
Golomb, Solomon
Sallows, Lee

box 54, folder 1  
**Corner-Connected Squares (Think-A-Ma-Jig) 1973**

Scope and Contents note
Correspondents:
Beeler, Mike

box 54, folder 2  
**Rhominoes 1976-1992**

Scope and Contents note
James Parker: analysis of 60 degree rhombuses (but tri-rhombuses are a subset of hexiamonds)
Correspondents:
Parker, James
Subject files Series 2

Polyominoes

box 54, folder 3

Bicolored Polyominoes 1983-1995
Scope and Contents note
Some checkerboard colorings & problems
Quintachex
MG notes

box 54, folder 4

Polycycles (Dutch) 1979
Scope and Contents note
Notes from Luitzen Yntena on polyomino variations

box 54, folder 5

Scope and Contents note
Polyomino references to about 1991, compiled by MG for Golomb:
Books by Martin Gardner
Polyomino references (from 1988)
New references added in 1991
Chessboard dissections into polyominoes
Books
Tiling
Marketed polyomino games
On rectification, on polyiamonds, on tetraboloes, on polyhexes, on polycubes, etc
J. of Rec. Math references

box 54, folder 6

Polyomino Tiling of Plane 1995
Scope and Contents note
"Tiling Rectangles with Polyominoes", by Solomon Golomb (typescript)
Correspondents:
Golomb, Solomon

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Primes

Physical Description: 26 folder(s)

box 1, folder 1

Goldbach Conjecture 1978-1987
Scope and Contents note
Correspondents:
Robertson, Douglas
Sklansky, David
Yates, Samuel

box 1, folder 2

Rieman Hypothesis (Zeta Function) 1972-2002
Scope and Contents note
Poem: "Where are the zeros of zeta of s?"

box 1, folder 3

Mersenne Primes 1978-2001
Scope and Contents note
Correspondents:
Lee, L.E.J.
Eberhart, Stephen
Nelson, Harry

Guide to the Martin Gardner Papers SC0647

SC0647 290
<table>
<thead>
<tr>
<th>Box, Folder</th>
<th>Description</th>
</tr>
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</table>
| box 1, folder 4 | General References 1953-1997  
Scope and Contents note  
Also articles on basic prime info: sieves, prime number theorem, unique factorization, etc.  
Correspondents:  
Wade, Carlton  
McDonnell, E.E. |
| box 1, folder 5 | Primes (Misc.-Curios-Problem, etc) [1 of 3] 1961-1981  
Scope and Contents note  
"The Numerology of One Hundred", by Solomon Golomb (mimeograph)  
Overlapping 9-digit primes  
"Prime Period Length Counts and Ratios", by Samuel Yates (typescript)  
"A Phsicist's Proof of Fermat's Theorem of Primes", by H. Gutfreund & W.A. Little (typescript)  
Long essay on "Alpha Operation", by Howard Bergerson, 1981 (typescript)  
Correspondents:  
Golomb, Solomon  
Card, L.E.  
Yates, Samuel |
| box 1, folder 6 | Primes (Misc.-Curios-Problem, etc) [2 of 3] 1964-1987  
Scope and Contents note  
"A Class of Primality Tests for Trinomials Which Includes the Lucas-Lehmer Test", by H.C. Williams (typescript)  
Correspondents:  
Hitotumatu, Sin  
Ondrejka, Rudolf  
Williams, Hugh  
Adams, Milton  
Yates, Samuel  
Guy, Richard |
| box 1, folder 7 | Primes (Misc.-Curios-Problem, etc) [3 of 3] 1975-2000  
Scope and Contents note  
"Strong Law of Small Numbers", by Richard Guy (photocopy of manuscript)  
Lots of articles, and MG notes  
Correspondents:  
Madachy, Joseph  
Clawson, Calvin |
Subject files Series 2
Primes

box 1, folder 8  Twin Primes (Variants) 1964-2001
Scope and Contents note
"Prime-Number Pairs", by Schuyler M. Christian, 1985 (booklet)
"Titanic Twins", by Samuel Yates (typescript)
"On Prime Densities and Twin Prime Fallacies", by F.E. von Ammon Jr
"Proof of the Infinitude of Double Twin Primes", by Martin Aaronson
"A Relation Between Twin Primes and their Indices", by A.R. Fazely
Correspondents:
Christian, Schuyler
Crandall, R.E.
Yates, Samuel
Aaronson, Martin

box 1, folder 9  Fermat Numbers & Primes 1990-1996
Scope and Contents note
"A Tail of Two Sieves", by Carl Pomerance

box 1, folder 10  Tables (Decimal, Binary) 1993
box 1, folder 11  Sieves, Tests, Factoring 1960-1998
Scope and Contents note
"Primes, a Strictly Empirical Study", by F.B. von Amon, Jr (booklet)
"Conway's Prime Producing Machine", by Richard Guy (typescript, ND)
Correspondents:
Ammon, F.E. von
Vanderpool, Donald
Dow, John
Morse, Arthur
Stilgebauer, Robert
Meyer, Marvin
Glass, John
Litvack, Barry
Pritchard, P.A.

box 1, folder 12  Probability Tests of Primes 1977-1978
Scope and Contents note
"A Note on Monte Carlo Primality Tests and Algorithmic Information Theory", by Gregory Chaitin & Jacob Schwartz (typescript draft)
"Monte-Carlo Tests for Primality", by Donald Malm (typescript)
"Probabilistic Algorithms", by Michael Rabin (typescript)
"Riemann's Hypothesis and Tests for Primality", by Gary Miller (typescript)
"A Fast Monte-Carlo Test for Primality", by R. Solovay & V. Strassen (reprint)
Correspondents:
Malm, Donald
100-Digit Primes 1964-1996
Scope and Contents note
Correspondents:
Madachy, Joseph
Mauchly, John
Yates, Samuel
Gosper, Bill

Repunit Primes (& 100-Digit Primes) [1 of 2] 1964-1985
Scope and Contents note
Much from column March, 1964
Correspondents:
Yates, Samuel
Williams, Hugh
Schaechter, David
Jordan, Steven
Brillhart, John
Chiles, Griffin
Cohen, Martin
Madachy, Joseph
Thompson, Hugh
Knowlton, William
Lee, Wallace
Mauchly, John

Scope and Contents note
"Divisibility with Repunit Factores", by Samuel Yates (typescript)
Many letters & articles of Samuel Yates
Correspondents:
Yates, Samuel

Reversible Primes (Emirps) 1964-1999
Scope and Contents note
Correspondents:
Card, L.E.
Farrell, Jeremiah
Barbour, David

Palindromic Primes, Squares, Cubes, etc. 1969-1999
Scope and Contents note
Correspondents:
Simmons, Gustavus
Card, L.E.
Ondrejka, Rudolf
Kaprekar, D.R.
Madachy, Joseph
Ely, Robert
Subject files Series 2
Primes

box 2, folder 6
Gustavus Simmons Factoring, & Lenstra 1984-1986
Scope and Contents note
Correspondents:
Simmons, Gustavus

box 2, folder 7
Prime Generating Formulas 1964-1998
Scope and Contents note
MG notes.
Correspondents:
Szulyovszky, D.
Koch, George
Higgins, Olga
Von Ammon, Fred
Atkin, Oliver

box 2, folder 8
Primes: Permutable, Snowballs, & Cyclics, Truncatable, etc. 1965-1997
Scope and Contents note
Correspondents:
Madachy, Joseph
Green, Milton
Card, L.E.

box 2, folder 9
Mills Formula & Others Like It 1963-1997
Scope and Contents note
Correspondents:
Cina, Jerome
Kravitz, Sidney
Golomb, Solomon
Ore, Oystein
Koch, George
Heppe, Robert

box 2, folder 10
Consecutive Digit Primes 1972-1978
Scope and Contents note
Correspondents:
Madachy, Joseph
Beeler, Michael
Golomb, Solomon
Cassel, Alan
Crandall, R.E.

box 2, folder 11
Gaps of No Primes 1964-1966
Scope and Contents note
Correspondents:
McMillan, Edwin
Brenner, Joel
Meally, Victor
<table>
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<tr>
<th>Box 2, Folder 12</th>
<th><strong>Conjectures - False and Unproved 1963-1985</strong></th>
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<tr>
<td>Scope and Contents note</td>
<td></td>
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<td>Golomb, Solomon</td>
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<td>Stevens, J.W.</td>
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<tr>
<th>Box 2, Folder 13</th>
<th><strong>Pseudo Primes (Ulam's Luck) (Poulet No's) undated</strong></th>
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<tr>
<td>Box 2, Folder 14</td>
<td><strong>Recent Tests for Primes 1981-1986</strong></td>
</tr>
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<tr>
<th>Box 2, Folder 15</th>
<th><strong>Primes in A.P. &amp; Prime Squares</strong></th>
</tr>
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<td>Guy, Richard</td>
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<td>Fry, James</td>
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<th>Box 2, Folder 16</th>
<th><strong>Primes in Arithmetical Progressions 1975-1995</strong></th>
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<td></td>
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<th>Box 2, Folder 17</th>
<th><strong>Prime Squares ca.1913-1991</strong></th>
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<td>Scope and Contents note</td>
<td></td>
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<tr>
<td>2 articles from &quot;The Monist:</td>
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<tr>
<td>&quot;Magic Squares Made With Prime Numbers&quot;, by W.S. Andrews &amp; Harry Sayles, 1913 (photocopy from The Monist)</td>
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<tr>
<td>&quot;Pandiagonal Prime Number Magic Squares&quot;, by Chas. D. Shuldham, 1914 (photocopy from The Monist)</td>
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<td>Card, L.E.</td>
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<td>Walker, George</td>
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<td>Fendall, Chuck</td>
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<th>Box 3, Folder 1</th>
<th><strong>Allan W. Johnson, Jr. 1981-1989</strong></th>
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<td>Scope and Contents note</td>
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<td>Johnson, Allan</td>
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<td>Dubner, Harvey</td>
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<th>Box 3, Folder 2</th>
<th><strong>Capt. Wm. H. Benson 1927-1980</strong></th>
</tr>
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<tr>
<td>Scope and Contents note</td>
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<tr>
<td>Various writings on prime magic squares, by Benson</td>
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<td>Benson, William</td>
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<th>Box 3, Folder 2</th>
<th><strong>Gukuho Abe 1986-1988</strong></th>
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<tr>
<td>Scope and Contents note</td>
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<tr>
<td>Several articles in Japanese</td>
<td></td>
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<td>Correspondents:</td>
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<td>Abe, Gakuho</td>
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Probability

Physical Description: 34 folder(s)

box 28, folder 9

Probability 1950-2001

Scope and Contents note
Many popular science articles, some on “philosophy” of probability.

box 28, folder 10


Scope and Contents note
3-door problem, 3 prisoners problem, Mony Hall problem
Many letters and much analysis of the problem (in various guises) and variations.
Correspondents:
Rosa, Domenico
Frazier, Kendrick
Gillman, Leonard
Vos Savant, Marilyn
Pohl, Frederick

box 28, folder 11

unsorted

box 29, folder 1

Vos Savant - Other Puzzles 1991-2000

Scope and Contents note
Lots of correspondence about problems from her column.
Correspondents:
Vos Savant, Marilyn

box 29, folder 2

Probability Paradoxes (& Sucker Bets) 1968-1997

Scope and Contents note
Many paradoxes, and many sucker bets
"The Strange Game of Lucky Louie", by Michael Stueben (typescript)
Correspondents:
Bar-Hillel, Maya
Stueben, Michael
Winkless, Nelson Brock

box 29, folder 3

Eldest Sono Paradox 1972-1999

Scope and Contents note
Two thirds of men are eldest sons.

box 29, folder 4

Paradox of 2nd Ace 1957-1992

Scope and Contents note
Set of correspondence with Warren Weaver & Norman Gridgeman, with much
discussion and analysis of the problem (1963-1964)
Set of correspondence with John Ford
Correspondents:
Weaver, Warren
Gridgeman, Norman
Ford, John
Fuhrmann, Steve
Gillman, Leonard
box 29, folder 5  **Paradox of the Second Child 1958-1992**  
Scope and Contents note  
Correspondents:  
Eliasberg, Jay  
Duggleby, R.G.

box 29, folder 6  **Birthday Paradox (& Variants) 1970-2001**  
Scope and Contents note  
Correspondents:  
Diaconis, Persi

box 29, folder 7  **Necktie Paradox & Variants (May 77) 1975-2001**  
Scope and Contents note  
Exchanging envelopes with $x & $2x paradox  
Correspondents:  
Coffman, Bill  
Lewis, Hal  
Girard, Martin

box 29, folder 8  **Unfaithful Wives 1985**  
Scope and Contents note  
2 reports on cheating husbands problem (same as unfaithful wives.)  
Correspondents:  
Halpern, Joe

box 29, folder 9  **Statistical Paradoxes 1959-1999**  
Scope and Contents note  
Waiting time paradox  
Boltzmann's dice paradox  
Popular and technical articles  
Correspondents:  
Vos Savant, Marilyn

Scope and Contents note  
Several long papers  
Correspondents:  
Alcock, James

Scope and Contents note  
Correspondents:  
Compagner, Aaldert
box 30, folder 1  **Probability & Cards (ESP also) [1 of 2] 1961-1978**
- Scope and Contents note
- Game with deck of 20 cards, by Howard (?)
- Several articles on chance
- Three-dimensional draw poker
- Several items from Persi Diaconis (notes by MG)
- Correspondents:
  - Wilson, Robert Ross
  - Curry, Paul
  - Diaconis, Persi

box 30, folder 2  **Probability & Cards (ESP also) [2 of 2] 1967-1997**
- Scope and Contents note

box 30, folder 3  **Dice-Probability Problems 1960-2002**
- Scope and Contents note
- Moser's problem (& Related ones) of loaded dice
- "Stochastic Inequalities", by Walter Funkenbusch, 1989 (typescript)
- Correspondents:
  - Moser, Leo
  - Thorp, Edward
  - Propp, James
  - Goldberg, Steven

box 30, folder 4  **"Small World" Paradox 1967-2000**
- Scope and Contents note
- Correspondents:
  - Kochen, Manfred

box 30, folder 5  **First Digits in Tables - Benford's Law 1960-1999**
- Scope and Contents note
- "Limits of Measures of the Integers With Application to Random Number Generators ...", by Persi Diaconis, 1973, Memorandum NS-211 (typescript)
- "On the Distribution of First Significant Digits", by Roger Pinkham, 1960 (dittograph)
- Correspondents:
  - Duquet, Robert
  - Federighi, Francis
  - Rudkin, Arthur

box 30, folder 6  **"Random" Triangles 1968-1982**
- Scope and Contents note
- Breaking a stick in 3 pieces - is it a triangle?
- Is a random triangle acute?
<table>
<thead>
<tr>
<th>Box</th>
<th>Folder</th>
<th>Title</th>
<th>Dates</th>
<th>Scope and Contents Note</th>
<th>Correspondents</th>
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</thead>
<tbody>
<tr>
<td>30</td>
<td>7</td>
<td>Matching Pennies Machines (Dunning) 1954-1975</td>
<td>Sprace (a Piet Hein game), Cleo (Computer to Learn Even-Odd), Dunning's machine, SEER, A Sequence Extrapolating Robot - Hagelbargers machine</td>
<td>Dunning, Charles, Hein, Piet</td>
<td></td>
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<tr>
<td>30</td>
<td>10</td>
<td>Blackjack Systems 1961-1979</td>
<td>Mostly newspaper articles</td>
<td>Thorp, Edward</td>
<td></td>
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<tr>
<td>30</td>
<td>11</td>
<td>Monte Carlo Method 1955-1958</td>
<td>MG notes</td>
<td></td>
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<tr>
<td>30</td>
<td>12</td>
<td>&quot;Death-Dips&quot; - Do Deaths Correlate with Important Events? 1980</td>
<td>Is there a dip in the number of deaths before important events (birthdays, etc), or a rise after?</td>
<td></td>
<td></td>
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<tr>
<td>30</td>
<td>13</td>
<td>Negative Probability (Feynman) 1977</td>
<td>&quot;Negative Probabilities&quot;, by R.P. Feynman, A paper on the concept of negative probabilities (by Feynman), with notes on it and a letter by MG.</td>
<td>Feynman, Richard</td>
<td></td>
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<td>Box and Folder</td>
<td>Description</td>
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</tbody>
</table>
| box 31, folder 1 | **Resampling (Efron's Bootstrap) 1984-1995**  
Scope and Contents note  
Several papers about Resampling & Bootstrap, by and about Simon & Efron  
Correspondents:  
Simon, Julian |
| box 31, folder 2 | **Metaanalysis 1992**  
Scope and Contents note  
Single article (by Ingram Olkin), from The Sciences |
| box 31, folder 3 | **Transparent Proofs 1992**  
Scope and Contents note  
2 short articles, from Focus and from Science |
Scope and Contents note  
Many problems and puzzles  
(typescript) I: "Decisions of Alice"; II: "A Tale of Probable Regions"  
Gardner's Dice  
Correspondents:  
Morgenstern, Leonard  
Dunne, Alex  
Curry, Paul  
Moser, Leo  
Upton, L.J.  
Moore, A.D.  
Griggs, Jerry  
Diaconis, Persi  
Hawkins, David  
Lenning, Alvar  
Fulves, Karl  
Gilbert, Edward |
Scope and Contents note  
Many problems  
Physics of models for generating random events (in Diaconis letter)  
Correspondents:  
Potvin, robert  
Hein, Piet  
Diaconis, Persi |
| box 31, folder 6 | **Roulette 1993-1999**  
Scope and Contents note  
Correspondents:  
Hu, Stephen |
box 31, folder 7

**Doomsday Argument 2000**

Scope and Contents note
MG note
computer printout of article (a literature review)

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**Sequences**

Physical Description: 16 folder(s)

box 6, folder 1

**Integer Sequences 1965-2001**

Scope and Contents note
MG notes on 2 R. Penrose problems.
"Find the Next Term", by Neil Sloane (typescript) - sequence puzzles
"Computer-Aided Analysis of Monotonic Sequence Games", by Frank Harary, Bruce Sagan, David West (typescript)
Correspondents:
Sloane, N.J.A.
Van Tooren, A.
Trigg, Charles
Knowlton, Kenneth
Sagan, Bruce
Sallows, Lee

box 6, folder 2

**Looping Problems "Black Holes" 1945-2000**

Scope and Contents note
Correspondents:
Green, Milton

box 6, folder 3

**Looping Problem - 3X+1 [1 of 2] 1978-1982**

Scope and Contents note
(Collatz conjecture, Syracuse problem, Hailstone numbers)
Correspondents:
Ulam, Stanislav
Erdos, Paul
Mendelsohn, Nathan
Wilber, James

box 6, folder 4

**Looping Problem - 3X+1 [2 of 2] 1971-1999**

Scope and Contents note
Correspondents:
Christy, Donald
Knuth, Donald
Trigg, Charles
Thompson, Hugh
### box 6, folder 5  
**Palindrome Conjecture 1961-1996**  
Scope and Contents note  
"A Note on Palindromes by Addition", by Michael Rebmann & Frank Sentryz (typescript)  
"A Study of Palindromic Numbers", by D.R. Kaprekar, 1976  
"Researches on Reversed Subtraction Process", by D.R. Kaprekar, 1977  
Correspondents:  
- Trigg, Charles  
- Beatty, Millard  
- Beeler, Michael

### box 6, folder 6  
**Fibonacci 1961-2000**  
Scope and Contents note  
Lots of short articles.  
MG notes.  
Correspondents:  
- Hoggatt, Vernon  
- Feinberg, Andrew

### box 6, folder 7  
**Applications 1951-1977**  
Scope and Contents note  
"Life, Form, and Number", by C.A.B. Smith, 1965 (pamphlet)

### box 6, folder 8  
**Fib. Magic Tricks 1959-1978**  
Scope and Contents note  
Heath's Fibonacci Trick, AAG Principle, Fibonacci Fantasy  
Correspondents:  
- James, Stewart

### box 6, folder 9  
**Fib. Variants 1968-1999**  
Scope and Contents note  
A Tribonacci Application  
Vibonacci numbers  
Correspondents:  
- Webb, Edward

### box 6, folder 10  
**Properties, Curiosities, etc. 1964-1992**  
Scope and Contents note  
Correspondents:  
- Albright, Charles  
- Hoggatt, Vernon
box 6, folder 11  Harmonic Series 1963-1997  
Scope and Contents note  
MG notes.  
Many articles.  
"Partial Sums of the Harmonic Series", by R.B. Boas & John Wrench (typescript)  
"Optimal Card Stacking", by Brad Jackson (typescript)  
Correspondents:  
Engel, Joseph  
Boas, R.P.  
Asimov, Dan  
Clawson, Calvin

box 6, folder 12  Thue Sequence & Infinite Chess (Non-repeating Chains) 1957-1998  
Scope and Contents note  
MG notes.  
Correspondents:  
Scott, Dana  
Sutcliffe, Alan  
Erdos, Paul  
Leech, John  
Beek, Allan

box 6, folder 13  Linus (& Sally) Sequences 1977  
Scope and Contents note  
Notes from Scott Kim  
Correspondents:  
Hellerstein, Nathaniel

box 6, folder 14  Conways, 1, 2, 3 1984-1997  
Scope and Contents note  
Correspondents:  
Morris, Scot

box 6, folder 15  Golomb's Self-Ref. Sequence 1967  
Scope and Contents note  
2 articles and short note.

box 6, folder 16  Farey Sequences 1967-1995  

Serial Isogons
box 14, folder 1  **Isogon Paper 1988-1996**

Scope and Contents note
Correspondents:
Dewdney, A.K.
Farhi, Sivy
Alexanderson, G.L.
Guy, Richard
Vardi, Ilan
Reid, Robert

Software Projects
Physical Description: 11 folder(s)

box 47, folder 1  **Programmed Card Tricks 1966-1996**

Scope and Contents note
Clock-Card Trick, Hans Trixer
"Magical Mathematics", by Persi Diaconis & Ron Graham (typescript) - outline of book to teach mathematical appreciation with magic tricks
"Computer Magic with the ZX-81", by David Hambly, 1983 (25 pp) (booklet)
Riffle Shuffle tricks
Chris Morgan's Space-bar Code Trick
Correspondents:
Busby, Jeff
Haines, Bob
Goldstein, Phil (Max Maven)
Kolb, William
Morgan, Christopher

box 47, folder 2  **Non-Card Magic 1985-1986**

Scope and Contents note
Many tricks (about 15) involving computer, mostly hidden ways of supplying info to computer
New Angle 16 Digit Test; AAG Principle; Precognition
box 47, folder 3  **Freeman Software Project (Neil Patterson) 1982-1985**

Scope and Contents note
Book (about 64 pp) and computer disks (2) to be written by MG & published by Neil Patterson Publishers, Inc.
Working title: Mathematical Insights, or "The Recreational Road to Mathematics"
Some subjects: Polyominoes, Parity checks
Explorations, notes, and correspondence about possible topics for math disk
Correspondents:
Goodman, Frederick
Barcellos, Anthony
Miller, Marvin
Patterson, Neil
Gardner, Jim

box 47, folder 4  **Classic P's (Save for Refs) undated**

Scope and Contents note
Many (40-50) straightforward, classic math problems (many from his books), adapted for computer presentation

box 47, folder 5  **Classic Problems 1985**

Scope and Contents note
Lots of problems (about 60) selected by MG and rewritten with comments for manual and computer interaction
Editors comments (Bill Fritzmeier & Joan Webb) on the problems

box 47, folder 6  **Other Disk Ideas undated**

Scope and Contents note
MG notes on: Competitive Games, Recreational Problem Solving, Mazes or graph-traversing puzzles, Graphics, General topics

box 47, folder 7  **Polyomino Chap. for Demo 1985**

Scope and Contents note
Draft polyominoes chapter for book ("Doing Mathematics with Martin Gardner"?)
Notes on demo disk (preliminary version) - Ominoe maker program
Correspondents:
Kohl, Herb

box 47, folder 8  **Parity 1985**

Scope and Contents note
Various storyboards & notes for section on parity, with examples of computer screens

box 47, folder 9  **Kohl, Herb 1985**

Scope and Contents note
Much correspondence with Kohl on program for recreational math computer project (and other writing projects)
Some other Herb Kohl writings
Polyomino Demo disk (5-inch floppy) -- it transferred to Box 73, Folder 15
Correspondents:
Kohl, Herb
Kahn, Ted
| Box 47, Folder 10 | **Silverman, Brian 1985**  
Scope and Contents note  
Letters: from MG and Brian Silverman to Tony Barcellos, from Barcellos to MG and to Brian Silverman, about the educational math diskette project |
| Box 47, Folder 11 | **Text for MIT Demo 1985**  
Scope and Contents note  
"Martin Gardner's Plane Games, An Excursion in Geometry", draft of text (by MG), and screen shots, with comments by MG |

## Solid Geometry

**Physical Description:** 26 folder(s)

| Box 15, Folder 12 | **Platonic Solids - SA Card (Xmas, 1966) 1958-2000**  
Scope and Contents note  
Couple of problems.  
Many descriptions.  
Hamiltonian paths on platonic solids.  
Correspondents:  
Wheeler, Nicholas  
Shannon, Elihu  
Coxeter, H.S.M.  
Singmaster, David |
| Box 15, Folder 13 | **Conways "Holyhedra" 1999-2000**  
Scope and Contents note  
Conway's introduction to Jade Vinson paper, and Math Trek reporting of the Vinson paper. (But not the Vinson paper itself.) |
| Box 15, Folder 14 | **Cone (Sphericon) 1999**  
Scope and Contents note  
Ian Steward column in SA. |
| Box 15, Folder 15 | **Gabriel's Horn 1999**  
Scope and Contents note  
Article by Julian Fleron. |
| Box 15, Folder 16 | **Pop-Up Solids 1997-2000**  
Scope and Contents note  
Some models and articles and MG notes. |
| Box 15, Folder 17 | **Solid Geometry 1964-1975**  
Scope and Contents note  
Some good, unusual problems.  
Correspondents:  
Silverman, David  
Kim, Scott  
McClellan, John |
box 15, folder 18  Mutually Touching Figures (2- & 3-Space) 1947-1980
Scope and Contents note
Cubes, Common 3-D objects, convex (not congruent) (Crum's Problem), Tetrahedra.
MG notes.
Correspondents:
Kim, Scott
James, Leigh

Scope and Contents note
Pop-up cube (in envelope).
Many cube problems and dissections.
Correspondents:
Luke, Dorman
Conway, John
Hein, Piet
Byther, John
Philpott, Wade

Scope and Contents note
Correspondents:
Knuth, Donald
Escher, G.A.
Uribe, Diego

Scope and Contents note
Many articles.
MG notes.
Correspondents:
Price, J. Federico
Schwartz, Benjamin
Gott, J. Richard

Scope and Contents note
More articles, etc.
"Origins of Graph Theory", revised outline, Section 7-Polyhedra: Euler's Formula and Section 8- Euler's Theorem (continued), by Federico (?).
Subject files Series 2
Solid Geometry

box 16, folder 3  Polyhedra Enumeration (By Faces) [1 of 3] 1961-1980
Scope and Contents note
Many letters (from June, 1961, column), several articles (by Federico)
Correspondents:
Wormald, E.Gordon
Ellis, Ray
Coxeter, H.S.M.
Hayward, Roger
Grunbaum, Branko
Federico, P.J.
McClellan, John

box 16, folder 4  Polyhedra Enumeration (By Faces) [2 of 3] 1965-1980
Scope and Contents note
More Federico articles & papers.
Correspondents:
Federico, P.J.
McClellan, John

box 16, folder 5  Polyhedra Enumeration (By Faces) [3 of 3] 1977-1991
Scope and Contents note

box 16, folder 6  Unistable Polyhedra 1966-1993
Scope and Contents note
Correspondents:
Conway, John
Guy, Richard
McClellan, John
Knowlton, Kenneth

box 16, folder 7  Folding Toroidal Polyhedra 1995
Scope and Contents note
Single article, by Ivars Peterson, from Science News: "Crinklet Doughnuts"

box 16, folder 8  Buckeyballs (Fullerine) 1990-2002
Scope and Contents note
Many articles, from popular science magazines & newspapers.

box 16, folder 9  Melencolia - Octahedron 1971-1998
Scope and Contents note
About the cube-like figure in Albrecht Durer's "Melencolia" painting.
Correspondents:
Johansson, Torbjorn
Enomoto, Kazuko

Scope and Contents note
Various problems and puzzles involving tetrahedra - dissecting them, constructing them, various special tetrahedra, origami, etc.

Correspondents:
Klarner, David
Pscheidt, Gordon
Wetzel, John
Beyer, William


Scope and Contents note
National Geographic article on Alexander Graham Bell.

Correspondents:
Trigg, Charles
Franklin, J. Stuart
Hermann, Franz

box 17, folder 1  **Rotating Tetrahedral Rings 1965-1990**

Scope and Contents note
IsoAxis, Tumbli, Sphinx, "Overtwisted" chains, Inver-flex, Kalaidocycles, etc.
Several Douglass Engel articles, published and unpublished, on twisting and tetrahedra.

Correspondents:
Schattschneider, Doris
Roosevelt, Cornelius Van S.
Engel, Douglas
Best, Wilt
Walker, Wallace
Sharp, John
Hooker, Rea

box 17, folder 2  **Tetrahedron to Cube 1988-1996**

Scope and Contents note
3-D fractal (analogous to snowflake curve.)
Scot Morris article (from Omni), and his draft of it.

Correspondents:
Morris, Scot
Gosper, Bill
Coxeter, H.S.M.
Madachy, Joseph
Banchoff, Tom
Schattschneider, Doris
<table>
<thead>
<tr>
<th>Box</th>
<th>Folder</th>
<th>Description</th>
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<tbody>
<tr>
<td>17</td>
<td>3</td>
<td><strong>Determining Polyhedrons from Orthogonal Projections 1979-1981</strong>&lt;br&gt;Scope and Contents note&lt;br&gt;Several articles and research reports (from IBM Research Division), mostly by George Markowsky &amp; Michael Wesley.&lt;br&gt;Correspondents:&lt;br&gt;Wesley, Michael&lt;br&gt;Grossman, David</td>
</tr>
<tr>
<td>17</td>
<td>4</td>
<td><strong>Connelly's Flexible Deltahedron 1977-1998</strong>&lt;br&gt;Scope and Contents note&lt;br&gt;Correspondents:&lt;br&gt;Schattschneider, Doris&lt;br&gt;Goldberg, Michael</td>
</tr>
<tr>
<td>17</td>
<td>5</td>
<td><strong>&quot;Jackstraw&quot; Problems (Remove one, not disturbing others) 1984</strong>&lt;br&gt;Scope and Contents note&lt;br&gt;1 article on these, by Robert Dawson</td>
</tr>
<tr>
<td>17</td>
<td>6</td>
<td><strong>Volume-Area Paradoxes 1972-1984</strong>&lt;br&gt;Scope and Contents note&lt;br&gt;Correspondents:&lt;br&gt;Wyche, Cecil</td>
</tr>
<tr>
<td>17</td>
<td>7</td>
<td><strong>Spheres 1969-1987</strong>&lt;br&gt;Scope and Contents note&lt;br&gt;MG notes &amp; references to various sphere problems.&lt;br&gt;&quot;The Baseball Seam Curve&quot;, by Mary Krimmel, 1972 (typescript)&lt;br&gt;Correspondents:&lt;br&gt;Hayward, Roger&lt;br&gt;Hallerberg, Arthur&lt;br&gt;Lindgren, Harry&lt;br&gt;Krimmel, Mary&lt;br&gt;Knowlton, Kenneth&lt;br&gt;Pedoe, Dan</td>
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<td>17</td>
<td>8</td>
<td><strong>Geodesics on Distorted Spheres 1992</strong>&lt;br&gt;Scope and Contents note&lt;br&gt;2 articles from Science &amp; Siam News, reporting on work of John Franks &amp; Victor Bengert</td>
</tr>
<tr>
<td>17</td>
<td>9</td>
<td><strong>Banach-Tarski Paradox 1989</strong>&lt;br&gt;Scope and Contents note&lt;br&gt;Several articles on paradox, and some on Stan Wagon's book on it.&lt;br&gt;MG notes on 3x5 cards.</td>
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<tr>
<td>Box and Folder</td>
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<td>Dates</td>
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<td>17, 10</td>
<td>(Spheres) 1995-1997</td>
<td>Scope and Contents note Double bubble conjecture. Why are some astronomical bodies not round. Billiard ball puzzle solution, by Naoaki Takashima.</td>
</tr>
<tr>
<td>17, 13</td>
<td>The Kiss Precise 1936-1984</td>
<td>Scope and Contents note Copy of the original poem, and successors. Also, The Hexlet.</td>
</tr>
<tr>
<td>17, 14</td>
<td>The 13-Spheres - in n-Dimensions 1963-2000</td>
<td>Scope and Contents note Sphere packing, in various dimensions. Correspondents: Tangen, John Coxeter, H.S.M.</td>
</tr>
<tr>
<td>17, 15</td>
<td>Kepler's Conjecture 1984-2000</td>
<td>Scope and Contents note Articles on Hsiang's proof and Hales proof.</td>
</tr>
<tr>
<td>17, 16</td>
<td>Packing Spheres 1972-2000</td>
<td>Scope and Contents note &quot;Close Packing and Cracking&quot;, by Bradley R. Miller, U. of Oregon, 1977 (Booklet, partly thesis and partly exhibition catalog.) Various close packing articles, notes, etc: spheres may be different sizes, loosely packed, etc. &quot;Loxodromic Sequences of Tangent Spheres&quot;, by H.S.M. Coxeter, 1968 (typescript)</td>
</tr>
<tr>
<td>17, 17</td>
<td>Recent Results on Dense Packing in Higher Spaces [1 of 2] 1968-1990</td>
<td>Scope and Contents note Many articles &amp; results in sphere packing in higher dimensions (with self-dual codes, latices, etc.) Correspondents: Leech, John Conway, John</td>
</tr>
</tbody>
</table>
Subject files Series 2

Spheres

box 17, folder 18  Recent Results on Dense Packing in Higher Spaces [2 of 2] 1964-1994

Scope and Contents note
More articles & book revies.
Correspondents:
Coxeter, H.S.M.
Sloane, N.J.A.

Tangrams

Physical Description: 16 folder(s)

box 61, folder 1  Tangrams I (History) Aug/74 1974-1998

Scope and Contents note
Much correspondence for writing Tangram article for SA by MG
Correspondents:
Read, Ronald
Van Note, Peter
Lipscomb, Kenneth
Reis, Richard
Sakane, Itsuo
Slocum, Jerry

box 61, folder 2  Bibliography 1972-2000

Scope and Contents note
Various lists, references, and ads

box 61, folder 3  Tangram Solving Computer Programs 1972-1974

Scope and Contents note
Detailed description of tangram solving computer program, from Sam Deutsch (E.S. Deutsch)
"A Computer Solution of Polygonal Jigsaw-Puzzles", by Ejvind Lynning, 1972, 36pp
Correspondents:
Deutsch, E.


Scope and Contents note
Bound booklet, photocopied, of "Sei Shonagon Chie-no-ita", consisting of 42 patterns of Sei Shonagon, with answers, 32pp, in Japanese, 16cmx11cm
Correspondents:
Read, R.C.
Hitotumatu, Sin
Sakane, Itsuo
Takagi, Shigeo

box 61, folder 5  Letter From Italy - Old Chinese MSS? 1986

Scope and Contents note
2 Italian articles
<table>
<thead>
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<th>Box Folder</th>
<th>Description</th>
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</table>
| 61, 6      | **Tan Patterns & Puzzles 1974-1998**  
  Scope and Contents note  
  Lots of tangram patterns, mostly with solutions (some impossible)  
  Correspondents:  
  Ransom, Tom |
| 61, 7      | **Tangrams II (Read & Deutsch) Sept/74 1974-1976**  
  Scope and Contents note  
  Only a couple of corrections (for book version) |
| 61, 8      | **Revised Tangram Columns (For SA Premium) 1976-1978**  
  Scope and Contents note  
  Proposed “Tangram Kit” sample, for new subscribers |
| 61, 9      | **Mail on the 53 Pentagonal Tangrams 1974-1984**  
  Scope and Contents note  
  Many drawings of pentagonal tangrams  
  Correspondents:  
  Read, R.C.  
  Beeler, Mike  
  Hitotumatu, Sin |
| 61, 10     | **Snug Hexagons (?) 1977**  
  Scope and Contents note  
  Algorithm & program to find 200 snug hexagonal tangrams, by Lyle L. Welch, with results (unchecked)  
  Correspondents:  
  Welch, Lyle |
| 61, 11     | **Tan Games (Competitive) 1972**  
  Scope and Contents note  
  Game by Lech Pijanowski (in Polish)  
  “Snuggle Up”, idea by MG (& Snuggle Down)  
  “Tangoes”, by Rex Games, Inc. |
| 61, 12     | **Tangram Variants 1963-1999**  
  Scope and Contents note  
  Loculus of Archimedes (2 Italian articles)  
  “Kingram”, designed by Yasuo Kiga  
  Bitangram Solitario Puzzle, designed by Feliceantonio Botta  
  “Six Bits”, Victory Patience Puzzle  
  I-Qube  
  Stomachion (Loculus of Archimedes)  
  Shinpan Chiye No I’ta  
  Pentagram  
  Pythagram (David Singmaster)  
  Correspondents:  
  Shepherd, Wilfred  
  Howell, Greg |
Read’s Work on Tangrams 1962-2002
Scope and Contents note
Correspondence between MG and Ron Read, about writing an article & what would be in it (but NOT the article itself.)
Correspondents:
Read, R.C.

Scope and Contents note
(Puzzles collected for a book of that title.)
Many problems, from a great variety of sources, including readers, Car Talk, Ask Marilyn, and many magazines, domestic and foreign
MG notes of problems he has encountered
Correspondents:
Card, L.E.

Scope and Contents note
More problems
Correspondents:
Pomerance, Carl
Stewart, Bonnie
Penney, Walter
Golomb, Solomon
Bergerson, Howard

Scope and Contents note
More problems
Correspondents:
Isaacs, Rufus
Smullyan, Raymond
Knuth, Donald
Duncan, Fred
Charosh, Mannis

Tesselations
Physical Description: 22 folder(s)

NOB/Knuth Decagon Packing Problem 1994
Scope and Contents note
Packing 72-72-36 triangles in a decagon
Correspondents:
Knuth, Donald
Yoshagihara, Nob

Designs by Paulus, Calif. 1963-1977
Scope and Contents note
Jigsaw-type puzzles using shapes that fill a rectangle, etc. Examples of several different styles of “Symbolocks”, using alphabet or numerals.
Subject files Series 2
Tesselations

box 14, folder 4  
**Penrose Material 1975-1985**

Scope and Contents note
Much material from Penrose about Penrose Tilings, as well as MG notes, articles, etc.
Correspondents:
Penrose, Roger

box 14, folder 5  
**Tesselations (Mosaics) [1 of 3] 1957-1978**

Scope and Contents note
Conway notes on Conway tile, Versa-tiles.
Correspondents:
Brocklebank, R.W.
Alexander, Howard
Weil, Roman
Roosevelt, Cornelius VAn S.
Schattschneider, Doris

box 14, folder 6  
**Tesselations (Mosaics) [2 of 3] 1978-1989**

Scope and Contents note
Piet Hein, whirling pentagons: aperiodic tilings with similar (but not congruent) shapes.
Various articles, preprints and typescripts.
Correspondents:
Hein, Piet
Klamkin, Murray
Giles, Jack Jr.
Mielke, Paul
Coxeter, H.S.M.
Golomb, Solomon
Wagon, Stan

box 14, folder 7  
**Tesselations (Mosaics) [3 of 3] 1980-2000**

Scope and Contents note
Several examples of space-filling tilings: by Akira Hamakawa, Peter Raedschelders
Correspondents:
Knuth, Donald
Pegg, Ed Jr.

box 14, folder 8  
**Voronoi Cells 1998**

Scope and Contents note
Just 2 articles.
Tesselations

box 14, folder 9  
**Solid Tesselations 1960-1996**
  Scope and Contents note
  Cross Tesselations.
  Space filling crosses, pentahedra, heptahedra, tetrahedra, etc.
  Correspondents:
  Goldberg, Michael
  Hein, Piet
  McMillan, Edwin
  Gosper, Bill

box 14, folder 10  
Claire Kenney's Cluster Puzzles 1966

box 14, folder 11  
Huff's "Parquet Deformations" 1975-1977
  Scope and Contents note
  Correspondents:
  Huff, William

box 14, folder 12  
**Crystals 1975**
  Scope and Contents note
  "Hierarchies in Crystals", lecture notes by Paul B. Moore.

box 15, folder 1  
**Fabrics 1978**
  Scope and Contents note

box 15, folder 2  
**Octagon (NYR) 1982**
  Scope and Contents note
  (NYR = New York Review of Books.)
  Octagons, warped octagons, luxated octagons.
  Correspondents:
  Shapiro, Raymond

box 15, folder 3  
**R-Morphic Prototiles (Tile in Just R Ways) 1982-1983**
  Scope and Contents note
  Correspondents:
  Ammann, Robert

box 15, folder 4  
**Tiling Rectangles 1987-1998**
  Scope and Contents note
  Wagon's 14 proofs that a rectangle tiled with smaller rectangles with an integral side, must have at least 1 pair of integral sides.
  Filling boxes with bricks.

box 15, folder 5  
**Rectangles with Rectangles (Graham, Fan, etc) undated**
  Scope and Contents note
  Tiling an integer-sided rectangle with smaller integer-sided rectangles which do not combine to form any subrectangle.

box 15, folder 6  
**Shmuzzles undated**
  Scope and Contents note
  Mostly advertising flyers and instruction pamphlets
Tesselations

box 15, folder 7  
**Alan Schoen - Cyclotome 1979**
Scope and Contents note
Tiling polygons with sets of rhombuses (or pairs, etc, of rhombuses) with same edge length (as polygon), but different shapes.
"The Cyclotome Puzzles" - analyses of cyclotomes, by Alan Schoen (typescript)
"Tiling A Regular 2n-Gon with \([n^2/4]\) Rhombs and Pairs of Rhombs with no Two Pieces Alike", by Alan Schoen, 64pp (typescript)
Correspondents:
Schoen, Alan

box 15, folder 8  
**George Woodman 1975**
Scope and Contents note
Tessellation pictures, a la Escher.

box 15, folder 9  
**Osborn's Tesselations 1988-1996**
Scope and Contents note
Many Escher-like tessellations.
Correspondents:
Osborn, John

box 15, folder 10  
**Peter Curzon 1992**
Scope and Contents note
Geometrical tilings, many with 5-fold symmetry.
Correspondents:
Curzon, Peter

box 15, folder 11  
**Peter Raedschelders 1993**
Scope and Contents note
3 signed prints of his (hyperbolic?) pentagon tilings.
Correspondents:
Raedschelders, Peter

---

**TickTackToe**

Physical Description: 22 folder(s)

box 34, folder 5  
**Golomb's Hypercube TTT 2000**
Scope and Contents note
(Paper from MSRI Conference on mathematical games.)

box 34, folder 6  
**4x4x4 ( & higher) 1961-2000**
Scope and Contents note
Much analysis
Correspondents:
Banerji, Ranan
Patashnik, Oren
Patashnik’s Proof for 4x4x4 1978-1982
Scope and Contents note
"A Qubic Solution", by Oren Patashnik (comp. printout)
Correspondents:
Patashnik, Oren
Berlekamp, Elwyn
Beeler, Michael

TTTj General 1877-2000
Scope and Contents note
References, history, analysis (by MG)
"The Science of Naughts and Crosses", by A. Wrangler, 1877, an article form The Boys Own Paper (earliest analysis)
Some ads, cartoons, stamps, etc, featuring TTT

Numbers TTT 1956-1996
Scope and Contents note
"Numberical Tic-Tac-Toe", by George Markowsky - 2 drafts, and correspondence concerning them.
Various variants, by Graham, Nygaard, James Rosenberg ("Hyper-Tic-Tac-Toe"), Keith Gunn, Ted Lau
Correspondents:
Markowsky, George
Graham, Ron
Nygaard, P.H.

Random TTT 1959-1982
Scope and Contents note
Gambling Tic-Tac-Toe (Frank Tapson)
Tic-Tac-Toe as a Game of Chance
Correspondents:
Harary, Frank
Landau, Remy

Circular Boards 1970-1974
Scope and Contents note
Several versions

Linear TTT undated
Scope and Contents note
MG notes

Wild TTT & Reverse Wild TTT 1964
Scope and Contents note
Correspondents:
Golomb, Solomon
Abbott, Robert
Austin, A.K.
Shepherd, Wilfred H.
<table>
<thead>
<tr>
<th>Box and Folder</th>
<th>Title</th>
<th>Scope and Contents note</th>
</tr>
</thead>
</table>
| 34, 14        | 4D TTT 1957-1978 | Scope and Contents note  
4-Dimensional Tic-Tac-Toe  
"4th Dimensional Tic Tac Toe", by Russell Dalby, 1972, instructions, examples and many game sheets (spiral bound booklet)  
"Variants and Generalizations of Tic-Tac-Toe", by Solomon Golomb, 1964 (mimeograph)  
Proofs of 1st player win on order-4 hypercube  
MG notes  
Correspondents:  
Dalby, Russell  
Stiennon, O. Arthur  
Funkenbusch, William  
Golomb, Solomon  
Paul, Jerome |
| 34, 15        | Larger & Smaller Grids TTT 1957-1993 | Scope and Contents note  
Taktik  
MG notes |
| 34, 16        | Misc Variants 1962-1989 | Scope and Contents note  
Reverse TTT  
MG notes  
Games & Puzzles from A.K. Austin: Rolling Cube Puzzles, Game of Path, Path Patience, Game of Pathex, Game of Branch  
"O & X, A Book of Games", by Frank Tapson, 1973 (booklet)  
Correspondents:  
Silverman, David  
Stevenson, Paul |
| 35, 1         | Two-Sided Counters 1965-1974 | Scope and Contents note  
Notes on original MG idea  
TAU  
Correspondents:  
Austin, A.K. |
| 35, 2         | Original Ideas for Games & Sets, Etc. 1941-1968 | Scope and Contents note  
Enlarged Magic set  
Game based on Wizard of Oz  
Strong Man Box  
House Game (1941)  
Clown game (based on Garter trick) |
box 35, folder 3  TTT Magic 1956-1982
Scope and Contents note
A Thorson trick
Tic-Tac-Toe Super mental stunt, by "Printz"
Polish Epic
Correspondents:
Webb, Walter

box 35, folder 4  3D Variants 1970-1971
Scope and Contents note
Cube Fusion
MG notes on his original
Correspondents:
Shepherd, Witt.

box 35, folder 5  3x3x3 1959-1975
Scope and Contents note
MG notes
Correspondents:
Morgan, John
Simmons, Gustavus
Moser, Leo
Ondrejka, Rudolf

box 35, folder 6  Moving Counters TTT 1957-1993
Scope and Contents note
MG notes
Teeko
Tic-Tackle
Correspondents:
Austin, A.K.

box 35, folder 7  Go-Moku 1971-1997
Scope and Contents note
MG notes
Renju
Go-Bang
Morpion Solitaire
Correspondents:
Richards, Dana
Stover, Mel
Wang, Shein
Comfort, John
Lunnon, W.F.
Leech, John
Patashnik, Oren
<table>
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<tr>
<td>box 18, folder 10</td>
<td><strong>Annulus Conjecture &amp; Horned Sphere 1964-1969</strong></td>
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<td>Scope and Contents note</td>
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<td></td>
<td>Several postcards of Helaman Ferguson sculptures.</td>
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<tr>
<td></td>
<td>&quot;The Topological Concept of Space&quot;, by A.W. Tucker (booklet)</td>
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<td>Correspondents:</td>
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<tr>
<td></td>
<td>Milnor, John</td>
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<td>Flanagan, Dennis</td>
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<td>Stewart, Ian</td>
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<td>box 18, folder 11</td>
<td><strong>Antoine's Necklace 1988</strong></td>
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<td>Scope and Contents note</td>
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<td>box 18, folder 12</td>
<td><strong>Bandwidth Problem 1982</strong></td>
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<td>Scope and Contents note</td>
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<td></td>
<td>Single survey article, Journal of Graph Theory, Chinn, Chvataluva, Dewney, Gibbs</td>
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<tr>
<td>box 18, folder 13</td>
<td><strong>Moebius Strip Molecules 1982-1983</strong></td>
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<td>Scope and Contents note</td>
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<tr>
<td></td>
<td>Several (short) articles about Moebius strip molecules and their discovery</td>
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<tr>
<td></td>
<td>&quot;Magic and Molecule&quot;, short article by MG (typescript)</td>
</tr>
</tbody>
</table>

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**Topology**

Physical Description: 12 folder(s)

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**Guide to the Martin Gardner Papers SC0647**

SC0647 321
box 18, folder 15  

Scope and Contents note  
MG's review of 4 books on Catastrophe Theory from The New York Review of Books, 1978, and correspondence about it. (The review is itself missing a page.)  
Pictures of "escargot hyperbolique" and "escargot elliptique"  
Correspondents:  
Zahler, Raphael  
Davis, Monte  
Stewart, Ian

box 18, folder 16  

**Inside-Out Sphere 1965-1998**  
Scope and Contents note  
Turning the Sphere Inside Out - Scientific American article, ads for Internationa Film Bureau film (Nelson Mx), Inside Out review  
Correspondents:  
Phillips, Anthony

box 18, folder 17  

**Fixed Point Problems 1965-1985**  
Scope and Contents note  
Correspondents:  
Garson, James

box 18, folder 18  

**Sperner's Lemma & Balanced Rod 1975-1996**  
Scope and Contents note  
Notes and articles on Courant & Robbins's problem of balancing a rod on a moving platform.

box 18, folder 19  

**Catastrophe Theory (Thom) 1974-1987**  
Scope and Contents note  
Mostly articles & a few references

box 18, folder 20  

**Criticisms of C.T. (Catastrophe Theory) 1976-1978**  
Scope and Contents note  
Correspondents:  
Sussman, Hector  
Poston, Tim  
Stewart, Ian

box 19, folder 1  

**Dirac's Scissors & Cable Twisting, Etc 1959-1997**  
Scope and Contents note  
Two rotations cancelling twist: in string, cable, etc, and the relation to spinors & twistors  
"Boros the Boa", by Bob Neale (magic trick) (typescript)  
Note on Dirac's original presentation  
"The Tangled Scissors", magic trick (typescript)  
"Direct Energy Communication Between Continuously Rotating and Stationary Platforms", by D.A. Adams, cardboard & string model of Dirac Scissors  
Correspondents:  
Neale, Robert  
Adams, D.A.  
Dirac, P.A.M.
**Types of Numbers (Alphabetized)**

Physical Description: 32 folder(s)

box 7, folder 1  **Misc. No. types 1970-1991**
- Scope and Contents note
- Friendly vs Solitary
- U-Numbers, Mu-Numbers
- Powerful Numbers, Self-Powerful Numbers
- Harshad No’s
- Exotic Numbers
- Repfigit Numbers
- SUNS (Smoothly Undulating Number)
- Robbins Numbers
- Weird Numbers

Correspondents:
- Recaman, Bernardo
- Schwartz, Benjamin

- Scope and Contents note
- 1000 digit automorphs in various bases (& more)

Correspondents:
- McMillan, Edwin
- Baker, Kirby
- Fairbairn, R.
- Feser, Victor
- Katsanix, Ted
- Hooven, Frederick
- Morris, Larry Dean

box 7, folder 3  **Automorphic Numbers [ 2 of 2 ] 1972**
- Scope and Contents note

box 7, folder 4  **Bernoulli No’s 1997**
- Scope and Contents note
  2 articles (by Kenneth Williams & by S.C. Woon)

box 7, folder 5  **Carmichael No’s 1992-1994**
box 7, folder 6  **Congruent No’s 1972-1974**
box 7, folder 7  Factorials 1967-1997
Scope and Contents note
S.A. Math. Games article from Aug. 1967
MG notes (called "Serious Material" & "Recreational Material")
"Tables of n! and GAMMA(n+1/2) for the First Thousand Values of n", by Herbert
Salzer, Bureau of Standards, 1951 (pamphlet)
Correspondents:
Simmons, Gustavus
Huffman, Dean
Knuth, Donald
Trigg, Charles
Madachy, Joseph
Singmaster, David
Alexanderson, G.L.
Kraus, Alexander

box 7, folder 8  Farey No's undated
box 7, folder 9  Fibonacci No's 1981
Scope and Contents note
Not much here -- see folders 6/6-6/9 instead.
Letter from Gerard Bergum about Vern Hoggatt's death.

box 7, folder 10  Kaprekar No's 1988
box 7, folder 11 Joseph Liouville No's (1809-1882)(Frenchman) 1976
box 7, folder 12  Many Factors No's (eg. Plato's 5040) undated
Scope and Contents note
"Versatile Numbers", by William Lauritzen (typescript)

box 7, folder 13  Modest No's 1983-1985
Scope and Contents note
Correspondents:
Havermann, Hans

box 7, folder 14  Niven No's 1984-1989
box 7, folder 15  P-Adic Numbers 1976-1996
Scope and Contents note
Correspondents:
Bernhart, Frank

box 7, folder 16  Palindromes 1988-2000
Scope and Contents note
"On Palindromic Numbers and Their Divisibility by 11", by R.M. Sternheimer, 1990
(typescript)
Correspondents:
Owen ? (from Ireland)

box 7, folder 17  Palindromic Squares 1962-1986
Scope and Contents note
Correspondents:
Ondrejka, Rudolf
<table>
<thead>
<tr>
<th>Box Folder</th>
<th>Description</th>
<th>Dates</th>
<th>Scope and Contents Note</th>
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<tbody>
<tr>
<td>box 7, folder 18</td>
<td><strong>Par Numbers 1967</strong></td>
<td></td>
<td>Mostly a rather long computer listing. Correspondents: Parmenter, Frederick</td>
</tr>
<tr>
<td>box 7, folder 19</td>
<td><strong>Numbers That are Sums of the Cubes (etc) of Digits (PDI's) 1963-1998</strong></td>
<td></td>
<td>Narcissistic numbers &quot;Self Generating Integers and Extended Self Generating Integers&quot;, by B.L. Schwartz (typescript) Correspondents: Madachy, Joseph Chilton, Stephen Deimel, Lionel Schwartz, Benjamin Isaacs, Anthony</td>
</tr>
<tr>
<td>box 7, folder 20</td>
<td><strong>Persistent Numbers (Keep Multiplying Digits) 1973-1997</strong></td>
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<tr>
<td>box 7, folder 21</td>
<td><strong>Quaternions 1965-1989</strong></td>
<td></td>
<td>&quot;Vectors Verses Quaternions&quot;, by Alfred Bork (mimeograph) &quot;DeMorgan's Field of Triplets&quot;, by David Schaller (?) (manuscript)</td>
</tr>
<tr>
<td>box 7, folder 22</td>
<td><strong>Samoan Numbers 1968</strong></td>
<td></td>
<td>&quot;On Genealogical Trees Containing Quadratic Residues&quot;, by Birger Jansson, 1968 (typescript)</td>
</tr>
<tr>
<td>box 7, folder 23</td>
<td><strong>Smith Numbers 1982-2002</strong></td>
<td></td>
<td>Correspondents: Yates, Samuel Lee, Elvin Trigg, Charles</td>
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<tr>
<td>box 8, folder 1</td>
<td><strong>S-P Numbers (Sum &amp; Product) undated</strong></td>
<td></td>
<td>Article, by A.F. Beardon (no date)</td>
</tr>
</tbody>
</table>
Subject files Series 2
Types of Numbers (Alphabetized)

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**Square Numbers & Sq. Roots 1963-2001**
Scope and Contents note
Lots of MG notes.
Trigg on his "Mathematical Quickies"
Correspondents:
Aehle, Truman
Metzger, James
Madachy, Joseph
Cheney, Fitch
Trigg, Charles
Brackney, r.L.
Ondrejka, Rudolf

**Cubes & Highter Powers 1958-1997**
Scope and Contents note
Correspondents:
Allen, Kenneth
Pugh, Henry
Goldberg, Michael

**Powers (Mod M) 1994-1999**

**Figurates 1989-1998**
Scope and Contents note
"On Figurate Numbers", by Istvan Gaal & Akos Pinter, Tech Report No. 93/78, 1993

**Tetrahedral Numbers 1958-1991**

**Triangular No's 1980-2000**

**Polyhedral No's 1994**

**Vampire No's 1995**

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**Word Play**
Physical Description: 51 folder(s)

**Chess Spells, ONE-&gt;NINE 1995**
Scope and Contents note
About arranging letters in a grid, so you can spell out numbers
Correspondents:
Eckler, Ross

**Alphabet (Letter Fun) 1996**
Scope and Contents note
Correspondents:
Golomb, Solomon

**ABC Lists & Books 1993**
Scope and Contents note
Alphabet books (& lists)

**Ashleigh Brilliant 1987-1992**
Scope and Contents note
Pot-Shots

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Guide to the Martin Gardner
Papers SC0647
<table>
<thead>
<tr>
<th>Box Folder</th>
<th>Description</th>
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<tbody>
<tr>
<td>63, 19</td>
<td>Borgmann, Dmitri 1965-1998</td>
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<td>Correspondents:</td>
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<td>Eckler, Ross</td>
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<td>Borgmann, Dmitri</td>
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<td></td>
<td>Scope and Contents note</td>
</tr>
<tr>
<td></td>
<td>Much humorous poetry (mostly undated)</td>
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<tr>
<td></td>
<td>Articles from Worm Runners Digest</td>
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<tr>
<td></td>
<td>&quot;Behind the Surface&quot;, by J.A. Lindon, a fantasy (10pp) (typescript)</td>
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<td>Correspondents:</td>
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<td>Lindon, J.A.</td>
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<td>Scope and Contents note</td>
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<td></td>
<td>Star numbers</td>
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<tr>
<td></td>
<td>More poetry, mostly humorous, some math-related</td>
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<td></td>
<td>Correspondents:</td>
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<tr>
<td></td>
<td>Lindon, J.A.</td>
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<td></td>
<td>Scope and Contents note</td>
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<tr>
<td></td>
<td>Many palindromes, articles on palindromes, articles about people who specialize in palindromes, etc.</td>
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<tr>
<td></td>
<td>Some J.A. Lindon poetry &amp; palindromes</td>
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<td></td>
<td>&quot;The Poetics of the Palindrome&quot;, by Gary Coen, 1977, 44p (typescript)</td>
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<td>Correspondents:</td>
</tr>
<tr>
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<td>Lindon, J.A.</td>
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<td>Mercer, Leigh</td>
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<td>&quot;Let's PLLay LLama&quot;, by Howard Nottage, 1968 (booklet)</td>
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<td>Correspondents:</td>
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<td>Hunt, Patrick</td>
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<td>Dickson, Paul</td>
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<td>Eckler, Ross</td>
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<td>Hein, Piet</td>
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<td>Morice, Dave</td>
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<td>Golomb, Solomon</td>
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<td>Palindrome Poetry 1963-1999</td>
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<td>&quot;Party Trap&quot;, by Jennifer Curtis, 1984, 6pp (booklet)</td>
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<td>Lindon, J.A.</td>
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<td>Bergerson, Howard</td>
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box 64, folder 2  

**S & S Crossword Book - Introduction 1925-1973**

Scope and Contents note

Introduction to Simon & Schusters "Crosswords Series 107"

Some references

Lots of newspaper articles, most on history and popularity of crossword puzzles

First draft of introduction

Correspondents:

Barrow, Helen

Farrar, Margaret

box 64, folder 3

"**Double Crostic**" 1966-1979

Scope and Contents note

Articles, obituaries

box 64, folder 4  

**Anagrams [1 of 2] 1960-1999**

Scope and Contents note

Many anagrams, various types

"Bibliography of Studies Employing Anagrams", by Charles Haertzen, 1965 (typescript)

Translation of "Memory, Dreams, Reflections", by C.G. Jung, Appendix V (anagrams at end) (photocoy)


Correspondents:

Borgmann, Dmitri

Card, L.E.

Swinford, Paul

Francis, Darryl

Golomb, Solomon

Woods, James

box 64, folder 5  


Scope and Contents note

Computer listing of single word anagrams, from Guy Steele, 1999

box 64, folder 6  

**Word Shifts 1961-1993**

Scope and Contents note

Correspondents:

Mercer, Leigh

Borgmann, Dmitri

box 64, folder 7

**Qwerty 1998**

Scope and Contents note

1 article (photocopy)

box 64, folder 8

**Person Names 1964-1993**

Scope and Contents note

Regular people

Prominent people

Non-existant people, and books, etc.

Correspondents:

McGovern, Eugene

Dickson, Paul
<table>
<thead>
<tr>
<th>Box and Folder</th>
<th>Description</th>
<th>Series Dates</th>
<th>Scope and Contents Note</th>
<th>Correspondents</th>
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<tr>
<td>box 64, folder 9</td>
<td>Place Names 1966-1993</td>
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<td>Scope and Contents note</td>
<td>Dickson, Paul</td>
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<td>box 64, folder 10</td>
<td>Acrostics 1961-1969</td>
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<td>Scope and Contents note</td>
<td>Mercer, Leigh, Borgmann, Dmitri, Lindon, J.A.</td>
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<td>box 64, folder 11</td>
<td>King's Tour Spelling Matrices 1968-1969</td>
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<td>Scope and Contents note</td>
<td>Methods of making these</td>
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<td>box 64, folder 13</td>
<td>Bombaugh Project 1959-1979</td>
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<td>box 64, folder 15</td>
<td>Long Words 1959-1965</td>
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<td>Scope and Contents note</td>
<td>Mostly, having unusual properties</td>
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<tr>
<td>Box Folder</td>
<td>Description</td>
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<td>64, 18</td>
<td>Tom Swifties &amp; Elephant Jokes 1963-1983</td>
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<td>65, 1</td>
<td>Punw 1961-1999</td>
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<td>Lindon, John</td>
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<td>&quot;Knock Knock Featuring Enoch Knox&quot;, by Bob Dunn, 1936, Whitman Publishing</td>
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<td>&quot;Knock, Knock - Who's There?&quot;, words by Jimmy Tyson &amp; Bill Davies, Music by Vincent Lopez &amp; Johnny Morris, 1936 (sheet music)</td>
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<td>Non-planar spelling nets</td>
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<td>Many kinds of poems, including:</td>
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<td>Short Verse (2 or 3 words)</td>
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<td>Sallows pangram machine - checks pangrams (Autograms) of the form &quot;This pangram contains five a's, ..., and six z's&quot;.</td>
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<td>&quot;In quest of a Pangram&quot;, by Lee Sallows, 1984, 33pp (pamphlet)</td>
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<td>Sator, Arepo 1957-1982</td>
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<td>Cryptography, codes 1973-1999</td>
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<td>Mrs. Herndon's Decoding 1996</td>
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box 66, folder 6  

Scope and Contents note  
Correspondents:  
Borgmann, Dmitri

box 66, folder 7  

Scope and Contents note  
"Speechstuff and Thoughtstuff", by Douglas Hofstadter, 36pp (typescript)  
Jack Green periodical, preliminary edition  
Correspondents:  
Browne, Owens Hand  
Borgmann, Dmitri

box 66, folder 8  

Scope and Contents note  
Correspondents:  
Barr, Steven  
O'Beirne, Thomas  
Weaver, Warren  
Lindon, J.A.  
Golomb, Solomon  
Legman, Gershon  
Gilmer, Robert

box 66, folder 9  

Scope and Contents note  
Section with much early (50's) wordplay from Dmitri Borgmann  
Correspondents:  
Mercer, Leigh  
Tompkins, Pendleton  
Borgmann, Dmitri

Additional material  Series 3  

Puzzles  
box 1, folder 1  
Jerry Slocum, Directory of Puzzle Collectors Puzzle Sellers 35431
box 1, folder 2  
Jerry Slocum, Directory of Puzzle Collectors and Puzzle Sellers 34425
box 1, folder 3  
Jerry Slocum, Compendium of Checkerboard Puzzles 30407
box 1, folder 4  
Jerry Slocum and Jacques Haubrich, Compendium of Checkerboard Puzzles 34182
box 1, folder 5  
Jerry Slocum and Dieter Gebhardt, Puzzles from Catel's Cabinet and BEstelmeier's Magazine 1785 to 1823 1997
box 1, folder 6  
Jerry Slocum, Wire Puzzles Ch'ung-en Yu
box 1, folder 7  
Ruan Liuqi, the Ingenious Puzzle Craftsman of Suzhou; edited by Wei Zhang and Peter Rasmussen circa 1998
box 1, folder 8  
Die 12 Verhext - Steine Zimpfer Puzzles
box 1, folder 9  
Stewart T. Coffin, Puzzle Craft 1981
box 1, folder 10  
Stewart T. Coffin, Wooden Puzzles 1984
box 1, folder 11  
William A. Miller, The Official Handbook for Peg Solitaire 1979
box 1, folder 12  
Sivy Farhi, projected book on the soma cube, with letter and c.v. 1982
box 1, folder 13  
James Dalgety, R. Journet and Company; a Brief History of the Company and Its Puzzles 1989
box 1, folder 14  
box 1, folder 15  gamepuzzles for the joy of thinking - catalogues 1993-1999
box 1, folder 16  Multimatch I, II, III, IV Game rules / puzzle designs
box 1, folder 17  Mind-bending puzzles by Terry Stickels, a 365-day calendar [4 items] 1997, 1999-2001
box 2  Visual Brain Storms, the Smart Thinking Game
box 2  Tangoes, the Ancient Chinese Puzzle Game with training guide
box 2  Word Trek, An Adventure from Start to Finish
box 2  Puzzle pieces for TANGRAM [2 unopened items]
box 2  Mathematical curiosities I, a collection of interesting and curious models...ready to cut out and glue together
box 2  Magnificent Mazes 1980 Appointment Calendar
box 2  Two games using Escher images
box 3, folder 1  Notebook on Calculus - Probability - Infinite numbers
box 3, folder 2  M. C. Escher address book with letter from Gardner to Frank Harary relating his own Escher artworks 1996

Additional material Accession ARCH-2003-016

box 1  Books and articles by or about Martin Gardner, Lewis Carroll; annotated editions of *Alice in Wonderland*, *The Hunting of the Snark*, etc.
box 2  Gardner, Martin, *The Flight of Peter Fromm*

Scope and Contents
Original manuscript (edited), galley proofs, etc.

box 3  Materials re: *The Hunting of the Snark*
box 4  Materials re: *The Flight of Peter Fromm*, the annotated centennial edition of Lewis Carroll's *The Hunting of the Snark*
box 5  Books re: Lewis Carroll

Additional Material Accession ARCH-2018-018

Box 1, Folder 1  Pentominoes 6 x 10
Box 1, Folder 2  Cutler, Bill, "A computer analysis of all 6-piece burrs" 1994
Box 1, Folder 3  Pentominoes 4 x 15
Box 1, Folder 4  Pentominoes 5 x 12
Box 1, Folder 5  Pentominoes 6 x 10
Box 1, Folder 6  Bouwkamp, C. J., "Catalog of solutions of the rectangular 3x4x5 solid pentomino problem" 1967 Jul
Box 1, Folder 7  Bouwkamp, C. J. and A. J. W. Duijvestijn, "Catalogue of simple perfect squared squares of orders 21, through 25" 1992 Nov
Box 1, Folder 8  HEXED circa 1960
Box 1, Folder 9  Pentomino workshop, Batavia, IL 1986 Dec 2
Box 1, Folder 10  Tribute to Piet Hein; Rube Goldberg Inventions circa 1997
Box 1, Folder 11  Design Science Toys 1993
Box 1, Folder 12  Pentominoes Workshop correspondence
Box 1, Folder 13  AGATE "Mathematics for gifted students" v.3, no.1 1989 Spring
Box 1, Folder 14  Wilson, Marguerite, "SOMA puzzle solutions" 1973
Box 1, Folder 15  Computer printouts
Box 1, Folder 16  EWS Collectors Evening 1992 May 14
Box 1, Folder 17  Pentomino solutions 1963 Jun-Jul
Box 1, Folder 18  Fontaine, Anne, "An infinite number of plane figures with Heesch Number Two"
Box 1, Folder 19  Golomb, Solomon, "Max Delbruck: an appreciation" 1982 Summer
Box 1, Folder 20  World Game Review - Special issue on polyforms 1989 Dec
Box 1, Folder 21  Articles in tribute to Martin Gardner 1993
Box 1, Folder 22  Gardner Atlanta gathering 1993
Box 1, Folder 23  Dedicated to M.G. by NOB 1993 Jan