Math Content by Unit

Grade 6	Grade 7	Grade 8	Algebra
Prime Time: Factors	Shapes and	Thinking with	Thinking with
and Multiples	Designs: Two	Mathematical	Mathematical Models:
Number theory,	Dimensional	Models: Linear and	Linear and Inverse
including factors,	Geometry	Inverse Variations	Variations
multiples, primes,	Polygons,	Linear models and	Linear models and
composites, prime	measurement of	equations, inverse	equations, inverse
factorization; order	angles, angle sum of	variation models and	variation models and
of operations,	polygons, conditions	equations, variability	equations, variability of
distributive	for unique triangle,	of numerical and	numerical and categorical
property.	parallel lines and	categorical data.	data.
	transversals.		
Comparing Bits and	Accentuate the	Looking for	Looking for Pythagoras:
Pieces: Ratios,	Negative: Integers	Pythagoras: The	The Pythagorean
Rational Numbers	and Rational	Pythagorean	Theorem
and Equivalence	Numbers	Theorem	Use and proof of
Ratio, unit rate, rate	Addition,	Use and proof of	Pythagorean Theorem and
tables, rational	subtraction,	Pythagorean	converse, square roots,
numbers, decimals,	multiplication and	Theorem and	cube roots, irrational and
percents,	division of rational	converse, square	real numbers, equation of
equivalence,	numbers, absolute	roots, cube roots,	circle.
absolute value,	value, opposites,	irrational and real	
number line.	order of operations,	numbers, equation	
	distributive	of circle.	
	property.		
Let's be Rational:	Stretching and	Growing, Growing,	Growing, Growing,
Understanding	Shrinking:	Growing:	Growing: Exponential
Fraction Operations	Understanding	Exponential	Functions
Addition,	Similarity	Functions	Representing exponential
subtraction,	Enlarging a figure,	Representing	growth with tables,
multiplication,	effect of scale	exponential growth	graphs, equations; rules
division of fractions,	factors on	with tables, graphs,	for exponents, scientific
fact families.	perimeter and area,	equations; rules for	notation; Exponential
	coordinate rules,	exponents, scientific	Decay; growth/decay
	ratios between and	notation; Exponential	factors and rates.
	within similar	Decay; growth/decay	
	figures; using	factors and rates	
	similarity to find		
	measures.		
Covering and	Comparing and		Frogs and Fleas and
Surrounding: Two	Scaling: Ratios,		Painted Cubes: Quadratic
Dimensional	Rates, Percent,		Functions
Measurement	Proportions		Representing quadratic
			functions, factoring

Area and perimeter	Rates, unit rate, rate		quadratic expressions,
relationships, area	tables, constant of		patterns of change, effect
and perimeter of	proportionality		of parameters
nolygons surface	solving proportions		of parameters.
polygons, surface	solving proportions,		
area and volume of	Inc. markups,		
rectangular prisms.	discounts,		
	commission,		
	measurement,		
	conversion.		
Decimal Ons:	Moving Straight	Say it with Symbols:	Say it with Symbols:
Computing with	Abood: Lincor	Say it with Symbols.	Say it with Symbols.
	Affeat: Lifear	Making Sense of	
Decimals and	Relationships	Symbols	Equivalent expressions,
Percepts	Representing linear	Equivalent	solving linear and
Addition,	relationships in	expressions, solving	quadratic equations;
subtraction,	graphs, tables,	linear and quadratic	identify and represent
multiplication and	equations: solving	equations: identify	linear, exponential and
division of decimals	linear equations:	and represent linear	quadratic functions
actimation:	slopo intercent	exponential and	quaratie functions.
estimation,	sope, intercept,	exponential and	
solutions for a % of	writing equation for	quadratic functions.	
b = c	linear relationship		
	given points.		
Variables and	What Do You	Butterflies,	Butterflies, Pinwheels
Patterns: Focus on	Expect: Probability	Pinwheels and	and Wallpaper: Symmetry
Algebra	and Expected Value	Wallpaper:	and Transformations
Variables variable	Probability models	Symmetry and	Symmetry
ovprossions	ovporimontal and	Transformations	transformations
expressions,	theoretical	Cummetry (
equations,		Symmetry,	congruence, similarity,
inequalities;	probability, analysis	transformations,	coordinate proofs.
representations of	of compound	congruence,	
relationships in	events.	similarity, coordinate	
tables, graphs,		proofs.	
equations.			
Data About Us:	Filing and	It's in the System:	It's in the System:
Statistics and Data	Wrapping: Three	Systems of Linear	Systems of Linear
Analysis	Dimensional	Equations and	Equations and
Analysis of data	Moocurement		
	weasurement	inequalities	
distributions,	Area circumterence	Solving linear	Solving linear systems
including shape,	of circle; volume	systems graphically	graphically and
measures of center	and surface area of	and algebraically,	algebraically, systems of
(mean, median,	rectangular and	systems of functions	functions and inequalities,
mode) and	polygonal prisms,	and inequalities,	solving systems of linear
variability (range.	cylinders; volume of	solving systems of	inequalities.
inter quartile range	pyramids cones	linear inequalities	
mean absoluto	spheres plane	incut inequalities.	
	spileres, plane		
deviation).	sections of prism,		
	pyramids; effect of		
	scaling on surface		



Samples and Populations: Making Comparisons and Predictions Sampling plans, effect of sample size, predicting populations statistics, simulations, comparing sample statistics to draw inferences about two populations. Function Junction: Families of Functions Function notation, inverses, arithmetic/geometric sequences, transformations on functions; completing the square, quadratic formula, polynomial expressions/functions/ equations