

SCIMATECH MATH

Time	Chapter/Section	Content/Skills	Applications/Project Ideas/Sci. Connections
4 days	Supplement	Problem Solving and Course Introduction/Expectations	
		What is Math?	<i>Corresponds to Unit I in Sci. and Tech.</i>
		Problem Solving Questions	Students simulate the handshake Problem and fireman
17 days	Chap. 1	Algebra	
	1.2	Powers and Exponents	
	supplement	Multiplying and Dividing with Exponents	
	1.3	Variables, Expressions and Equations	
	1.4	Solving One Step Equations (+, -)	<i>Science -Preparing for Physics Unit II (ch. 14)</i>
	1.5	Solving One Step Equations (x, /)	<i>Science -Preparing for Physics Unit II (ch. 14)</i>
	1.6	Writing Expressions and Equations	
	1.7	Solving Two Step Equations (+, -, x, /)	Science -Manipulating Formulas & Preparing for Physics Unit II(ch. 14)
	1.7	Solving Two Step Equations with the Distributive (+, -, x, /)	Comparing Cell Phone Rates by solving and graphing equations
	1.8	Area and Perimeter	
	1.9	Solving Inequalities (+, -, x, /)	
	1.9	Graphing Inequalities on a number line	
	supplement/6.9	Scientific Notation and Converting	News Activity. Science- <i>Intro. To Science Unit I (ch.1)</i>
16 days	Chap. 2	Algebra: Using Integers	
	2.1	Graphing integers on a number line and absolute value	
	2.2	Comparing and ordering integers	
	2.3-2.4	Adding Integers	<i>Science- Physics Unit IV (ch. 12)</i>
	2.5	Subtracting Integers	
	2.7- 2.8	Multiplying Integers and Dividing Integers	
	2.6	Matrices with Integers	
	2.9	Equation Solving with negatives (+, -, X, /)	
	supplement	Writing 2 step equations	Algebra Fun with Calendars
	supplement	Solving Equations with Variables on both sides	"Party Time"
supplement	Solving Equations with Variables on both sides and dist. prop.		
2.1	Graphing Integers in the coordinate plane		
15 days	Chap. 10	Functions	<i>Science - Physics Unit III (ch. 11)</i>
	10.1	Functions	
	10.2	Use Table to Graph Functions	Graphing Calc.
	10.3	Equations with 2 variables	Graphing Calc.
	10.4	Graphing Linear Equations	Graphing Calc.
	10.5	Graphing Systems of Equations	Graphing Calc.
	10.6	Graphing Quadratic Functions	Graphing Calc.
	10.7	Translations	
	10.8	Reflections	
	10.9	Rotations	

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11 days	Chap. 3 and 8	Using Proportion and Percent	
	3.1	Ratios, Rates and Unit Rates	Grocery Store Math
	8.5	Percent of Change	
	8.6	Simple Interest	
	3.2	Ratios and Percents	
	3.3	Solving Problems Using Proportions	
	3.4	Fractions, Decimals and Percents	<i>Invention Convention</i>
	Supplement	Finding % of a number using Proportions	<i>Invention Convention</i>
	3.5	Finding %'s Mentally	
Supplement	Interest for buying a car credit card	Use Fake credit cards with interest rates listed on the cards	
15 days	Chap. 9	Exploring Real Numbers	<i>Science - Physics Unit II (ch. 14)</i>
	9.1	Square Roots	
	9.4	Pythag. Thrm	Skateboard Ramp Projects
	9.5	Using Pythag. Thrm	
	9.7	Special Right Triangles	
	Supplement	Trig. Ratios and using the Trig. Chart	
	Supplement	More Practice using Trig.	
	Supplement	Problem Solving with Trig. And Pythag. Thrm.	
13 days	Chap. 5	Geometry: Investigating Patterns	<i>Science -Catastrophic Events (Unit I)</i>
	5.1	Parallel Lines	
	5.2	Classify triangles	
	5.3	Classify quadrilaterals	
	5.4	Symmetry	M.C Escher Tessellation Project (computer lab and in class)
	5.5	Congruent Triangles	
	5.6	Similar Triangles	
7 days	Chap. 7 and 6	Fractions	
	7.1 - 7.2	(+, -) Fractions with like and unlike denominators	
	7.3	Multiplying Fractions	
	7.8	Dividing Fractions	
	6.4	Rational Numbers	
	6.8	Ordering and Comparing Rational Numbers	

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10 days	Chap. 4	Statistics: Analyzing Data	<i>Science -Intro to Science Unit I (Ch. 1)</i>
	4.4	Measures of Central Tendency	<i>Invention Convention</i>
	4.1	Bar Graphs	Sunflower Seed activity, Invention Convention
	4.2	Circle Graphs	Survey 20 people and create graph of results, Invention Convention
	Supplement	Frequency Tables	<i>Invention Convention</i>
	4.8	Misleading Statistics	
11 days	Chap. 6	Primetime	
	Supplement	Factors, Multiples	Factor Game, Product Game
	Supplement	Prime, Composite, Products	Students create their own game and play them in groups
	6.1	Divisibility Rules	
	6.2	Prime Factorization	
	6.3 - 6.7	GCF and LCM	
10 days	Chap. 11	Geometry: Using Area and Volume	
	11.1	Area of Circles	Hula Hoop
	11.2	3D Figures	Pass around Yellow 3D shapes in class
	11.3	Volume of Prisms and Cylinders	Pringles container and other food containers
	11.4	Volume of Pyramids and cones	
	11.5	Surface Area of Prisms	
	11.6	Surface Area of Cylinders	Wrapping the pringles container
10 days	Chap. 12	Probability	
	12.2	Permutations	
	12.3	Combinations	
	12.5	Compound Events	
	12.6	Experimental Probability	Perform experiments (Dice rolling, Coin Tossing, Tac Tossing)
	Supplement	Make an Organized List	
	Supplement	Sample Space	

