

Quarterly Content Guide ~ Advanced Grade 6

Quarter 1	Quarter 2
<p>Review:</p> <ul style="list-style-type: none"> • Multiplication/Division of Multi-Digit Whole Numbers (T) • Place Value through Millions (T) • Exponents, Scientific Notation, and Order of Operations (T) • Recognizing Integers and Coordinate Graphing (T) • Charts and Graphs (T) <p>Data Analysis: Mean, Median, Mode, and Range Equivalency of Fractions, Decimals, and Percents</p> <ul style="list-style-type: none"> • Problem Solving • Compare and Order • Estimating Results 	<p>Divisibility Rules, Factors, GCF, LCM (T) Understanding Fractions (D) Terminal and Repeating Decimals Addition/Subtraction of Decimals/ Fractions (T) Multiplication/Division of Decimals/ Fractions Probability (T)</p>
Quarter 3	Quarter 4
<p>Problem Solving with Fractions and Decimals</p> <ul style="list-style-type: none"> • Percent of a Number (T), Discount, Percent of Change, Taxes, Simple Interest <p>Ratios and Rates</p> <ul style="list-style-type: none"> • Problem Solving • Interpret and Compare <p>Measurement: Customary and Metric (T) Symmetry and Transformations (T) Geometry</p> <ul style="list-style-type: none"> • Angle Measures • Circumference and Area of Circles • Perimeter and Area of Simple Two-Dimensional Figures (T) • Perimeter and Area of Composite Two-Dimensional Figures 	<p>Algebraic Expressions, Equations, and Inequalities</p> <ul style="list-style-type: none"> • Operations with Integers and Exponents • Write and Evaluate Expressions • Write, Solve, and Graph One- and Two-Step Linear Equations and Inequalities w/ Rational Coefficients • Properties of Equalities • Function Rules • Linear Functions and Graphs <p>Geometry</p> <ul style="list-style-type: none"> • Formulas for Surface Area and Volume
<p>All textbook references not specifically identified are from the Glencoe Mathematics, Course 2 textbook. Glencoe's "Countdown to F(essential component in the SIXTH grade math curriculum.</p>	

Qtr 1	DAYS	2007 Sunshine State Standards BENCHMARKS	Textbook Resources Identified by Chapter-Section (i.e., 4 - 6)	Additional Resources	Instructional Strategies	As:
Unless otherwise indicated, all textbook references are from the Glencoe Mathematics, Course 2 textbook						
TRANSITION STANDARDS						
Quarter 1	1	Place Value for whole numbers through millions.	pp. 555		<p>NETS: S3,4 NETS: TII,III,IV</p> <p>In Word, have student create a place value worksheet by writing out the number in words with "10". Fill in boxes or blanks regardless of the place value. Exchange worksheets with a partner for completion. Can use a table for the boxes</p>	
	1	Multiplication and division of multi-digit whole numbers with an emphasis on vocabulary. KEY TERMS: multiplicand, product, quotient, divisor, dividend	Supplement, if needed			

Quarter 1	6	Exponents, Scientific Notation, and Order of Operations* *Emphasize that \times and \div are inverse operations and should be done in the order seen from left to right. The same is true with $+$ and $-$.	1-2, p. 10 - 11 p. 564 supplement text	The 24 Game® is a fun game for practicing order of operations. The Game Zone p. 23		
	2	Recognizing Integers	p. 106 - 108	ELL (3-1) p. 106		
Supporting Idea #4 - Geometry and Measurement						
Q1	4	MA.7.G.4.3: Identify and plot ordered pairs in all four quadrants of the coordinate plane.	3-3, p. 117,	The Game Zone p. 117		
<i>*KEY TERMS: coordinate plane, coordinates, integer, negative integer, quadrant, x-axis, y-axis</i>						
Transition Standard						
Quarter 1	5	Charts and Graphs: tally charts, bar graphs, line graphs. KEY TERMS: axis, scale, interval, bar graph, break, squiggle, frequency table, line graph, line plot	2-1, 2-2a, 2-2, 2-3, pp. 54 - 68	Interactive Chalkboard Bellringer, p. 60 Daily Intervention Find the Error, p.66	NETS: S1,2,3,5 NETS: TII,III Have students track their grades for a certain time period and graph them in a bar or line graph using Excel or Word	

Supporting Idea #6 - Data Analysis						
Quarter 1	4	<p>MA.6.S.6.1: Determines the measure of central tendency (mean, median, mode) and variability (range) for a given set of data.</p> <p>KEY TERMS: mean, median, mode, outlier, range</p>	2-4, supplement text		<p>NETS: S1,2,3,5 NETS: TII,III</p> <p>Have student enter their grades in Excel, then use the formula functions to find the mean, median, and mode.</p>	
	3	<p>MA.6.S.6.2: Select and analyze the measures of central tendency or variability to represent, describe, analyze, and/or summarize a data set for the purpose of answering questions appropriately.</p>	Use data from 2-5, 2-6 to address benchmark; supplement text with resources such as newspapers	Newspapers USA Today has graphs in every section (lower left).		
Supporting Idea #5 - Numbers and Operations						
Quarter 1	2	MA.7.A.5.2: Solve non-routine problems by working backwards	4-4a	Bellringer, p.164		
	7	MA.6.A.5.1: Use equivalent forms of fractions, decimals, and percents to solve problems.	5-4, 5-5, 5-6, 7-5, supplement text	Bellringer, p. 210 Game Zone, p.215 Differentiating Instruction p. 217 Unlocking Misconceptions	Tips for New Teachers p. 313	

Sixth Grade, Advanced

Academic Plan

August, 2008 (NMS)

Quarter 1	7	MA.6.A.5.2: Compare and order fractions, decimals, and percents, including finding their approximate location on a number line.	3-2, 5-3, 5-5, 10-6, pp. 108 - 110, supplement w/ 7th grade book	Bellringer, p.109 Find the Error, p.		
	3	MA.6.A.5.3: Estimate the results of computations with fractions, decimals, and percents and judge the reasonableness of the results.	6-1, 8-1, p. 558	Bellringer, p. 240, 334 Tips for New Teachers p. 241 Differentiated Instruction p. 241 Find the Error, p. 336		
END OF QUARTER 1						

Qtr 2	DAYS	2007 Sunshine State Standards BENCHMARKS	Textbook Resources Identified by Chapter-Section (i.e., 4 - 6)	Additional Resources	Instructional Strategies	As:
Transition Standards						
Quarter 2	5	Divisibility Rules, Factors, GCF, LCM (T)	p. 554 5-1, 5-2, 5-7	Bellringer, p. 197 Find the Error, p. 205 Find the Error p. 205		
	3	Understanding Fractions (T)	5-2, 5-3	Interactive Chalkboard Enrichment, 5-2		
	5	Addition and Subtraction of Decimals and Fractions (T)	6-2, 6-3	Find the Error, pp. 246, 250 Daily Intervention p. 249		
<i>*Key Terms: denominator, GCF, improper fraction, LCD, like fractions, mixed number, numerator, reciprocal, simples</i>						
Big Idea #1: Develop and understanding of and fluency with multiplication and division of fractions and decimals.						
Quarter 2	4	MA.6.A.1.1: Explain and justify multiplying and dividing fractions and decimals	6-4, 6-6, supplement text with representation models and Course I: 4-2a, 4- 3, 7-2a, 7-2, 7-4a	Bellringer, pp. 254, 265 Game Zone, p. 263 Interactive Chalkboard p. 265 Differentiated Instruction		

Quarter 2	7	MA.6.A.1.2: Multiple and divide fractions and decimals efficiently.	pp. 560, 562 6-4, 6-6 Supplement text with Course I: 7-2a, 7-2, 7-3, 7-4a, 7-5			
	3	MA.7.A.5.1: Express rational numbers as terminating or repeating decimals.	5-4, supplement text			
	8	MA.6.A.1.3: Solve real-world problems involving multiplication and division of fractions and decimals.	Textbook Ancillaries and Test Bank word problems. Supplement text with Course I: Skills practice from sections 4-1, 4-2, 4-3, 4-4, 7-2, 7-3, 7-4, 7-5			
	8	MA.7.A.3.2: Add, subtract, multiply, and divide fractions and terminating decimals and perform exponential operations with rational bases and whole number exponents.	Textbook Ancillaries and Test Bank word problems. Supplement text with Course I: Skills practice from sections 4-1, 4-2, 4-3, 4-4, 7-2, 7-3, 7-4, 7-5			

***KEY TERMS: composite, denominator, divisibility, equivalent, factor, factor tree, GCF, LCM, multiples, numerator, prime factorization, simplest form**

Transition Standard					
Q2	1	Theoretical Probability	9-6	Bellringer, p. 393	
END OF QUARTER 2					

Qtr 3	DAYS	Content	Textbook Resources Identified by Chapter-Section (i.e., 4 - 6)	Supplemental Resources	Instructional Strategies	As:
Big Idea #1: Develop and understanding of and fluency with multiplication and division of fractions and decimals.						
Quarter 3	1	Percent of a Number (T)	7-7	Interactive Chalkboard p. 320		
	6	MA.7.A.1.2: Solve percent problems including problems involving discounts, simple interest, taxes, tips, and percents of increase or decrease.	8-4, 8-5, 8-6, supplement text	Hands On Mini Lab p. 350 Interactive Chalkboard pp. 351, 355, 359 Daily Intervention p. 352	NETS: TII,III,V Have students search the internet to find sales with a certain % off. Record the original amount, % off, sale price, item name. SHOW ALL WORK!	
*KEY TERMS: discount, interest, principal, sales tax, simple interest						

Big Idea #2: Connect ratio and rates to multiplication and division.

Quarter 3	5	MA.6.A.2.1: Use reasoning about multiplication and division to solve ratio and rate problems.	7-1, 7-2, supplement text	Bellringer, p. 288 Interactive Chalkboard pp. 289, 293 Differentiated Instruction pp. 289, 293 Find the Error, pp. 290, 294	NETS: S2,3 NETS: TII,III Using Publisher or Word, make a sign illustrating your favorite recipe. Insert fractions using the Equation Editor. Show the mathematical calculations and results to triple and half your recipe.	
	4	MA.6.A.2.2: Interpret and compare ratios and rates.	7-1, 7-2, supplement text			

***KEY TERMS: cross products, equivalent ratios, percents, proportion, rate, ratio, scale, scale drawing**

Transition Standards					
Quarter 3	1	Measurement and Time	6-7, 1-8, supplement text with Course I 12- 1, 12-2, 12-3, 12- 4, 12-5, 12-6 as needed Practice: Word Problems, p. 335	Bellringer, p. 267	NETS: T II,III,IV Students will research the internet to find the traveling distance to the National Park of their choice. Using Word or Publisher, create a timeline, indicating a time of departure and arrival. Show stopping for gas, eating, sleeping,
	1	Angle Measures	10-1, 10-10	Bellringer, pp. 413 Daily Intervention p. 413 Mini Lab, pp. 416- 417	Tips for New Teachers p.414
*KEY TERMS : <i>acute angle, complementary angles, congruent angles, corresponding angles, degree, obtuse angle, ray angle, rotation, straight angle, supplementary angles, vertex, vertical angles</i>					

Supporting Idea #4 - Geometry and Measurement						
Quarter 3	5	MA.6.G.4.1: Understand the concept of π , know common estimates of π (3.14 and 22/7), and use these values to estimate and calculate the circumference and the area of circles.	6-9a, 6-9, 11-6, FCAT Reference Sheet, supplement text Practice Word Problems, p. 345	Bellringer, pp. 275, 493 Daily Intervention, pp. 275, 493 Interactive Chalkboard p. 276 Mini Lab, p. 463		
	5	MA.6.G.4.3: Determine a missing dimension of a plane figure given its area and some of the dimensions (or) determine the area given the dimensions.	6-8, 11-4, 11-5, supplement text			
	6	MA.6.G.4.2: Find the perimeters and areas of composite two-dimensional figures, including non-rectangular figures (such as semi-circles) using various strategies.	1-7a, 11-7 supplement text	NETS: S 1,2,3 NETS: T II,III Students will use the autoshape feature in Word or Publisher to make 10 different sized circles - 5 with a radius shown and 5 with a diameter shown, and find their circumference. Include a narrative explaining the process for finding circumference.	NETS: S 1,2,3 NETS: T I,II,III Students will use the autoshape feature in Word or Publisher to make and label 10 different sized shapes and find their perimeter. A narrative should be included explaining the process for finding perimeter.	
*KEY TERMS: area, base, circumference, diameter, height, perimeter, pi, radius						
FCAT: Final Review and Administration						

Qtr 4	DAYS	Content	Textbook Resources Identified by Chapter-Section (i.e., 4 - 6)	Supplemental Resources	Instructional Strategies	As:
Big Idea #3: Write, Interpret, and Use Mathematical Expressions and Equations						
Quarter 4	5	MA.7.A.3.1: Use and justify the rules for adding, subtracting, multiplying, dividing, and finding the absolute value of integers.	3-1, 3-2, 3-4a, 3-4, 3-5a, 3-5, 3-6, 3-7	Bellringer, pp. 109, 120, 128 Differentiated Instruction pp. 121, 129 Find the Error, pp.122, 130 Mini Lab	HANDS on EQUATIONS	
	4	MA.6.A.3.1: Write and evaluate mathematical expressions that correspond to given situations.	4-1, supplement text	Bellringer, p. 150 Find the Error, p. 151 Mini Lab		
	6	MA.6.A.3.2: Write, solve, and graph one- and two-step linear equations and inequalities on a number line and in quadrant one. (Note: Graping linear equations in four quadrants and slope will be introduced in Grade 7.)	4-2a, 4-2, 4-3, 4-4, 4-5, 4-6a, 4-6, supplement text	Bellringer, pp. 160. 166, 172, 177 Interactive Chalkboard		
	5	MA.7.A.3.3: Formulate and use different strategies to solve one-step and two-step equations including equations with rational coefficients.	4-1, 4-2, 4-3, 4-4, supplement text	pp. 157, 158, 167, 173, 178, 179		

	4	MA.7.A.3.4: Use properties of equality to represent an equation in a different way and to show the two equations are equivalent in a given context.	4-1, 4-2, 4-3, 4-4, supplement text		HANDS on EQUATIONS	
Quarter 4	2	MA.6.A.3.3: Work backwards with two-step function rules to undo expressions.	4-6a, 4-6, 4-7, supplement text	Bellringer, pp. 177, 182 Interactive Chalkboard 170, 170, 100		
	4	MA.6.A.3.6: Construct and analyze tables, graphs, and equations to describe linear functions and other simple relations using both common language and algebraic notation.	4-6a, 4-6, supplement text			
		MA.6.A.3.4: Solve problems given a formula.	4-7 supplement text	NETS: S 1,2,3 NETS: T I,II,III Students will use the autoshape feature in Word or Publisher to make and label 10 different sized shapes and find their perimeter. A narrative should be included explaining the process for finding perimeter.		

***KEY TERMS:** *algebraic equation, algebraic equation, algebraic expression, base, cubed, equation, evaluate, exponent, expression, factor, function, input, order of operations, output, power, sequence, squared, term, variable*

Quarter 4	2	MA.6.A.3.5: Apply the Commutative, Associative, and Distributive Properties to show that two expressions are equivalent.	1-6, supplement text	Bellringer, p. 30 Interactive Chalkboard		
	*KEY TERMS: addition identity, associative property, commutative property, distributive property, inverse operation, equation, function, multiplicative identity					
Supporting Idea #4: Geometry and Measurement						
Quarter 4	3	MA.6.G.4.3: Determine a missing dimension of a prism given its volume and some of the dimensions (or) determine the volume given the dimensions.	12-2, supplement text	Bellringer, p. 520 Find the Error, p. 521		
	3	MA.7.G.2.1: Justify and apply formulas for surface area and volume of pyramids, prisms, cylinders, and cones.	12-3, 12-4a, 12-4, 12-4b, 12-5 supplement text	Bellringer, p. 532, 538 Game Zone, p. 529	Manipulatives: Nets	
	3	MA.7.G.2.2: Use formulas to find surface areas and volume of three-dimensional composite shapes.	supplement text			
*KEY TERMS: base, cubic unit, cylinder, edge, face, prism, rectangular solid, surface area, vertex, volume						
Final Review/Assessment (4 days)						
END OF QUARTER 4						