

# Index

\* Topic is addressed in the lesson, but is not the focus of the lesson

† Article that contains a lesson excerpt addressing the topic

## MATHEMATICAL TOPICS

Arc Length	Shot Put Arc	179
Area	On a Good Day †	226
	The Gum Drop	148
	Poison Weed	153
	Polygon House	156
	Princess Dido and the Ox Skin	196
	Brother in the Box	271
Best Fit Lines	CoolShoes.com	66
	Olympic Swim Times	83
Chords (Power Point Theorems)	Strike a Chord	182
Circumcenter	Robotic Disney	86
Circumference	A Slice of Pi	151
	On a Good Day †	226
Congruent Triangles	Baseball Congruency	143
Distance Formula	Town Grid	111
Expressions	Number Tricks	34
	Age Trick	272
Equations, Writing & Solving	I'm Thinking of a Number...	36
	Pig Pen Algebra	38
	Rule Quest	40
	Rising Water	45
	The Student-Generated Word Problem	49
	Ultimate Cosmic Power †	236
	The Economy of Thought †	254
Four-Color Conjecture	The Selling of America	191
Fractions	Candy Bars	23
	Brownies	25
	Beef Jerky	27
	Inside & Out †	231
Functions	Calculator Logos	121
Graphing	Algebra Walk	50
	Graphing for Meaning †	241
Integers	Wallflowers	14
	The Postman Always Rings Twice	18
	Piggy Banks	20
Inequalities	Red Dot - Green Dot	269
Linear Equations	Monster Cars	59
	The Jogging Hare	64
	CoolShoes.com	66
	Robotic Disney *	86
	The Tic-Tac Equation	270
Matrices	The Tortoise and The Hare *	74
	The Billabong and the Bush	114
Measurement	Measurement †	232
Mixture Problems	Stixture Problems	72

# Index *(continued)*

## MATHEMATICAL TOPICS *(continued)*

Order of Operations	4-Digit Problem	13
Parallel & Perpendicular Lines	The X-Files	81
	Robotic Disney	86
Parametric Equations	The Migratory Paths of Birds	89
Parallel & Perpendicular Lines	The X-Files	81
	Robotic Disney	86
Perimeter	Princess Dido and the Ox Skin	196
Polygons	The Mason's Secret	136
	Polygon House	156
Polynomials	Empty Box	92
	Pizza Box	95
Prisms	Swimming Pools	159
	Super Size It! *	170
	Can There Be Giants? *	172
	Whatever Floats Your Boat	175
Probability	Playing with a Full Deck	29
	Psychic Probability	267
Proofs	The Fire-Fish Story	142
	Baseball Congruency *	143
Pyramids	King Tut	163
	The Luxor	165
Pythagorean Theorem	Shipping Conundrum	146
Quadratics	Pool Decks	98
	The Coin Fountain	105
	Parabolic Pizza	108
	Cannonballs and Concepts †	239
Rate	Don't Break my Stride	11
	Land Cruiser	69
Ratio	How Big is Barbie?	2
	M&M Count and Crunch	4
	Counting Fish	8
	Super Size It! *	170
	Can There Be Giants? *	172
Reflections	Reflection Golf	185
	Kaleidoscope *	185
	William Tell *	188
Rotations	William Tell	188
	Kaleidoscope	185
Sectors	Poison Weed	153
Sequences and Series	Zeno's Bouncing Ball	118
Similarity	Super Size It!	170
	Can There Be Giants?	172
	The America's Cup Sail *	139
Similar Triangles	How High: Beyond a Shadow of a Doubt	126
	How High: The Right Stuff *	128
	How High: Surveyor's Trig Trick *	130
	How High: Do You Have the Inclination?	132
	How High: The Chinese Difference	134

# Index *(continued)*

## MATHEMATICAL TOPICS *(continued)*

Slope	Staircases & Ramps	53
	Tumbling Cars	57
	Monster Cars *	59
	The Jogging Hare *	64
	CoolShoes.com *	66
Special Right Triangles	How High: The Right Stuff	128
Spheres	The Shopkeeper's Jar	167
	Around the World *	268
Statistics	Playing with a Full Deck	29
	Don't Break My Stride *	11
Surface Area	Swimming Pools	159
	The Luxor	165
	Super Size It!	170
	Can There Be Giants?	172
Systems of Equations	The Tortoise and The Hare	74
	Rescue Mission	77
	The X-Files	81
	Olympic Swim Times	83
	Robotic Disney *	86
	The Migratory Paths of Birds	89
Tessellations	The Mason's Secret	136
Transformations	Reflection Golf	185
	Kaleidoscope	185
	William Tell	188
	Mega Translation	271
Trapezoids	The America's Cup Sail	139
Trigonometry	How High: Surveyor's Trig Trick	130
	The America's Cup Sail *	139
Variables	Number Tricks	34
	The Student-Generated Word Problem	49
	The Dentist's Puzzle	266
Vectors	The Vector Map	194
Volume	Swimming Pools	159
	The Luxor	165
	The Shopkeeper's Jar	167
	Super Size It! *	170
	Can There Be Giants? *	172
	Whatever Floats Your Boat	175

## EDUCATION TOPICS

Abstract Generalizations	Ultimate Cosmic Power	236
	The Economy of Thought	254
Assessment	Original Works	123
	Portfolios	216
	Nuts & Bolts	221
	The Railroad and the Kayak	257
	Math Walk	272

# Index *(continued)*

## EDUCATION TOPICS *(continued)*

Conceptual Understanding	Q.M.I. 4.5	203
	TIMSS: A Call for Substance	205
	Cannonballs and Concepts	239
	Graphing for Meaning	241
	Universal Remote	255
Instructional Philosophy	Q.M.I. 4.5	203
	TIMSS: A Call for Substance	205
	Beavis & Barbie	243
	Still All Full of Stuffin'	245
	Godzilla or Godzuki	247
	Martian Math	251
Methodologies in Teaching	A Struggle Among Equals	218
	Kicking the Textbook Habit	224
	On a Good Day	226
	Measurement	232
	Teaching Backwards	234
	Christmas Carols & Disco Tunes	250
Multiple Representations	Inside & Out	231
Problem Solving	Sculpting Young Thinkers	249
Project Development	Sleeping with the Enemy	229
	Fluff-n-Stuff	259
	Lesson Studies	261
	Inspiration, Perspiration, Desperation	263
Raising Test Scores	A Mountain of Vision	212
Standards-Based Instruction	Q.M.I. 4.5	203
	TIMSS: A Call for Substance	205
	A Mountain of Vision	212