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	Grade Level				Activity Type			Learning Format			
	K-2	2-4	4-6	6-8	Concrete/Manipulative	Visual/Pictorial	Abstract	Total Group	Cooperative	Independent	
I. Making Sense of Numbers											1
1. Toothpick Storybooks	X	X			X	X	X	X	X	X	3
2. Number Combination Noisy Boxes	X	X			X	X	X		X	X	5
3. Everyday Things Numberbooks	X	X			X	X	X	X	X	X	7
4. Under the Bowl	X	X			X	X	X		X	X	9
5. Cheerios™ and Fruit Loops™ Place Value	X	X	X		X	X	X	X	X	X	11
6. Beans and Beansticks	X	X	X		X	X	X	X	X	X	13
7. Incredible Expressions	X	X	X	X			X	X	X		19
8. Number Cutouts	X	X	X	X	X	X	X	X	X	X	22
9. Celebrate 100 Days	X	X	X	X	X	X	X	X	X	X	27
10. Paper Plate Fractions		X	X	X	X	X	X	X	X	X	30
11. Bean Cups to 1,000		X	X	X	X	X	X	X	X	X	33
12. Dot Paper Fractions		X	X	X		X	X	X	X	X	36
13. Fraction Cover-Up or Un-Cover		X	X	X	X	X	X		X		43
14. Post-it™ Mental Math		X	X	X			X	X	X		47
15. Calendar Math		X	X	X			X	X	X	X	50
16. Let's Have Order		X	X	X			X	X	X		54
17. Reject a Digit		X	X	X			X	X	X		57
18. A Million or More			X	X		X	X	X	X		62
19. Smallest and Largest			X	X			X	X	X	X	66
20. Numbers to Words to Numbers			X	X			X	X	X	X	71
21. Target a Number			X	X			X	X	X	X	74

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22. Fraction Codes			X	X		X	X		X	X	X	77
23. Comparing Fractions, Decimals, and Percents			X	X	X	X	X		X	X		80
24. Number Clues			X	X			X		X	X	X	83
25. Number Power Walks			X	X	X	X	X		X	X		91
II. Computation Connections												95
26. Paper Clip Addition Cards	X				X	X	X			X	X	97
27. Arm-Lock Computation	X	X			X	X	X		X	X		100
28. Punchy Math	X	X	X		X	X	X		X	X	X	104
29. Multiplication Fact Fold-Outs	X	X	X			X	X			X	X	106
30. Ziploc™ Division	X	X	X		X	X	X			X	X	109
31. Dot Paper Diagrams	X	X	X			X	X		X	X	X	112
32. File Folder Activities	X	X	X				X			X	X	119
33. Beat the Calculator	X	X	X			X	X		X	X		122
34. Floor Number Line Actions	X	X	X		X	X	X			X		125
35. Egg Carton Math	X	X	X		X	X	X		X	X	X	128
36. Cross-Line Multiplication		X	X			X	X		X	X	X	133
37. Highlighting Multiplication		X	X			X	X		X	X	X	136
38. Chalkboard or Tabletop Spinner Games		X	X	X			X		X	X		139
39. Skunk		X	X	X			X		X	X		143
40. Subtraction Squares		X	X	X			X		X	X	X	147
41. Drawing Fraction Common Denominators		X	X	X		X	X		X	X	X	151
42. Fraction \times and \div Diagrams			X	X		X	X		X	X	X	154
43. Decimal Squares		X	X	X		X	X		X	X	X	158
44. Square Scores		X	X	X		X	X			X		163
45. Math Concentration		X	X	X		X	X		X	X		168
46. Scramble		X	X	X			X		X	X		170
47. Palindromic Addition		X	X	X			X		X	X	X	174
48. Paper Clip Division		X	X	X	X	X	X		X	X	X	179
49. I Have _____, Who Has _____?		X	X	X			X		X	X		182

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50. Number Grids		X	X	X			X		X	X	X	186
51. Here I Am		X	X	X			X		X	X		189
52. Equation Match-Up		X	X	X			X		X	X		194
53. Block Four		X	X	X			X			X		196
54. Silent Math			X	X		X	X		X	X		203
55. Rapid Checking			X	X			X		X	X	X	206
III. Investigations and Problem Solving											209	
56. Shoe Graphs	X	X			X	X	X		X	X		211
57. Sticky Gooey Cereal Probability	X	X			X	X	X			X	X	214
58. Sugar Cube Buildings	X	X	X	X	X	X	X		X	X	X	219
59. A Chocolate Chip Hunt	X	X	X	X	X	X	X		X	X	X	223
60. Flexagon Creations	X	X	X	X	X	X	X		X	X	X	228
61. Watermelon Math	X	X	X	X	X	X	X		X	X		232
62. Restaurant Menu Math	X	X	X	X		X	X		X	X	X	235
63. Peek Box Probability	X	X	X	X	X	X	X		X	X	X	238
64. A Problem-Solving Plan	X	X	X	X	X	X	X		X	X	X	242
65. Fraction Quilt Designs	X	X	X	X	X	X	X		X	X	X	247
66. What I Do in a Day		X	X			X	X		X		X	250
67. Shaping Up		X	X	X	X	X	X		X	X	X	254
68. Verbal Problems		X	X	X			X		X	X	X	260
69. Scheduling		X	X	X		X	X		X	X	X	271
70. Student-Devised Word Problems		X	X	X			X		X	X	X	274
71. Tired Hands		X	X	X	X	X	X		X	X		278
72. Paper Airplane Mathematics		X	X	X	X	X	X		X	X	X	281
73. A Dog Pen Problem		X	X	X	X	X	X		X	X	X	285
74. Building the Largest Container		X	X	X	X	X	X		X	X	X	288
75. The Three M's (Mean, Median, and Mode)		X	X	X		X	X		X		X	290
76. Post-it Statistics		X	X	X	X	X	X		X	X		294
77. A Postal Problem			X	X	X	X	X		X	X	X	297

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78. Build the "Best" Doghouse			X	X	X	X	X	X	X	X	301
79. Dog Races			X	X	X	X	X	X	X		304
80. Four-Coin Statistics			X	X	X	X	X	X	X		308
81. Tube Taping			X	X	X	X	X	X	X	X	312
82. Height with a Hypsometer			X	X	X	X	X	X	X	X	317
83. Fairness at the County Fair			X	X	X	X	X		X	X	321
84. Winning a Prize Spelling "NUT"			X	X	X	X	X		X	X	328
85. Building Toothpick Bridges			X	X	X	X	X	X	X	X	332
86. A Bridge with a Bulge				X		X	X	X	X	X	335
IV. Logical Thinking											339
87. Stacking Oranges		X	X	X	X	X	X	X	X	X	341
88. Tell Everything You Can		X	X	X	X	X	X	X	X	X	345
89. Handshake Logic		X	X	X	X	X	X	X	X	X	349
90. 2- and 3-D Arrangements		X	X	X	X	X	X	X	X	X	352
91. Overhead Tic-Tac-Toe		X	X	X		X	X	X	X		355
92. Magic Triangle Logic		X	X	X			X	X	X	X	358
93. Paper Clip Spinners		X	X	X		X	X	X	X	X	361
94. Triangle Toothpick Logic		X	X	X	X	X	X	X	X	X	364
95. Rectangle Toothpick Logic		X	X	X	X	X	X	X	X	X	367
96. What Graph Is This?		X	X	X		X	X	X	X	X	372
97. Fold-and-Punch Patterns		X	X	X	X	X	X	X	X	X	377
98. Coordinate Clues		X	X	X		X	X	X	X	X	380
99. Puzzlers with Paper		X	X	X	X	X	X	X	X	X	383
100. Create a Tessellation			X	X	X	X	X	X	X	X	388
101. Problem Puzzlers			X	X		X	X	X	X	X	392
102. Dartboard Logic			X	X		X	X	X	X	X	397
103. Angelica's Bean Logic			X	X	X	X	X	X	X	X	401
104. Line It Out			X	X	X	X	X	X	X	X	404

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105. Duplicate Digit Logic			X	X			X		X	X	X				408
106. String Triangle Geometry			X	X	X	X	X		X	X	X				411
107. A Potpourri of Logical-Thinking Problems, Puzzles, and Activities															414
Plan a Circuit Board	X	X	X	X	X	X	X	X	X	X	X	X			414
22 Wheels and 7 Kids	X	X	X	X			X	X		X	X	X			415
Candy Box Logic		X	X	X		X	X	X		X	X	X			416
Brownie Cutting		X	X	X		X	X	X		X	X	X			416
Making Sums with 0-9		X	X	X				X			X	X			417
Upside-Down Displays		X	X	X			X	X		X	X	X			418
Coin Walk		X	X	X		X	X	X			X	X			418
Dice Plotting			X	X		X	X	X			X	X			419
Coin Divide			X	X		X	X	X			X	X			420
Animal Pens			X	X		X	X	X			X	X			420
12 Days of Christmas			X	X			X	X		X	X	X			421
Rubber Sheet Geometry				X		X	X	X			X	X			422
How Long Is a Groove?				X		X	X	X		X	X	X			423
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