Priority Code
E = Essential
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3rd Grade Math Prioritized Curriculum

Goals and Objectives	Priority	Time	Essential Questions	Suggested Activities	Resources	Assessments
Goal 1: The learner will model, identify, and compute with whole number through 9,999.					The following resources may be used for all of the objectives: • Superstars • Math Stars • DPI Testlets • NC Math Coach • Blast Off Math • Excel Math • Harcourt Math Text • Saxon Math • Mountain Math • Daily Math • Daily Word Problems • Math Manipulative Kit	The following types of assessment can be used for all of the following activities: • Teacher Assessments • EOG Prep Materials • Weekly Test • Superstar Math • Work Samples • Peer Assessments • Letter/Numerical Grades • Math Stars • NC Math Coach • Blast Off • EOG Testing • Daily Math Workbook • Daily Word Problems
1.01 Develop number sense for whole numbers through 9,999. a. Connect model, number word, and number using a variety of representations. b. Build understanding of place value (ones through thousands). c. Compare and order.	I I I	On-going	a. How do I write numbers in standard expanded and work form? b. How does knowing place value help me determine the value of a number? c. How do I order numbers to 10,000?	a. Base ten blocks Digit cards to make different numbers b. Students work in pairs to make up place value riddles and exchange with others to solve Place value charts Base ten blocks c. Use number cards 0-9 and allow students to manipulate them to find the greatest/least possible number for each set	b. <u>How Much Is a Million?</u> by David Schwartz <u>If You Made a Million?</u> by David Schwartz Base ten blocks Place value charts c. Number cards	

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1.02 Develop fluency with multi-digit addition and subtraction through 9,999 using: a. Strategies for adding and subtracting numbers. b. Estimation of sums and differences in appropriate situations. c. Relationships between operations.	I I I	Ongoing	a. How do I add and subtract three- and four-digit numbers/ b. How do I use estimation techniques to determine a problem's solution? c. How does knowing how to add help me with subtraction?	a. Use base ten blocks and place value charts to explore addition and subtraction. b. Use a demonstration thermometer to teach estimation. c. Use dominoes to describe fact families.	a. Base ten blocks Place value chart b. Demonstration thermometer c. dominoes	
1.03 Develop fluency with multiplication from 1x1 to 12x12 and division up to two-digit by one-digit number using: a. Strategies for multiplying and dividing numbers. b. Estimation of products and quotients in appropriate situations. c. Relationships between operations.	E E E	On-going	a. What strategies can I use to memorize my multiplication facts? b. How do I use estimation techniques to determine a problem's solution? c. How does knowing how to multiply help me to divide?	a. Have students make flash cards to use on a regular basis. Have students model arrays using tiles. b. Brainstorm examples of everyday life experiences when you would need to estimate to find products or quotients. (ex. caterers & grocery shopping) c. Read <u>The Doorbell Rang</u> by Pat Hutchins; give cookies to the students and ask them to demonstrate division as it is portrayed in the book.	a. Index cards Tiles c. <u>The Door Bell Rang</u> by Pat Hutchins Cookies	
1.04 Use basic properties (identity, commutative, associative, order of operations) for addition, subtraction, multiplication, and division.	E	On-going	What happens when I move numbers around in a problem?	Have students make an informational poster modeling the basic properties to share with their classmates.	• Poster Board • Markers	

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1.05 Use area or region models and set models of fractions to explore part-whole relationships.					For sections a., b., and c.:	
a. Represent fractions concretely and symbolically (halves, fourths, thirds, sixths, eighths).	E	On-going	a. How can I model fractions in a variety of ways?	a. Read the Hershey's Milk Chocolate Fraction Book by Jerry Pallotta; ask students to use candy bars to model fractions and mixed numbers. Fraction pizzas. Fraction Bars.	• Hershey bars Fraction bars Fraction pizza game Fraction hamburger game Fraction tiles Fraction pies	
b. Compare and order fractions (halves, fourths, thirds, sixths, eighths) using models and benchmark numbers (zero, one-half, one); describe comparisons.	E		b. How do I order and compare fractions?	b. Use fraction tiles to describe comparisons.		
c. Model and describe common equivalents, especially relationships among halves, fourths, and eighths, and thirds and sixths.	E		c. How do I model equivalent fractions?	c. Use fraction pizzas/pies or tiles to model equivalent fractions		
d. Understand that the fractional relationships that occur between zero and one also occur between every two consecutive whole numbers.	E		d. What patterns do I see between each whole number on a standard ruler?	d. Allow students to discuss the patterns on a standard ruler between each whole number.	d. Standard ruler for each child and teacher.	
e. Understand and use mixed numbers and their equivalent fraction forms.	E		e. How do I model mixed numbers?	e. Have students sort 19 paper squares into groups (i.e., 4 groups, 3 groups, 5 groups), and name the mixed number the squares represent. Have students use fraction bars that are the same size, such as 7 fourths, 8 fifths, 10 eights, or 11 thirds and arrange them into as many wholes as they can; have them name the mixed number they have modeled.	Fractions bars	

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1.06 Develop flexibility in solving problems by selecting strategies and using mental computation, estimation, calculators or computers, and paper and pencil.	I	On-going	What are some strategies I can use to help me solve mathematical problems?	• Draw pictures • Make models • Trial and error • Guess and check	• Computers pencils paper calculators	

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Goals and Objectives	Priority	Time	Essential Questions	Suggested Activities	Resources	Assessments
Goal 2: The learner will recognize and use standard units of metric and customary measurement.					The following resources may be used for all of the objectives: • Superstars • Math Stars • DPI Testlets • NC Math Coach • Blast Off Math • Excel Math • Harcourt Math Text • Saxon Math • Mountain Math • Daily Math • Daily Word Problems • Math Manipulative Kit	The following types of assessment can be used for all of the following activities: • Teacher Assessments • EOG Prep Materials • Weekly Test • Superstar Math • Work Samples • Peer Assessments • Letter/Numerical Grades • Math Stars • NC Math Coach • Blast Off • EOG Testing • Daily Math Workbook • Daily Word Problems
2.01 Solve problems using measurement concepts and procedures involving:						
a. Elapsed time.	E	On-going	a. How do I know how much time has passed?	a. Make a timeline or schedule of daily events and discuss how much time is needed for each event.	a. Daily schedule	
b. Equivalent measures within the same measurement system.	E		b. What is the relationship between units of measurement in the same system?	b. Hershey's Weights and Measures by Jerry Pallotta; discuss measurement equivalence as shown in book	b. Hershey's Weights and Measures by Jerry Pallotta	

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Goals and Objectives	Priority	Time	Essential Questions	Suggested Activities	Resources	Assessments
2.02 Estimate and measure using appropriate units.						
a. Capacity (cups, pints, quarts, gallons, liters).	E	On-going	a. How many cups are in a gallon?	a. Have each child make a poster of Gallon Man.	a. Poster Board, Construction paper, Scissors, Glue.	
b. Length (miles, kilometers).	E		b. How many feet are in one yard?	b. Share book: Hershey's Weights and Measures by Jerry Pallotta Have students locate objects in the room of a specific length. Read How Big is a Foot? by Rolf Myller.	b. Hershey's Weights and Measures by Jerry Pallotta Hershey's miniature candy bars. Ruler/Yardstick How Big is a Foot? by Rolf Myller	
c. Mass (ounces, pounds, grams, kilograms).	E		c. How many ounces are in a pound?	c. Set up several measurement centers where students weigh various objects.	c. Objects of different weights Balance	
d. Temperature (Fahrenheit, Celsius).	E		d. How do I read a thermometer?	d. Have students graph the outdoor temperature over a period of weeks. Matching temperature game.	d. Thermometer Temperature puzzle Match game	

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Goals and Objectives	Priority	Time	Essential Questions	Suggested Activities	Resources	Assessments
Goal 3: The learner will recognize and use basic geometric properties of two- and three-dimensional figures.					The following resources may be used for all of the objectives: • Superstars • Math Stars • DPI Testlets • NC Math Coach • Blast Off Math • Excel Math • Harcourt Math Text • Saxon Math • Mountain Math • Daily Math • Daily Word Problems • Math Manipulative Kit	The following types of assessment can be used for all of the following activities: • Teacher Assessments • EOG Prep Materials • Weekly Test • Superstar Math • Work Samples • Peer Assessments • Letter/Numerical Grades • Math Stars • NC Math Coach • Blast Off • EOG Testing • Daily Math Workbook • Daily Word Problems
3.01 Use appropriate vocabulary to compare, describe, and classify two- and three dimensional figures.	C	On-going	What are the ways I can describe two-dimensional or three dimensional shapes?	a. Read <u>The Greedy Triangle</u> by Marilyn Burns and compare the polygons in the story b. 3-dimensional shapes compare/contrast	a. <u>The Greedy Triangle</u> by Marilyn Burns b. 3-dimensional shapes	
3.02 Use a rectangular coordinate system to solve problems. a. Graph and identify points with whole number and/or letter coordinates. b. Describe the path between given points on the plane.	 E E	On-going	a. How do ordered pairs help me determine my location? b. How can I describe the path between given points on a plane?	a. Make a floor grid and put treats on different coordinates for students to identify the points; allow students to enjoy the treats b. Have students make a coordinate system drawing using colored chalk on the blacktop or sidewalk.	a. Masking tape, candy, numbers or letters to label coordinates b. Colored sidewalk chalk	

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Goals and Objectives	Priority	Time	Essential Questions	Suggested Activities	Resources	Assessments
Goal 4: The learner will understand and use data and simple probability concepts.					The following resources may be used for all of the objectives: • Superstars • Math Stars • DPI Testlets • NC Math Coach • Blast Off Math • Excel Math • Harcourt Math Text • Saxon Math • Mountain Math • Daily Math • Daily Word Problems • Math Manipulative Kit	The following types of assessment can be used for all of the following activities: • Teacher Assessments • EOG Prep Materials • Weekly Test • Superstar Math • Work Samples • Peer Assessments • Letter/Numerical Grades • Math Stars • NC Math Coach • Blast Off • EOG Testing • Daily Math Workbook • Daily Word Problems
4.01 Collect, organize, analyze, and display data (including circle graphs and tables) to solve problems.	E	On-going	How can I collect and display this data to help me solve problems?	• Survey the class to find out their favorite meal in the cafeteria; use the data to create graphs; survey another class and graph the results; compare the graphs • Skittle graphing	• Graph paper • Skittles for each child	
4.02 Determine the number of permutations and combinations of up to three items.	E	On-going	How many different combinations can I find with these three items?	Have an ice cream party and discuss the combination of cones that each student can make with three flavors of ice cream.	Ice cream, cones, scope	
4.03 Solve probability problems using permutations and combinations.	I	On-going	How do permutations and combinations help me solve problems?	• Help students use a grid to find all the possible ways to arrange their desk. • Help students find all the possible ways to arrange their outfits with 3 shirts, 2 pants.	• Grid • Each part of outfit cut out	

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Goals and Objectives	Priority	Time	Essential Questions	Suggested Activities	Resources	Assessments
Goal 5: The learner will recognize, determine, and represent patterns and simple mathematical relationships.					The following resources may be used for all of the objectives: • Superstars • Math Stars • DPI Testlets • NC Math Coach • Blast Off Math • Excel Math • Harcourt Math Text • Saxon Math • Mountain Math • Daily Math • Daily Word Problems • Math Manipulative Kit	The following types of assessment can be used for all of the following activities: • Teacher Assessments • EOG Prep Materials • Weekly Test • Superstar Math • Work Samples • Peer Assessments • Letter/Numerical Grades • Math Stars • NC Math Coach • Blast Off • EOG Testing • Daily Math Workbook • Daily Word Problems
5.01 Describe and extend numeric and geometric patterns	C	On-going	Given a geometric pattern, how will I determine what comes next?	• Help students find number patterns on a calculator. • Have students skip count by 10's to 100.	Calculator	
5.02 Extend and find missing terms of repeating and growing patterns.	C	On-going	What's missing from this pattern?	Give students a pattern and ask them to find the missing numbers.		
5.03 Use symbols to represent unknown quantities in numbers sentences.	I	On-going	What would "x" stand for in this number sentence?	Have students make flash cards with missing addends and/or factors; then switch with a partner.	Index cards	
5.04 Find the value of the unknown in a number sentence.	E	On-going	How can I find the value of an unknown number?	See above	See above	