MP.1. Make sense of problems and persevere in solving them.

MP.2. Reason abstractly and quantitatively.

MP.3. Construct viable arguments and critique the reasoning of others.

MP.4. Model with mathematics.

MP.5. Use appropriate tools strategically.

MP.6. Attend to precision.

MP.7. Look for and make use of structure.

MP.8. Look for and express regularity in repeated

reasoning.

Standards Curriculum Map Bourbon County Schools

Level: 5th Grade

Grade and/or Course: Math Updated/Created: March 2020

Days: 1-20	KAS:	Skills/Targets:	Strategies/ Activities:	Resources:
Unit 1: Place Value -	5.NBT.1 MP.2, MP.7 Recognize that in a multi-digit number,	I can describe the relationship between two	IXL Lessons: 5-A.1	Engage NY Module 1-Lessons 1-2
Whole Numbers and Decimals	a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it	place-value operations.	5-A.2 5-G.4	Ready Common Core Lesson 1
Decimals	represents in the place to its left		Go Math Lessons 1.1-1.2, 3.1	
Read and write decimals to thousandths using base-ten numerals, number names and expanded form. represent decimals 5-G.1 through thousandths. 5-G.5	Read and write decimals to	represent decimals	IXL Lessons: 5-G.1	EngageNY Module 1-Lesson 5
	5-G.3 5-G.5 5-G.16	Ready Common Core Unit 1-Lesson 3		
				Go Math Lesson 3.2
	5.NBT.3b MP.2, MP.5, MP.7 Compare two decimals to thousandths	I can use place value to compare and order	IXL Lessons: 5-G.9	EngageNY Module 1-Lesson 6

MP.1. Make sense of problems and persevere in solving them.

MP.2. Reason abstractly and quantitatively.

MP.3. Construct viable arguments and critique the reasoning of others.

MP.4. Model with mathematics.

MP.5. Use appropriate tools strategically.

MP.6. Attend to precision.

MP.7. Look for and make use of structure.

MP.8. Look for and express regularity in repeated

reasoning.

	based on meanings of the digits in	numbers.	5-G.10	
to record the results of comparisons.	each place, using >, =, and < symbols to record the results of comparisons.			Ready Common Core Unit 1-Lesson 4
				Go Math Lessons 3.3
	5.NBT.4 MP.5, MP.7 Use place value understanding to	I can use place value to round decimals to a	IXL Lessons: 5-G.7	EngageNY Module 1-Lessons 7-8
round decimals to any place.	given place.	5-H.8	Ready Common Core Unit 1-Lesson 4	
				Go Math Lesson 3.4

Vocabulary: whole numbers, decimal point, tenths, hundredths, thousandths, number name form, expanded form, base ten numerals, rounding, compare, greater than, less than, equal to

HOT Questions: Can you model 300 is 100 times as much as 3 with base-10 blocks?

Days: 21-30	KAS:	Skills/Targets:	Strategies/ Activities:	Resources:
Unit 2: Numerical	5.OA.1 MP.1, MP.3 Use parentheses, brackets, or braces in	•	IXL Lessons: 5-O.5 5-O.6	EngageNY Module 2-Lesson 3
Expressions	numerical expressions and evaluate expressions with these symbols.	numerical expressions, and evaluate		Ready Common Core Unit 3-Lesson 19

MP.1. Make sense of problems and persevere in solving them.

MP.2. Reason abstractly and quantitatively.

MP.3. Construct viable arguments and critique the reasoning of others.

MP.4. Model with mathematics.

MP.5. Use appropriate tools strategically.

MP.6. Attend to precision.

MP.7. Look for and make use of structure.

MP.8. Look for and express regularity in repeated

reasoning.

		expressions with these symbols.		Go Math Lessons 1.11-1.12
	5.OA.2 MP.2, MP.7 Write simple expressions with numbers	I can use numerical expressions to describe	IXL Lessons: 5-O.3	EngageNY Module 2-Lesson 3
without evaluating them.	a situation. I can interpret numerical expressions without evaluating them.	5-O.4	Ready Common Core Unit 3-Lesson 19	
			Go Math Lessons 1.11-1.12	

Vocabulary: numerical expressions, parentheses, brackets, braces, evaluate, interpret, sum, difference, product, quotient, times, add, half, double

HOT Questions: Julie wrote (15-6)-3=15-(6-3). Is Julie's equation sense or nonsense? Do you think the Associative Property works for subtraction? Explain.

Days: 31-64	KAS:	Skills/Targets:	Strategies/ Activities:	Resources:
Unit 3: Multiplication And Division of Whole	5.NBT.5 MP.7, MP.8 Fluently multiply multi-digit whole numbers (not to exceed four-digit by two-digit multiplication) using an	I can multiply multi-digit whole numbers.	t IXL Lessons: 5-C.12 5-C.13 5-C.14 5-C.15 5-C.16 5-C.17 5-C.18	EngageNY Module 2-Lessons 5- Ready Common Core Unit 1-Lesson 5
Numbers algorithm. Volume	algorithm.			Go Math Lessons 1.6-1.7

MP.1. Make sense of problems and persevere in solving them.

MP.2. Reason abstractly and quantitatively.

MP.3. Construct viable arguments and critique the reasoning of others.

MP.4. Model with mathematics.

MP.5. Use appropriate tools strategically. MP.6. Attend to precision.

MP.7. Look for and make use of structure.

Customary Measurement			5-C.19 5-C.20	
	5.NBT.6 MP.2, MP3, MP.4 Divide up to four digit dividends by	I can find whole number quotients with up to	IXL Lessons: 5-D.7 5-D.8	EngageNY Module 2-Lessons 19-23
	two digit divisors. A. Find whole-number quotients of whole numbers with up to four-digit		5-D.6 5-D.11 5-D.12	Ready Common Core Unit 1-Lesson 6
	dividends and two-digit divisors using *strategies based on place value *the properties of operations *the relationship between multiplication and division. B. Illustrate and explain the calculation by using equations, rectangular arrays and/or area models.			Go Math Lessons 1.3,1.8-1.9, 2.1-2.6,2.8-2.9
	5.MD.3 MP.6 Recognize volume as an attribute of	I can recognize volume as an attribute of solid	IXL Lessons: 5-EE.13	EngageNY Module 5-Lessons 1-3
	solid figures and understand concepts of volume measurement.	figures.		Ready Common Core
	A . A cube with side length 1 unit, called a "unit cube", is said to have "one cubic unit" of volume and can be used to measure volume. B. A solid figure which can be packed without gaps or overlaps using n unit			Go Math

MP.1. Make sense of problems and persevere in solving them. MP.2. Reason abstractly and quantitatively. MP.3. Construct viable arguments and critique the reasoning of others.

MP.4. Model with mathematics.

MP.5. Use appropriate tools strategically. MP.6. Attend to precision.

MP.7. Look for and make use of structure.

	cubes is said to have a volume of <i>n</i> cubic units.			
	5.MD.4 MP.5, MP.6 Measure volumes by counting unit	I can use unit cubes to determine volume.	IXL Lessons: 5-EE.13	EngageNY Module 5-Lessons 1-3
	cubic cm, cubic in, cubic ft. and improvised units.			Ready Common Core Unit 4-Lesson 25
				Go Math
	5.MD.5 MP.1, MP.4, MP.8 Relate volume to the operations of	I can find the volume of one or more	IXL Lessons: 5-EE.14	EngageNY Module 5-Lessons 4-9
real world and mather involving volume.	_	rectangular prisms.	5-EE.15	Ready Common Core Unit 4-Lesson 26 & 27
	A. Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths, equivalently by multiplying the height by the area of the base. Represent threefold whole-number products as volumes. B. Apply the formulas $V = I \times W \times h$ and $V = b \times h$ for rectangular prisms			Go Math

MP.1. Make sense of problems and persevere in solving them. MP.2. Reason abstractly and quantitatively.

MP.3. Construct viable arguments and critique the reasoning of others.

MP.4. Model with mathematics.

MP.5. Use appropriate tools strategically.

MP.6. Attend to precision.

MP.7. Look for and make use of structure.

MP.8. Look for and express regularity in repeated reasoning.

with whole-number edge lengths in the context of solving real world and mathematical problems. C. Recognize volume as additive. Find volumes of solid figures composed of two non-overlapping right rectangular prisms by adding the volumes of the non-overlapping parts, applying this technique to solve real world problems.			
5.MD.1b MP.3, MP.8 Convert among different-sized measurement units (mass, weight,	I can convert customary units of measurement.	IXL Lessons: 5-Z.2 5-Z.3	EngageNY Module 2-Lessons 13-15 and Lessons 28-29
liquid, volume, length, time) within one system of units. **Customary Units	I can convert units of time.	5-Z.4 5-Z.5	Ready Common Core
Only**		5-Z.6 5-Z.7 5-Z.8 5-Z.9 5-Z.10 5-Z.11 Time 5-Y.1 5-Y.2	Go Math

Vocabulary: multiply, product, divide, quotients, dividend, divisor, algorithm, unit cube, volume, 3 dimensional, cubic unit, rectangular prism, length, width, height, composed figures, mass, weight, liquid volume, time, customary units

HOT Questions: In a study, 9 people ate a total of 1,566 pounds of potatoes in 2 years. If each person ate the same amount each

MP.1. Make sense of problems and persevere in solving them.

MP.2. Reason abstractly and quantitatively.

MP.3. Construct viable arguments and critique the reasoning of others.

MP.4. Model with mathematics.

MP.5. Use appropriate tools strategically.

MP.6. Attend to precision.

MP.7. Look for and make use of structure.

MP.8. Look for and express regularity in repeated

reasoning.

year, how many pounds of potatoes did each person eat in 1 year?

Javon is helping his dad build a treehouse. He has a piece of trim that is 13 feet long. How many pieces can Javon cut that are one yard long? How much of a yard will he have left over?

Days: 65-91	KAS:	Skills/Targets:	Strategies/ Activities:	Resources:
Unit 4: Operations and Decimals	Unit 4: Operations and 5.NBT.7 MP.2, MP.3, MP.5 Operations with decimals to hundredths A Add subtract multiply and divide	I can add and subtract decimals.	IXL Lessons: Add and Subtract 5-H.1 5-H.2 5-H.3 5-H.4 5-H.5 5-H.6	EngageNY Module 1-Lessons 9-10
		I can multiply decimals.	Multiply 5-1.3 5-1.4 5-1.5 5-1.6 5-1.7 5-1.8 5-1.9	EngageNY Module 1-Lessons 11-12 EngageNY Module 2-Lessons 10-12 Ready Common Core Unit 1-Lessons 7-9
		I can divide decimals.	Divide 5-J.3 5-J.4	EngageNY Module 1-Lessons 13-15

MP.1. Make sense of problems and persevere in solving them.

MP.2. Reason abstractly and quantitatively.

MP.3. Construct viable arguments and critique the reasoning of others.

MP.4. Model with mathematics.

MP.5. Use appropriate tools strategically. MP.6. Attend to precision.

MP.7. Look for and make use of structure.

	I can solve problems with decimal operations.	5-J.5 5-J.6 Mixed Operations 5-O.7 5-O.8 5-S.1 5-S.2 5-S.3 5-S.4 5-S.6	EngageNY Module 1-Lesson 16 Go Math Lessons 3.5-3.12,4.2-4.8,5.2-5.8
5.NBT.2 Multiply and divide by powers of 10. Explain patterns in the number of zeros of the product with multiplying a number by powers of 10. Explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10.	I can multiply and divide by powers of 10.	IXL Lessons: 5-C.3 5-C.4 5-C.5 5-I.2 5-J.1 5-J.2 5-E.3	EngageNY Module 1-Lesson 3 Ready Common Core Unit 1-Lesson 2 Go Math Lessons 1.4-1.5, 4.3-4.4,4.7-4.8,5.1,5.4,5.6
5.MD.1 MP.3, MP.8 Convert among different-sized measurement units (mass, weight, liquid, volume, length, time) within one system of units. **Metric Units Only**	I can convert metric units.	IXL Lessons: 5-Z.13 5-Z.14 5-Z.15 5-Z.16 5-Z.17 5-Z.18 5-Z.19 5-Z.20	EngageNY Module 1-Lesson 4 Ready Common Core Unit 4-Lessons 21-22 Go Math

MP.1. Make sense of problems and persevere in solving them.

MP.2. Reason abstractly and quantitatively.

MP.3. Construct viable arguments and critique the reasoning of others.

MP.4. Model with mathematics.

MP.5. Use appropriate tools strategically.

MP.6. Attend to precision.

MP.7. Look for and make use of structure.

MP.8. Look for and express regularity in repeated

reasoning.

|--|

Vocabulary: add, subtract, multiply, divide, sum, difference, product, quotient, metric units, kilo, hecto, deka, base unit, grams, liters, meters, centi, milli, deci

HOT Questions: Kirsten needs to make 1,000 lanyards. She will use 1.75 feet of cord for each lanyard. How much cord will Kirsten need?

Kirsten's work is shown below.

1x1.75=1.75

10x1.75=10.75

100x1.75=100.75

1,000x1.75=1,000.75

Find and describe Kirsten's error.

A new building is being planned. First, a model was built 1.3 meters tall. Then, a more detailed model was built that was 1.5 times as tall as the first model. The building will be 2.5 times as tall as the height of the more detailed model. What will be the height of the building?

Notepads cost \$0.65 a piece and markers are \$0.36 each. If Ramon paid \$3.25 for notepads and \$1.44 for markers, what is the total number of items he bought?

Days: 92-119	KAS:	Skills/Targets:	Strategies/ Activities:	Resources:
Unit 5: Operations	5.NF.1 MP.2, MP.3 Efficiently add and subtract fractions	I can add and subtract fractions and mixed	IXL Lessons: 5-L.6	EngageNY Module 3-Lessons 1-16
with Fractions	with unlike denominators (including mixed numbers) by	ding numbers with unlike 5-L.7 denominators. 5-L.8	Ready Common Core Unit 2-Lesson 10	

MP.1. Make sense of problems and persevere in solving them.

MP.2. Reason abstractly and quantitatively.
MP.3. Construct viable arguments and critique the reasoning of others.

MP.4. Model with mathematics.

MP.5. Use appropriate tools strategically. MP.6. Attend to precision.

MP.7. Look for and make use of structure.

	*using reasoning strategies, such as counting up on a number line or creating visual fraction models *finding common denominators.		5-L.10 5-L.12 5-L.15 5-L.18 5-L.19 5-L.22	Go Math Lessons 6.4-6.8,6.10
	5.NF.2 MP.1, MP.4 Solve word problems involving	problems by adding and subtracting fractions. 5-I 5-I 5-I	IXL Lessons: 5-L.4	EngageNY Module 3-Lessons 1-16
	addition and subtraction of fractions. A. Solve word problems involving addition and subtraction of fractions		5-L.11 5-L.13 5-L.20 5-L.21	Ready Common Core Unit 2-Lesson 11
	referring to the same whole, including cases of unlike denominators. B. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers.			Go Math Lessons 6.1-6.3,6.9
	5.NF.3 MP.4, MP.8 Interpret a fraction as division of the	I can explain and model how a fraction represents division.	5-K.1 5-K.2	EngageNY Module 4-Lessons 2-5
	numerator by the denominator ($\frac{a}{b}$ = a+b).		5-K.16 5-N.5	Ready Common Core Unit 2-Lesson 12
	Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers by using visual	I can solve whole number division word problems that have fraction		Go Math Lesson 2.7,8.3

MP.1. Make sense of problems and persevere in solving them. MP.2. Reason abstractly and quantitatively. MP.3. Construct viable arguments and critique the reasoning of others.

MP.4. Model with mathematics.

MP.5. Use appropriate tools strategically. MP.6. Attend to precision.

MP.7. Look for and make use of structure.

fraction models or equations to represent the problem.	quotients.		
5.NF.4 MP.1 Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction. A. Interpret the product ($\frac{a}{b}$) x q as a parts of a partition of q into b equal parts; equivalently, as the result of a sequence of operations $a \times q + b$. B. Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths, and show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas.	I can multiply a whole number or a fraction by a fraction.	IXL Lessons: 5-M.5 5-M.11 5-M.12 5-M.14 5-M.15 5-M.16 5-M.17 5-M.20 5-M.32 5-M.33 5-M.34 5-M.17 5-M.18 5-M.19 5-M.29 5-M.30 5-EE.6 5-EE.12	EngageNY Module 4-Lessons 6-12 EngageNY Module 5-Lessons 10-15 Ready Common Core Go Math Lessons 7.1-7.3,7.6
5.NF.5 MP.4 and MP.5 Interpret multiplication as scaling (resizing) by: A. Comparing the size of a product to the size of one factor on the basis	I can interpret multiplication as scaling.	IXL Lessons: 5-M.23 5-M.24 5-M.25 5-M.19 5-M.22	EngageNY Module 5-Lessons 10-15 Ready Common Core Unit 2-Lesson 15

MP.1. Make sense of problems and persevere in solving them.

MP.2. Reason abstractly and quantitatively.
MP.3. Construct viable arguments and critique the reasoning of others.

MP.4. Model with mathematics.

MP.5. Use appropriate tools strategically. MP.6. Attend to precision.

MP.7. Look for and make use of structure.

	of the size of the other factor, without performing the indicated multiplication.			Go Math Lessons 7.5, 7.8, 7.10
	B. Explaining why multiplying a given number by a fraction greater than 1 results in a product greater than the given number (recognizing multiplication by whole numbers greater than 1 as a familiar case); explaining why multiplying a given number by a fraction less than 1 results in a product smaller than the given number; and relating the principle of fraction equivalence $\frac{a}{b} = (n \times a)/(n \times b)$ to the effect of multiplying $\frac{a}{b}$ by 1.			
	5.NF.6 MP.4, MP.5 Solve real world problems involving multiplication of fractions and mixed numbers.	I can solve real world problems by multiplying fractions and mixed numbers.	IXL Lessons: 5-M.13 5-M.21	Engage NY
				Ready Common Core
			5-M.36 5-M.37	Go Math Lessons 7.9
	5.NF.7 MP.1, MP.4, MP.8 Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions.	I can divide whole numbers and unit fractions.	IXL Lessons: 5-N.1 5-N.2 5-N.3 5-N.7	EngageNY
				Ready Common Core Unit 2-Lesson 16-18
				Go Math

MP.1. Make sense of problems and persevere in solving them. MP.2. Reason abstractly and quantitatively.	MP.5. Use appropriate tools strategically. MP.6. Attend to precision.
MP.3. Construct viable arguments and critique the reasoning of others.	MP.7. Look for and make use of structure. MP.8. Look for and express regularity in repeated
MP.4. Model with mathematics.	reasoning.

A. Interpret division of a unit fraction by a non-zero whole number and compute such quotients. B. Interpret division of a whole number by a unit fraction and compute such quotients. C. Solve real world problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions.			Lessons 8.1-8.2,8.4-8.5
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--	--	-------------------------

Vocabulary: numerator, denominator, fraction, common denominator, mixed number, add, subtract, multiply, divide, area, length, width, 2 dimensional, scaling (resizing), unit fraction

HOT Questions: Use fraction strips to solve the following problem.

Maya makes trail mix by combining $\frac{1}{2}$ cup of mixed nuts and $\frac{1}{4}$ cup of dried fruit. What is the total amount of ingredients in her trail mix?

Write new problems using different amounts of each ingredient. Use fraction strips to solve.

Maribel wants to skate 1 ½ miles on Monday. If she skates 9/10 mile on Monday morning and ¾ of the distance on Monday afternoon, will she reach her goal? Explain.

Penny wants to make a model of a beetle that is larger than life size. Penny says she is going to use a scaling factor of 7/12. Does this make sense or is it nonsense? Explain.

Eight students share 12 oatmeal muffins equally and 6 students shared 15 apple muffins equally. Carmine is in both groups of students. What is the total number of muffins Carmine gets?

MP.1. Make sense of problems and persevere in solving them. MP.2. Reason abstractly and quantitatively. MP.3. Construct viable arguments and critique the reasoning of others.

MP.4. Model with mathematics.

MP.5. Use appropriate tools strategically. MP.6. Attend to precision.

MP.7. Look for and make use of structure.

Days: 120-149	KAS:	Skills/Targets:	Strategies/ Activities:	Resources:
Unit 6: Geometry and Graphing	5.G.1 MP.4, MP.7 Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis.	I can understand a coordinate grid	IXL Lessons: 5-U.1	EngageNY Module 6-Lessons 1-6 Ready Common Core Unit 5-Lesson 28 Go Math Lesson 9.2
	5.G.2 MP.1, MP.6 Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation.	I can solve real world problems using a coordinate grid.	IXL Lessons: 5-U.2 5-U.3 5-U.4	EngageNY Module 6-Lessons 13-20 Ready Common Core Unit 5-Lesson 29 Go Math Lessons 9.3-9.4

MP.1. Make sense of problems and persevere in solving them. MP.2. Reason abstractly and quantitatively. MP.3. Construct viable arguments and critique the reasoning of others.

MP.4. Model with mathematics.

MP.5. Use appropriate tools strategically. MP.6. Attend to precision.

MP.7. Look for and make use of structure.

situations. A. Genera patterns, ic relationshi correspond B. Genera two given C. Use tab graphs to	numerical patterns for	I can identify and graph numerical patterns.	IXL Lessons: 5-T.1 5-T.2 5-V.8 5-V.9 5-V.10	EngageNY Module 6-Lessons 7-12 Ready Common Core Unit 3-Lesson 20 Go Math Lessons 9.5-9.7
belonging dimension	3, MP.6 Id that attributes to a category of two al figures also belong to egories of that category.	I can understand attributes of 2D shapes.	IXL Lessons: 5-BB.5 5-BB.6 5-BB.8 5-BB.9 5-BB.10	EngageNY Module 5-Lessons 16-21 Ready Common Core Unit 5-Lesson 31 Go Math
1	1, MP.7 vo-dimensional figures in y based on properties.	I can classify 2D shapes in a hierarchy based on their properties.	IXL Lessons: 5-AA.1 5-AA.3 5-BB.1 5-BB.2 5-BB.3 5-BB.6 5-BB.8	EngageNY Module 5-Lessons 16-21 Ready Common Core Unit 5-Lesson 30 Go Math

MP.1. Make sense of problems and persevere in solving them.
MP.2. Reason abstractly and quantitatively.
MP.3. Construct viable arguments and critique the reasoning of others.
MP.4. Model with mathematics.

MP.5. Use appropriate tools strategically.
MP.6. Attend to precision.
MP.7. Look for and make use of structure.
MP.8. Look for and express regularity in repeated reasoning.

		5-BB.9 5-BB.10	
5.MD.2 MP.4, MP.5, MP.6 Identify and gather data for statistical questions focused on both categorical and numerical data. Select an appropriate data display (bar graph, pictograph, dot plot). Make observations from the graph about the questions posed.	I can gather data, create an appropriate graph and make observations from that graph.	IXL Lessons: 5-W.4 5-W.5 5-W.6 5-W.7 5-W.10 5-W.11 5-W.12 5-W.17	EngageNY Module 4-Lesson 1 Ready Common Core Unit 4-Lesson 23 Go Math Lesson 9.1

Vocabulary: coordinate grid, coordinate plane, x-axis, y-axis, ordered pair, origin,quadrant, 2 Dimensional, hierarchy, polygon, rhombus, rectangle, square, triangle, quadrilateral, pentagon, hexagon, cube, trapezoid, half circle, quarter, circle, parallelogram, numerical pattern, corresponding terms, pattern, bar graph, pictograph, dot plot, line plot

HOT Questions: In the cafeteria, tables are arranged in groups of 4, with each table seating 8 students. How many students can sit at 10 groups of tables? Write the rule used to find the number of students.

Days: 150-173	KAS:	Skills/Targets:	Strategies/ Activities:	Resources:
Review				

MP.1. Make sense of problems and persevere in solving them.

MP.2. Reason abstractly and quantitatively.

MP.3. Construct viable arguments and critique the reasoning of others.

MP.4. Model with mathematics.

MP.5. Use appropriate tools strategically.

MP.6. Attend to precision.

MP.7. Look for and make use of structure.

MP.8. Look for and express regularity in repeated reasoning.

MATH QUESTIONS FOR STUDENT REFLECTION:

@TEACHHEATH

Check for Accuracy (You KNOW the student understands the topic):

- 1. Explain your method or strategy you used- Why did you choose that method?
- 2. Would it work if you didn't use that method?
- 3. If you broke this down into parts, what would they be?
- 4. Can you create and solve a problem similar to this one?
- 5. Try doing this a different way to show your thinking.
- 6. Can you think of an anti-example?

Check for Understanding (You THINK a student understands the topic):

- 1. Why is your method and answer correct?
- 2. Can you convince us you are correct?
- 3. Have you thought about all parts of your answer? Are there places where you could be wrong?
- 4. Can you explain your thinking in simpler terms?
- 5. Can you make a model to show that?

Check for Clarity (You THINK the student may confused):

- 1. What do you need to find out?
- 2. What strategies will you use?
- 3. How would you describe the problem in your own words?
- 4. Could you try this with simpler numbers? Fewer numbers?
- 5. What did other members of your group try?
- 6. What pieces of the problem make sense to you and which parts are confusing?

Giving Clarity (You KNOW the student is confused):

- 1. Which words are important?
- 2. Where do you think we should start?
- 3. Where are your issues with this problem? What confuses you?
- 4. Did you try a different method? Pictures or models?
- 5. Try explaining your thoughts. Start by saying "I know I have to dobecause...
- 6. Where can you find the help you need?
- 7. How can your group members help you? Draw it? Talk about it?

- MP.1. Make sense of problems and persevere in solving them.
- MP.2. Reason abstractly and quantitatively.
- MP.3. Construct viable arguments and critique the reasoning of others.
- MP.4. Model with mathematics.

MP.5. Use appropriate tools strategically.

MP.6. Attend to precision.

MP.7. Look for and make use of structure.

MP.8. Look for and express regularity in repeated reasoning.

H.O.T. Questions for Math Workshop

How did you get your solution?
How did you know what operation to use?
What was your operation indicator word?
Can you think of other strategies that you could use to solve the problem?
Did you compare your solution to another student's work?

Explain.
If you changed the number _____ to ____, how would that change your answer?

Could you use (inverse operation) to check your answer?

How would that have looked?

H.O.T. Questions for Math Workshop

How did you get your solution?
How did you know what operation to use?
What was your operation indicator word?
Can you think of other strategies that you could use to solve the problem?
Did you compare your solution to another student's work?

Explain.
If you changed the number to your answer?
Could you use (inverse operation) to check your answer?
How would that have looked?

MP.1. Make sense of problems and persevere in solving them.

MP.2. Reason abstractly and quantitatively.
MP.3. Construct viable arguments and critique the reasoning of others.

MP.4. Model with mathematics.

MP.5. Use appropriate tools strategically. MP.6. Attend to precision.

MP.7. Look for and make use of structure.

Ongoing Reading Standards or Math Practices to be incorporated in every unit.				
STANDARD # (e.g. RL.8.1)	STATE THE STANDARD (e.g. Cite the relevant textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.)	VOCABULARY (e.g. RL 8.1 textual evidence analyze explicit inference)		
MP.1	Make sense of problems and persevere in solving them.			
MP.2	Reason abstractly and quantitatively.			
MP.3	Construct viable arguments and critique the reasoning of others.			
MP.4	Model with mathematics.			
MP.5	Use appropriate tools strategically.			
MP.6	Attend to precision.			
MP.7	Look for and make use of structure.			
MP.8	Look for and express regularity in repeated reasoning.			