

MATH CURRICULUM

GRADES

PRE-K TO 3



Preschool

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
MA.1	<ul style="list-style-type: none"> ▪ Daily counting routines: # of friends at school and choosing the corresponding number to put up, counting during calendar 	<ul style="list-style-type: none"> ▪ Teacher observations ▪ Semi-Annual Assessment 	<ul style="list-style-type: none"> ▪ Online Resources ▪ Mailbox Magazine ▪ Creative Curriculum, NAEYC and MA Preschool Experiences as guidelines
MA. 2	<ul style="list-style-type: none"> ▪ Daily Routines: Counting Friends and choosing a calendar # ▪ -Math Center activities: Seasonal activities such as apples on a tree, putting a set number of buttons on a snow man, raindrops under an umbrella ▪ -Number Bingo ▪ -Number puzzles 	<ul style="list-style-type: none"> ▪ Teacher Observations ▪ Semi-Annual Assessment 	<ul style="list-style-type: none"> ▪ Online Resources ▪ Mailbox Magazine ▪ Creative Curriculum, NAEYC and MA Preschool Experiences as guidelines
MA.3	<ul style="list-style-type: none"> ▪ -Math Center activities: Activities such as apples on a tree, putting a set number of buttons on a snow man, raindrops under an umbrella, ▪ -Number Bingo ▪ -Number puzzles 	<ul style="list-style-type: none"> ▪ Teacher Observations ▪ Semi-Annual Assessment 	<ul style="list-style-type: none"> ▪ Online Resources ▪ Mailbox Magazine ▪ Creative Curriculum, NAEYC and MA Preschool Experiences guidelines

Preschool

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
MA. 4	<ul style="list-style-type: none"> ▪ Math Center Activities: ▪ Activities such as counting out the number of dots on a clown's hat and placing the corresponding number at the top, or counting the number of hearts of a certain color and writing or matching the number with it, etc. ▪ -Counting out the number of claps (syllables in words) 	<ul style="list-style-type: none"> ▪ Teacher Observations ▪ Semi-Annual Assessment 	<ul style="list-style-type: none"> ▪ Online Resources ▪ Mailbox Magazine ▪ Creative Curriculum, NAEYC and MA Preschool Experiences as guidelines
MA. 5	<ul style="list-style-type: none"> ▪ Take opinion polls and count/graph the answers ▪ When counting out spots for friends and the teacher puts down more, less, or the exact amount needed for students. Students must figure it out and tell what should be done to correct it. ▪ Center time math activities: Graphing candy hearts, candy corns or other items ▪ Circle Time questions of the week: Graph the answers and discuss the results ▪ Graph the weather and talk about the results 	<ul style="list-style-type: none"> ▪ Teacher observations 	<ul style="list-style-type: none"> ▪ Online Resources ▪ Mailbox Magazine ▪ Creative Curriculum, NAEYC and MA Preschool Experiences as guidelines

Kindergarten

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
<p>Know number names and the count sequence</p>			
<p>1. Count to 100 by ones and by tens.</p>	<ul style="list-style-type: none"> ▪ Ten frame counting and/or counting sticks ▪ 100 Number chart ▪ 100 Thumb Print Activity ▪ 100 Handprint Counting ▪ 100 Days of School Song p. 6 (Miss Jenny) 	<ul style="list-style-type: none"> ▪ Count orally to 100 ▪ Observation-Harcourt Math Chapter 7 Test 	<ul style="list-style-type: none"> ▪ Number Patterns Resource-Kathy Richardson ▪ Ten frame grid ▪ Counting Sticks ▪ 100 chart ▪ Number line ▪ Ink pads ▪ Printed numbers by 10's ▪ Harcourt worksheet PW51 ▪ Harcourt Math Chapter lessons 7.1, 7.2, 7.9 ▪ Miss Jenny Math CD
<p>2. Count forward beginning from a given number within the known sequence (instead of heaving to begin at 1).</p>	<ul style="list-style-type: none"> ▪ Calendar Math ▪ Large number cards 0-20 ▪ Number Squeeze Activity ▪ Hop Up & Back Activity ▪ Fill It Up Activity ▪ Before or After Activity ▪ Mystery Numbers 	<ul style="list-style-type: none"> ▪ Observation ▪ Questioning ▪ Harcourt Math Tests Chapters 3 & 4 	<ul style="list-style-type: none"> ▪ Classroom Calendar Resource p.6 (TrailBlazers) ▪ Blank Calendar ▪ Large number cards ▪ Large number line ▪ Bee Bots – (Rebot) ▪ Harcourt worksheets- PW25, PW31, PW33, PW46 ▪ Missing Numbers worksheets (Math Teaching Resources) ▪ Harcourt Math Chapters 3 & 4

Kindergarten

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
<p>3. Write numbers from 0 to 20. Represent a number of objects with a written numeral 0 – 20, (with 0 representing a count of no objects).</p>	<ul style="list-style-type: none"> ▪ Math Journal Number Books ▪ Harcourt Chapters 3 & 4 ▪ Handwriting Without Tears ▪ Numeral Journal Writing worksheets numbers 1-20 ▪ Race to Trace ▪ Monthly Calendar writing numbers 	<ul style="list-style-type: none"> ▪ Math Journal Pages ▪ Harcourt Chapter resources 3 & 4 	<ul style="list-style-type: none"> ▪ Number Books Resource p. 111 ▪ Math Journal Books Number Printing 1- 20 ▪ Number Printing worksheets HWT ▪ Harcourt Math Chapter Number Poems for printing numbers

Kindergarten – Counting and Cardinality

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
<p>Counting to tell the number of objects.</p>			
<p>4. Understand the relationship between numbers and quantities; connect counting to cardinality.</p>	<ul style="list-style-type: none"> ▪ Sleep Bears ▪ Count and Dump activity ▪ Making Towers 1-3 ▪ Grow and Shrink 1-8 ▪ Grab Bag Counting 1-7 ▪ Tell Me Fast 1-13 ▪ Break It Up 1-14 ▪ Taller Towers ▪ One More/One Less ▪ Domino Path Game ▪ Domino Sort Game ▪ Number Race 1 & 2 Game 	<ul style="list-style-type: none"> ▪ Observation ▪ Questioning ▪ Harcourt Tests Chapters 3 & 4 ▪ Baseline counting skills assessments p. 66 (Trailblazers) 	<ul style="list-style-type: none"> ▪ Number Sense Resource p.153, 155 ▪ Equal Groups PW18 ▪ Large number cards ▪ Harcourt Math Chapters 3,4 & 7
<p>a. When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.</p>	<ul style="list-style-type: none"> ▪ Shake It Up Activity ▪ Shake the Cubes ▪ Shake Five and Spill ▪ Counting Cups ▪ Number Cube Toss ▪ Building Cube Trains ▪ Number Sort Activity ▪ Organizing the Bears ▪ Alligator 1 More p.17 ▪ Alligator 1 Less pg. 19 (Miss Jenny) ▪ Plus One More ▪ Link Number Tags ▪ Counting Links ▪ Counting Bags/Boxes ▪ Counting board games ▪ Number Cube Toss 		

Kindergarten – Counting and Cardinality

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
<p>b. Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.</p>	<ul style="list-style-type: none"> ▪ Same activities as a. 	<ul style="list-style-type: none"> ▪ Observation ▪ Check students worksheets 	
<p>c. Understand the each successive number name refers to a quantity that is one larger.</p>	<ul style="list-style-type: none"> ▪ Various songs ▪ Counting bags ▪ Unifix cube trains ▪ Same as above 	<ul style="list-style-type: none"> ▪ Observations ▪ Check Recording Sheets 	<ul style="list-style-type: none"> ▪ Number Songs ▪ Recording Sheets for Counting Bags/Unifix cubes ▪ One More Worksheet

Kindergarten – Counting and Cardinality

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
<p>5. Count to “how many?” questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1-20, count out that many objects.</p>	<ul style="list-style-type: none"> ▪ Counting Bags p.97-98 ▪ Links Number Tags ▪ Cube Number Tags ▪ Building Cube Trains ▪ Shaping Tens Activity ▪ How Many Counters? 	<ul style="list-style-type: none"> ▪ Observations ▪ Questioning ▪ Check Recording Sheets ▪ Baseline Counting Skills ▪ Assessment p.66-67: Math Trailblazers 	<ul style="list-style-type: none"> ▪ Harcourt Math ▪ Counting Bags ▪ Unifix cubes, red/yellow counters, various manipulatives for counting ▪ Recording sheets for activities. (Same as standard 1.4) ▪ Harcourt Chapters 3 &4

Kindergarten – Counting and Cardinality

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
Compare numbers			
6. Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies.1	Harcourt Math Activities <ul style="list-style-type: none"> ▪ Cube Towers ▪ Comparing Counting Jars ▪ More or Fewer? ▪ Taller Towers ▪ Show Me Five ▪ Five Activity ▪ Alligator Greater Than/Less Than p.16 (Miss Jenny) ▪ Comparing Two Domino-Math Journal Sheet 	<ul style="list-style-type: none"> ▪ Observation ▪ Questioning 	<ul style="list-style-type: none"> ▪ Counting Jars ▪ Unifix Cubes ▪ Recording Sheets ▪ Spinners ▪ Harcourt Math worksheets PW18 ▪ Various Manipulatives (bears, counting chips, etc) ▪ Miss Jenny Math CD ▪ Domino Journal Sheet ▪ Harcourt Chapters 3 & 4
7. Compare two numbers between 1 and 10 presented as written numerals.	<ul style="list-style-type: none"> ▪ More Than, Less Than, The Same p.299 ▪ Collect Six Game p.301 ▪ Plus One More ▪ Number Cards Activity Lesson 3-6 ▪ Grow, Shrink and Compare Lesson 3 	<ul style="list-style-type: none"> ▪ Exploring/Observation ▪ Teacher Questioning 	<ul style="list-style-type: none"> ▪ Numeral Cards 1-10 ▪ Unifix Cubes ▪ Bear Counters and small objects ▪ Spinners ▪ Dominoes ▪ Harcourt Math Chapters 3&4

Kindergarten – Counting and Cardinality

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
Operations and Algebraic Thinking			
<p>1. Represent addition and subtraction with objects, fingers, mental images, drawings², sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.</p>	<ul style="list-style-type: none"> ▪ Picture This! ▪ Heads Up? ▪ Ducks in the Pond ▪ Penny Addition ▪ Count the Dots ▪ Building and Addition Story ▪ Adding Connecting Cubes ▪ Disappearing Balloons ▪ Bears Hiding in the Tent ▪ Add or Subtract? ▪ Draw to Subtract ▪ Two-Card Draw ▪ Penny Subtraction ▪ A Plate of Pennies ▪ Subtracting Cubes ▪ Benny’s Pennies ▪ Number Concepts-Math Journal Sheets ▪ Lego Math Journal Sheets 	<ul style="list-style-type: none"> ▪ Exploring/Observation ▪ Teacher Questioning ▪ Harcourt Math Chapter Test 11 & 12 	<ul style="list-style-type: none"> ▪ Spinner, dominoes, numeral cards, blocks, pennies, cubes, dice, etc. ▪ Math Journal page-Number Concepts ▪ Story-Benny’s Pennies ▪ Math Journal Sheets: Number Concepts, Lunch Count, Legos
<p>2. Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.</p>	<ul style="list-style-type: none"> ▪ Penny Addition ▪ How many Books? ▪ Count the Dots ▪ Ducks in the Pond ▪ Adding with Books ▪ Subtraction Pictures ▪ Join the Group ▪ Domino Addition ▪ Count on Cup 	<ul style="list-style-type: none"> ▪ Exploring/Observation ▪ Teacher Questioning ▪ Harcourt Math Chapter Test 11 & 12 	<ul style="list-style-type: none"> ▪ Pennies, books, Dominoes, spinners, Unifix Cubes ▪ Miss Jenny Math CD ▪ Math Journal Pages

Kindergarten – Counting and Cardinality

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
Operations and Algebraic Thinking			
	<ul style="list-style-type: none"> ▪ Representing Numbers In Three Ways ▪ The Pizza Eating Alligator song P. 15 ▪ Subtract with Addition Fact song p.24 (Miss Jenny) 		
<p>3. Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., $5 = 2 + 3$ and $5 = 5 + 1$).</p>	<ul style="list-style-type: none"> ▪ Making Five ▪ Groups of Four ▪ Five on a Mat ▪ Number Concepts: Students will draw, illustrate, and record on math journal pages ▪ Part-Whole Mats ▪ Hide the Cubes ▪ Partitioning 7, 8, & 9 Circus Train p. 363 ▪ Finger Counting p.56 ▪ Rings on My Fingers p.267 – 270 ▪ Five Little Monkeys p. 270 – 275 ▪ Ten In Bed p.355 - 359 	<ul style="list-style-type: none"> ▪ Exploring/Observation ▪ Teacher Questioning ▪ Harcourt Math Chapter Test 11 & 12 	<ul style="list-style-type: none"> ▪ Number Concept Journal pages ▪ Various manipulatives ▪ Addition/Subtraction and equal symbols resource sheet ▪ Harcourt Chapters 11 & 12 ▪ Trailblazers Resources

Kindergarten – Counting and Cardinality

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
Operations and Algebraic Thinking			
<p>4. For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation.</p>	<ul style="list-style-type: none"> ▪ Two Fives Make Ten ▪ Bear Addition ▪ We’ve Got Ten ▪ Building Cube Trains ▪ Know Those Ten’s Song p.221 (Miss Jenny) ▪ Facts of Ten ▪ Ten Frame – Calendar p.7 	<ul style="list-style-type: none"> ▪ Exploring/Observation ▪ Teacher Questioning ▪ Harcourt Math Chapter Tests 11 & 12 	<ul style="list-style-type: none"> ▪ Bear counters, Unifix cubes, counting manipulatives ▪ Unifix Cube Pattern strip resource sheet ▪ Miss Jenny Math CD ▪ Ten Frame Grid – (Trailblazers)
<p>5. Fluently add and subtract within 5.</p>	<ul style="list-style-type: none"> ▪ Connecting Cube Addition ▪ Build an Addition Story ▪ Picture this! ▪ Make Five ▪ Shake Five and Spill ▪ Five Squares ▪ Addition/Subtraction worksheets ▪ Butterfly Addition/Subtraction Song – pp 10 & 11 (Miss Jenny) 	<ul style="list-style-type: none"> ▪ Exploring/Observation ▪ Teacher Questioning ▪ Harcourt Math Chapter Test 11 & 12 	<ul style="list-style-type: none"> ▪ Unifix cubes, numeral cards, counting chips, manipulatives ▪ Math Number ▪ Concepts Worksheet ▪ Vocabulary cards TR113, TR114 ▪ Practice Worksheets 86, 88, 90, 91, 94 96, 98, 99 & 281 ▪ Dotty Dominoes p. 25 ▪ Domino Recording Sheet ▪ Domino Addition Recording Sheet ▪ Miss Jenny Math CD

Kindergarten – Counting and Cardinality

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
<p>Work with numbers 11-19 to gain foundation for place value</p>			
<p>1. Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawing, and record each composition or decomposition by drawing or equation (e.g., $18 = 10 + 8$); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight or nine ones.</p>	<ul style="list-style-type: none"> ▪ Number Concepts Math Journal pages ▪ Ten Frames blank 11-20 worksheets ▪ Number Sentences and Ten Frames p.297 ▪ I Have the Same Number Activity ▪ Teen Numbers ▪ Ten and More ▪ Alligator 10 More ▪ Alligator 10 Less pp. 18 & 20 (Miss Jenny) 	<ul style="list-style-type: none"> ▪ Observation ▪ Check daily Math Journal Worksheets ▪ Chapter 6 Harcourt Test 	<ul style="list-style-type: none"> ▪ Ten Frame numbers 10-20 ▪ Harcourt Resources-Ten Frames TR3-TR8 TR94-TR98 ▪ Ten Frame Flash Cards p.242 ▪ Blank Ten Frame Templates ▪ Red/Yellow counting chips ▪ Unifix cubes ▪ Miss Jenny Math CD ▪ Harcourt Math worksheets-PW 11, 43, 46, 47, 49, 50, CW 43, 44, 45, 46, 49, 50 ▪ Harcourt Chapter 6

Kindergarten – Counting and Cardinality

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
Describe and compare measurable attributes			
1. Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.	<ul style="list-style-type: none"> ▪ Short or Longer? ▪ The Longest Crayon ▪ Measuring Lines ▪ Small, Medium, Large ▪ Teddy Bear Line up p. 315 ▪ Measuring Classroom objects worksheet 	<ul style="list-style-type: none"> ▪ Observation ▪ Questioning ▪ Chapter 9 Harcourt Test 	<ul style="list-style-type: none"> ▪ Harcourt Math Chapter 9 ▪ Trailblazer Lessons ▪ Various classroom objects to measure ▪ Harcourt Worksheets PW 68, 69, 71
2. Directly compare two objects with a measurable attribute in common, to see which object has “more of”/“less of” the attribute, and describe the difference. <i>For Example, directly compare the heights of two children and describe one child as taller/shorter.</i>	<ul style="list-style-type: none"> ▪ Measurement p.40 ▪ Paperclip Measurement p.9 (Miss Jenny) ▪ Tall as a Pencil p. 219-226 ▪ Will It Fit? ▪ Heavier or Lighter? ▪ Which Holds More? ▪ Order and Graph Amounts ▪ Which Weights More? ▪ Cups of Cubes 	<ul style="list-style-type: none"> ▪ Observation ▪ Questioning ▪ Experiments 	<ul style="list-style-type: none"> ▪ Miss Jenny Math CD ▪ Giant Paper Pencil ▪ Manipulatives to measure, weigh, and compare ▪ Containers to measure capacity ▪ Harcourt Chapter 9

Kindergarten – Counting and Cardinality

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
Classify objects and counting the number of objects in each category			
3. Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. 3	<ul style="list-style-type: none"> ▪ Musical Pattern ▪ Move and Sing Along ▪ Button Patterns ▪ Button, Button 	<ul style="list-style-type: none"> ▪ Observation ▪ Listen to beats and count ▪ Questioning ▪ Verbal responses 	<ul style="list-style-type: none"> ▪ Musical Instruments- Xylophone ▪ Variety of Buttons ▪ Harcourt Chapter 9

Kindergarten – Geometry

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
<p>Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).</p>			
<p>1. Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as <i>above, below, beside, in front of, behind and next to.</i></p>	<ul style="list-style-type: none"> ▪ Students look for geometric shapes in their environment ▪ Meet Mr. "O" Origin p. 214 	<ul style="list-style-type: none"> ▪ Observation ▪ Math Worksheets ▪ Chapter 5 Harcourt Test 	<ul style="list-style-type: none"> ▪ Geometry p. 159-162 (Math Trailblazers) ▪ Harcourt Chapters 1 & 5 Lessons 1.1, 1.2, 1.3, 5.3 & 5.5 ▪ Harcourt worksheets PW 1-3, CW 37, 39 ▪ Geometric Solid Figures
<p>2. Correctly name shapes regardless of their orientations or overall size.</p>	<ul style="list-style-type: none"> ▪ Mystery Shapes p.367 ▪ What Shape Am I? ▪ Shapes Songs ▪ By Design ▪ Number of Pattern Blocks ▪ Printing Shapes Another Way ▪ Stretch A Shape 	<ul style="list-style-type: none"> ▪ Observation ▪ Questioning ▪ Math Worksheets 	<ul style="list-style-type: none"> ▪ Mystery Shapes Resource (Trailblazers) p. 367-395 ▪ Harcourt Resource PP. TR90-91, TR45 ▪ Geometric Solid Figures ▪ Shape Songs pp.1-3 ▪ Geometric Pattern Blocks ▪ Sponges, paints, paper, yarn ▪ Resource Math pages TR45 & p. 395 ▪ Shape Stamps

Kindergarten – Geometry

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).			
3. Identify shapes as two – dimensional (lying in a plane, “flat”) or three dimensional (“solid”)	<ul style="list-style-type: none"> ▪ Geometry and Fractions FA21 ▪ Sort Solid Figures PW35 ▪ Use Visual Thinking PW37 ▪ BY Design Activity 	<ul style="list-style-type: none"> ▪ Observation ▪ Questioning ▪ Harcourt Math Worksheets 	<ul style="list-style-type: none"> ▪ Exploring Pattern Block Shapes (Math Trailblazers) p.366 ▪ Harcourt Math Resource Worksheets FA21, PW35, PW37

Kindergarten – Geometry

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
Analyze, compare, create, and compose shapes			
<p>4. Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/"corners") and other attributes (e.g., having sides of equal length).</p>	<ul style="list-style-type: none"> ▪ Same or Different ▪ Miss Jenny-Circle Go Round and Round Song p. 3 (Miss Jenny) ▪ My Shape Book p. 34 (Miss Jenny) ▪ Group Lops: Students sort various geometric shapes according to their attributes ▪ What Shape am I? ▪ Puzzle Fun 	<ul style="list-style-type: none"> ▪ Chapter 5 Test ▪ Observation ▪ Questioning ▪ Harcourt Math Worksheets 	<ul style="list-style-type: none"> ▪ Harcourt Math Chapter 5 ▪ Math Trailblazers Resource p. 344 ▪ Harcourt Math Miss Jenny Math Songs ▪ Sorting rings ▪ Geometric Figures ▪ Paper plane geometric shapes ▪ Magna Tiles
<p>5. Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.</p>	<ul style="list-style-type: none"> ▪ Mat Man ▪ Building Solids-Geometric Shapes ▪ Puzzle Fun ▪ Stretch A Shape ▪ Shapes on the Geoboard ▪ Drawing Shapes-Math Journal paper 	<ul style="list-style-type: none"> ▪ Observation ▪ Questioning ▪ Harcourt Math Test Chapter 5 ▪ Shape Journal Pages 	<ul style="list-style-type: none"> ▪ Handwriting Without Tears-Mat Man Lesson p. 44 ▪ Clay, straw, yarn & pipe cleaners ▪ Paper geometric plane shapes ▪ Geoboards ▪ Elastic ▪ Magnatiles ▪ Shape Journals ▪ Harcourt lesson 5.1-5.5

Kindergarten – Geometry

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
Analyze, compare, create, and compose shapes			
6. Compose simple shapes to form larger shapes. <i>For example, "Can you join these two triangle with full sides touching to make a rectangle?"</i>	<ul style="list-style-type: none"> ▪ Students explore with smaller shapes and create larger shapes/designs ▪ Puzzle Fun ▪ By Design 	<ul style="list-style-type: none"> ▪ Observation ▪ Questioning ▪ Chapter 5 Harcourt test 	<ul style="list-style-type: none"> ▪ Harcourt Math PW38,42, CW38, 42 ▪ Magnatiles ▪ Geometric Pattern Blocks ▪ Pattern Block Design Cards ▪ Harcourt Lesson 5.4

Grade 1-Operations and Algebraic Thinking

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
Represent and solve problems involving addition and subtraction.			
<p>1. Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.</p>	<ul style="list-style-type: none"> ▪ Harcourt chapters 1-8 and 10&11 ▪ Everyday counts games: Take Away Stories 	<ul style="list-style-type: none"> ▪ Harcourt Unit 1 and 2 test (this is what we do now, but these don't focus on word problems specifically. We may want to look at developing a rubric for math journals.) 	<ul style="list-style-type: none"> ▪ Math journals ▪ Harcourt math program and leveled activities ▪ Everyday Counts Partner Game
<p>2. Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.</p>	<ul style="list-style-type: none"> ▪ Harcourt lessons 13.3 and 18.5 ▪ Math journals 	<ul style="list-style-type: none"> ▪ See above 	<ul style="list-style-type: none"> ▪ Math journals ▪ Harcourt math program and leveled activities

Grade 1-Operations and Algebraic Thinking

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
<p>Understand and apply properties of operations and the relationship between addition and subtraction.</p>			
<p>3. Apply properties of operations as strategies to add and subtract. <i>Examples: if $8 + 3 = 11$ is known, then $3 + 8 = 11$ is also known. (Commutative property of addition.) To Add $2 + 6 + 4$, the second two numbers can be added to make a ten, so $2 + 6 + 4 = 2 + 10 + 12$. (Associative property of addition.)</i></p>	<ul style="list-style-type: none"> ▪ Harcourt 2.1,8.4,14.2,14.3,20.2 Singapore Math chapter 8 Number bracelets Everyday Counts game Fill Up Tens to Take Away 	<ul style="list-style-type: none"> ▪ This past year (2011-12) we used the Singapore chapter 8 test, but are looking to create a new one on examview 	<ul style="list-style-type: none"> ▪ Math journals ▪ Harcourt math program and leveled activities ▪ Everyday Counts Partner Games ▪ Building Number Sense by Catherine
<p>4. Understand subtraction as an unknown-addend problem. For example, subtract $10 - 8$ by finding the number that makes 10 when added to 8.</p>	<ul style="list-style-type: none"> ▪ Harcourt 14.4 Everyday Counts Partner Games: Win the Dominoes 	<ul style="list-style-type: none"> ▪ See above 	<ul style="list-style-type: none"> ▪ Math journals ▪ Harcourt math program and leveled activities ▪ Everyday Counts Partner Games

Grade 1-Operations and Algebraic Thinking

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
Add and subtract within 20.			
5. Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).	<ul style="list-style-type: none"> ▪ Harcourt lessons 7.3, 14.1, 19.3 ▪ Math journals 	<ul style="list-style-type: none"> ▪ Math journals 	<ul style="list-style-type: none"> ▪ Harcourt math program and leveled activities ▪ Math journals
6. Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., $8 + 6 = 8 + 2 + 4 = 10 + 4 = 14$); decomposing a number leading to a ten (e.g., $13 - 4 = 13 - 3 - 1 = 10 - 1 = 9$); using the relationship between addition and subtraction (e.g., knowing that $8 + 4 = 12$, one knows $12 - 8 = 4$); and creating equivalent but easier or known sums (e.g., adding $6 + 7$ by creating the known equivalent $6 + 6 + 1 = 12 + 1 = 13$).	<ul style="list-style-type: none"> ▪ Harcourt chapters 1-8 and 10&11 ▪ Singapore math chapter 8 ▪ Mad Minute timed tests 	<ul style="list-style-type: none"> ▪ Mad Minute timed tests (30 problems in 2 minutes) 	<ul style="list-style-type: none"> ▪ Harcourt math program and leveled activities ▪ Minute Drill book or sheets

Grade 1-Operations and Algebraic Thinking

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
<p>Work with addition and subtraction equations.</p>			
<p>7. Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. For example, which of the following equations are true and which are false? $6 = 6$, $7 = 8 - 1$, $5 + 2 = 2 + 5$, $4 + 1 = 5 + 2$.</p>	<ul style="list-style-type: none"> ▪ True or Trash Game ▪ Balance Scales to represent addition or subtraction sentences 	<ul style="list-style-type: none"> ▪ Observation 	<ul style="list-style-type: none"> ▪ Balance scales, cubes, number sentences (true and false ones)
<p>8. Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations $8 + ? = 11$, $5 = \square - 3$, $6 + 6 = \square$.</p>	<ul style="list-style-type: none"> ▪ Harcourt 14.4 ▪ Math journals 	<ul style="list-style-type: none"> ▪ Math journals 	<ul style="list-style-type: none"> ▪ Harcourt math program and leveled activities ▪ Math journals

Grade 1-Number and Operations in Base Ten

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
Extend the counting sequence.			
1. Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.	<ul style="list-style-type: none"> ▪ Daily calendar activities ▪ Number scrolls ▪ Math journals 		<ul style="list-style-type: none"> ▪ Blank 10x10 grids ▪ Math journals ▪ Everyday counts Calendar activities
Understand place value.			
2. Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases:		<ul style="list-style-type: none"> ▪ Harcourt ch 10 &11 tests ▪ Math journals 	
a. 10 can be thought of as a bundle of ten ones — called a “ten.”	<ul style="list-style-type: none"> ▪ Harcourt 10.2 ▪ Everyday Counts Partner Game: Lu Lu 	<ul style="list-style-type: none"> ▪ See above 	<ul style="list-style-type: none"> ▪ Harcourt math program and leveled activities ▪ Everyday Counts Partner Games
b. The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.	<ul style="list-style-type: none"> ▪ Teen Number concentration ▪ Harcourt 10.1 	<ul style="list-style-type: none"> ▪ See above 	<ul style="list-style-type: none"> ▪ Harcourt math program and leveled activities ▪ Everyday Counts Partner Games
c. The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones).	<ul style="list-style-type: none"> ▪ Harcourt 10.3 & 10.4 	<ul style="list-style-type: none"> ▪ See above 	<ul style="list-style-type: none"> ▪ Harcourt math program and leveled activities

Grade 1-Number and Operations in Base Ten

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
Understand place value.			
3. Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols $>$, $=$, and $<$.	<ul style="list-style-type: none"> ▪ Harcourt 11.1-11.3 ▪ Everyday Counts Partner Game: High-Low 	<ul style="list-style-type: none"> ▪ See above 	<ul style="list-style-type: none"> ▪ Harcourt math program and leveled activities ▪ Everyday Counts Partner Games

Grade 1-Number and Operations in Base Ten

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
<p>Use place value understanding and properties of operations to add and subtract.</p>			
<p>4. Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.</p>	<ul style="list-style-type: none"> ▪ Harcourt 29.2 (addition) and 29.5 (subtraction) ▪ Singapore math chapter 8 Trailblazers game: Spin for Beans ▪ Everyday Counts Partner Games: Race for a Dollar 	<ul style="list-style-type: none"> ▪ Singapore chapter 8 test with Harcourt chapter 29 	<ul style="list-style-type: none"> ▪ Harcourt math program and leveled activities ▪ Everyday Counts Partner Games ▪ Trailblazer directions and beans
<p>5. Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.</p>	<ul style="list-style-type: none"> ▪ Harcourt 29.1 and 29.5 ▪ Harcourt 11.6 asks students to draw 10 more or less 	<ul style="list-style-type: none"> ▪ Teacher questioning and ▪ Math journals 	<ul style="list-style-type: none"> ▪ Harcourt math program and leveled activities

Grade 1-Number and Operations in Base Ten

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
<p>Use place value understanding and properties of operations to add and subtract.</p>			
<p>6. Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.</p>	<ul style="list-style-type: none"> ▪ Harcourt 11.6 	<ul style="list-style-type: none"> ▪ Math journals 	<ul style="list-style-type: none"> ▪ Harcourt math program and leveled activities ▪ Math journals

Grade 1-Measurement and Data

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
<p>Measure lengths indirectly and by iterating length units.</p>			
<p>1. Order three objects by length; compare the lengths of two objects indirectly by using a third object.</p>	<ul style="list-style-type: none"> ▪ Harcourt 26.1 	<ul style="list-style-type: none"> ▪ Examview unit test 	<ul style="list-style-type: none"> ▪ Harcourt grade 1 text
<p>2. Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps.</p>	<ul style="list-style-type: none"> ▪ Harcourt 26.2 	<ul style="list-style-type: none"> ▪ Examview unit test: time, money, measurement 	<ul style="list-style-type: none"> ▪ Harcourt grade 1 text, Links, unifix cubes, string, paperclips (nonstandard units of measure)

Grade 1-Geometry

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
<p>Reason with shapes and their attributes.</p>			
<p>1. Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); build and draw shapes to possess defining attributes</p>	<ul style="list-style-type: none"> ▪ Ways to sort activity using buttons or other classroom items ▪ Geometry envelopes ▪ Sorting activity 	<ul style="list-style-type: none"> ▪ Examview unit test: geometry 	<ul style="list-style-type: none"> ▪ Bucket of buttons, envelopes, glue, 3D shape bingo cards cut apart
<p>2. Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape</p>	<ul style="list-style-type: none"> ▪ Pizza pans game ▪ Harcourt chapter 15 game: Make that Shape ▪ Shapely Art creations 	<ul style="list-style-type: none"> ▪ Examview unit test: geometry 	<ul style="list-style-type: none"> ▪ Pizza pans game board, spinners, pattern blocks, paper cut out pattern blocks, glue, scissors, Harcourt chapter 15.5 and chapter game

Grade 1-Measurement and Data

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
Tell and write time.			
3. Tell and write time in hours and half-hours using analog and digital clocks.	<ul style="list-style-type: none"> ▪ Harcourt chapter 24.3, 24.4. 24.5 ▪ Lakeshore tic tac toe: time 	<ul style="list-style-type: none"> ▪ Examview unit test: time, money, measurement 	<ul style="list-style-type: none"> ▪ Lakeshore Tic Tac Toe ▪ Pocket chart and cards, ▪ Harcourt grade 1 text
Represent and interpret data.			
4. Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.	<ul style="list-style-type: none"> ▪ Harcourt chapter 9 ▪ United Streaming video ▪ Survey Savvy center ▪ Graphing class graphs 	<ul style="list-style-type: none"> ▪ Examview unit test:time, money, measurement 	<ul style="list-style-type: none"> ▪ NCTM website "graph it", Harcourt program, United Streaming, Copy of Survey Savvy student sheet

Grade 1-Geometry

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
<p>Reason with shapes and their attributes.</p>			
<p>▪3. Partition circles and rectangles into two and four equal shares, describe the shares using the words halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares.</p>	<ul style="list-style-type: none"> ▪ Fraction Tic Tac Toe ▪ Harcourt chapter 21 ▪ United Streaming the Number Crew Action with Fractions 	<ul style="list-style-type: none"> ▪ Examview unit test: geometry 	<ul style="list-style-type: none"> ▪ Lakeshore Tic Tac Toe ▪ Pocket chart and cards ▪ Harcourt grade 1 text ▪ United Streaming

Grade2-Operations and Algebraic Thinking

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
Represent and solve problems involving addition and subtraction.			
1. Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.	<ul style="list-style-type: none"> ▪ Math Journals word problems that correlate with each unit Journals are used about 2 to 3 times a week ▪ Use of the ten frames ▪ Concepts of counting on counting back $<$, $>$ or $=$ ▪ Harcourt Hands on Activities by chapters ▪ Math Club-Activities correlate with each unit skills 		
Add and subtract within 20.			
2. Fluently add and subtract within 20 using mental strategies. 2 By end of Grade 2, know from memory all sums of two one-digit numbers.			

Grade 2-Operations and Algebraic Thinking

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
<p>Work with equal groups of objects to gain foundations for multiplication.</p>			
<p>3. Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends.</p>			
<p>4. Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.</p>			

Grade 2- Number and Operations in Base Ten

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
Understand place value.			
<p>1. Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases:</p>	<p>Essential Skills</p> <ul style="list-style-type: none"> • The student will use base ten manipulatives (e.g., base ten blocks, stacks of cubes, bundles of sticks, place value cards) to represent a given number • The student will show knowledge of the value of each place in a given number • The student will show knowledge of the value of a digit in a specific place • The student will show knowledge that the placement of a digit affects the value of that digit <ul style="list-style-type: none"> ▪ Harcourt chapter/lessons: (27.1, 27.2, 27.3,27.5(\$)) ▪ Harcourt Chapter Math Games ▪ Chapter 27 Big Money ▪ Harcourt Hands on Activities by chapters ▪ Base Ten Block to the Thousands ▪ Harcourt Online Website Games ▪ Harcourt Online Website Games ▪ Chapter 27 ▪ Numbers to 1,000 ▪ Numbers to 1,000 in Different Ways 	<ul style="list-style-type: none"> ▪ Harcourt Assessments for both chapters and units ▪ Teacher observations during group lessons or small group instruction, looking at student work ▪ Construct possible arguments and comment on the reasoning of others ▪ Model by using mathematics ▪ Use appropriate math tools strategically ▪ SuccessMaker Math Concepts 	<ul style="list-style-type: none"> ▪ Harcourt chapter/lessons: (27.1, 27.2, 27.3, 27.5(\$)) ▪ Harcourt Chapter Math Games ▪ Chapter 27 Big Money ▪ Harcourt Reteach, Practice, Challenge worksheets ▪ Problem of the Day ▪ Harcourt intervention and extension activities for advanced learners and struggling students by chapters ▪ Math Journals ▪ Word problems that correlate with each unit. Journals are used about 2 to3 times a week ▪ Math Club ▪ Activities correlate with each unit skills ▪ Touch Math Strategies when needed ▪ Mega-Fun Card-Game Math ▪ Scholastic Grades 1-3 Find Your Place Value

Grade 2- Number and Operations in Base Ten

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
Understand place value.			
<p>1. Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases:</p>	<ul style="list-style-type: none"> ▪ Place Value flip charts – for expanded notation ▪ Place Value Classroom Poster ▪ Math Journals ▪ Word problems that correlate with each unit. Journals are used about 2 to 3 times a week ▪ Math Club ▪ Activities correlate with each unit skills ▪ Touch Math Strategies when needed ▪ Math Practice Games ▪ Place Value Pie ▪ Find Your Place Value (cards) ▪ Big Tac Toe (numbers to 100) ▪ Tree House Race (numbers to 100) ▪ Fill Up Two Boxes (numbers to 100) ▪ Bowl A Strike! (numbers to 100) ▪ Winning Number -place value 		<ul style="list-style-type: none"> ▪ Find Your Place Value ▪ Math Practice Games by Marcia Dana (Place Value) ▪ Great Games for the Overhead – Scholastic (Place Value) ▪ Harcourt Online Website Games ▪ Chapter 27 ▪ Numbers to 1,000 ▪ Numbers to 1,000 in Different Ways

Grade 2- Number and Operations in Base Ten

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
Understand place value.			
<p>a. 100 can be thought of as a bundle of ten tens — called a “hundred.”</p>	<p>Essential Skills</p> <ul style="list-style-type: none"> ▪ The student will show the ability to compose and decompose 100 in a variety of ways which lays the foundation for regrouping ▪ The student will show and apply the ability to count by tens to 100 and beyond, starting at any given point ▪ Base ten blocks ▪ Math Journals ▪ Word problems that correlate with each unit. Journals are used about 2 to 3 times a week ▪ Math Club ▪ Activities correlate with each unit skills ▪ Touch Math Strategies when needed ▪ Vocabulary ▪ Incorporate word problems that use the math content words ▪ Harcourt Online Website Game 	<ul style="list-style-type: none"> ▪ Harcourt Assessments for both chapters and units ▪ Teacher observations during group lessons or small group instruction, looking at student work ▪ Construct possible arguments and comment on the reasoning of others ▪ Model by using mathematics ▪ Use appropriate math tools strategically ▪ Grade 2 spelling assessment using content words such as, ones, tens, hundreds, digits etc. ▪ SuccessMaker Math Concepts ▪ Harcourt Online Website Game 	<ul style="list-style-type: none"> ▪ Book: One Hundred Hungry Ants ▪ Math Journals ▪ Word problems that correlate with each unit Journals are used about 2 to 3 times a week ▪ Math Club ▪ Activities correlate with each unit skills ▪ Touch Math Strategies when needed ▪ Daily Calendar; to mark off the days until the 100th day of school ▪ Bundling groups of tens ▪ Base ten blocks ▪ Connect cubes

Grade 2-Operations and Algebraic Thinking

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
Understand place value.			
b. The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).	<p>Essential Skills</p> <ul style="list-style-type: none"> ▪ The student will show their ability to count by hundreds using place value manipulatives ▪ The student will show their ability to count by hundreds verbally ▪ Math Journals ▪ Word problems that correlate with each unit. Journals are used about 2 to 3 times a week ▪ Math Club ▪ Activities correlate with each unit skills ▪ Touch Math Strategies when needed 	<ul style="list-style-type: none"> ▪ Harcourt Assessments for both chapters and units ▪ Teacher observations during group lessons or small group instruction, looking at student work ▪ Construct possible arguments and comment on the reasoning of others ▪ Model by using mathematics ▪ Use appropriate math tools strategically ▪ Grade 2 spelling assessment using content words for higher number names ▪ SuccessMaker Math Concepts 	<ul style="list-style-type: none"> ▪ Math Journals ▪ Word problems that correlate with each unit. Journals are used about 2 to 3 times a week ▪ Math Club ▪ Activities correlate with each unit skills ▪ Touch Math Strategies when needed
2. Count within 1000; skip-count by 5s, 10s, and 100s.	<p>Essential Skills</p> <ul style="list-style-type: none"> ▪ The student will show their ability to skip count within 100 using the hundreds chart and 1000 using the thousands chart ▪ The student will show their ability to skip-count starting from various numbers (e.g., counting by tens starting with 27) ▪ The student will show their ability to determine patterns when skip-counting ▪ Math Journals 	<ul style="list-style-type: none"> ▪ Harcourt Assessments for both chapters and units ▪ Teacher observations during group lessons or small group instruction, looking at student work ▪ Construct possible arguments and comment on the reasoning of others ▪ Model by using mathematics ▪ Use appropriate math tools strategically ▪ Teacher made learning centers 	<ul style="list-style-type: none"> ▪ Harcourt Chapters/lessons: 2.2, 2.4, 28.5, 28.6 ▪ Harcourt Chapter Math Games ▪ Chapter 2 Skip Up ▪ Chapter 28 Small Number Road ▪ Teacher made learning centers ▪ Math Journals ▪ Word problems that correlate with each unit. Journals are used about 2 to 3 times a week ▪ Math Club

Grade 2-Operations and Algebraic Thinking

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
Understand place value.			
2. Count within 1000; skip-count by 5s, 10s, and 100s.	<ul style="list-style-type: none"> ▪ Math Journals ▪ Word problems that correlate with each unit. Journals are used about 2 to 3 times a week ▪ Math Club ▪ Activities correlate with each unit skills ▪ Touch Math Strategies when needed ▪ Harcourt Chapters/lessons: 2.2, 2.4, 28.5, 28.6 ▪ Harcourt Chapter Math Games ▪ Chapter 2 Skip Up ▪ Chapter 28 Small Number Road ▪ Harcourt Hands on Activities by chapters ▪ Harcourt Online Website Games ▪ Chapter 2 ▪ Count by Twos and Threes ▪ Count by Fives and Tens ▪ Chapter 28 ▪ Gumball Surprise ▪ Numbers & Operations ▪ Number Patterns Chapter 2 ▪ 200 Classroom Poster - to model skip counting ▪ Desk Top ▪ Number Charts (1 to 200) ▪ Number Charts (100 to 199), (200 to 299), (300 to 399), (400 to 499), (500 to 599), (600 to 699), (700 to 799), (800 to 899), (900 to 999) ▪ TouchMath skip counting worksheets ▪ Math Practice Game ▪ Beat the Clock 	<ul style="list-style-type: none"> ▪ Harcourt Assessments for both chapters and units ▪ Teacher observations during group lessons or small group instruction, looking at student work ▪ Construct possible arguments and comment on the reasoning of others ▪ Model by using mathematics ▪ Use appropriate math tools strategically. ▪ Teacher made learning centers 	<ul style="list-style-type: none"> ▪ Activities correlate with each unit skills ▪ Touch Math Strategies when needed ▪ Harcourt Chapter 2 Game ▪ Skip Up ▪ Harcourt Online Website Games ▪ Chapter 2 ▪ Count by Twos and Threes ▪ Count by Fives and Tens ▪ Chapter 28 ▪ Gumball Surprise

Grade 2-Operations and Algebraic Thinking

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
Understand place value.			
<p>3. Read and write numbers to 1000 using base-ten numerals, number names, and expanded form</p>	<p>Essential Skills</p> <ul style="list-style-type: none"> ▪ The student will show their knowledge of the value of digits within a multi-digit number ▪ The student will show their knowledge of and ability to represent numbers using concrete materials (e.g., base ten blocks, place value cards) as well as written numerals and number words ▪ The student will show their ability to justify the representation with word form and written numerals ▪ Math Journals ▪ Word problems that correlate with each unit. Journals are used about 2 to 3 times a week ▪ Math Club ▪ Activities correlate with each unit skills ▪ Touch Math Strategies when needed ▪ Harcourt Chapters/lessons: 27.4, 28.2, 28.3, 28.4 ▪ Harcourt Chapter Math Game ▪ Chapter 27 Big Money ▪ Chapter 28 Small Number Road ▪ Math Task Cards 1 to 12 ▪ Expanded form ▪ Standard form 	<ul style="list-style-type: none"> ▪ Harcourt Assessments for both chapters and units ▪ Teacher observations during group lessons or small group instruction, looking at student work ▪ Construct possible arguments and comment on the reasoning of others ▪ Model by using mathematics ▪ Use appropriate math tools strategically ▪ Teacher made learning centers ▪ SuccessMaker Math Concepts 	<ul style="list-style-type: none"> ▪ Harcourt chapters/lessons: 27.4, 28.2, 28.3, 28.4 ▪ Harcourt Chapter Math Game ▪ Chapter 27 Big Money ▪ Chapter 28 Small Number Road ▪ Harcourt Online Website Game ▪ Chapter 27 ▪ Numbers to 1,000 ▪ Numbers to 1,000 in Different Ways ▪ Chapter 28 ▪ Gumball Surprise ▪ Teacher made learning centers ▪ Math Journals ▪ Word problems that correlate with each unit. Journals are used about 2 to 3 times a week. ▪ Math Club ▪ Activities correlate with each unit skills ▪ Touch Math Strategies when needed

Grade 2-Operations and Algebraic Thinking

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
Understand place value.			
3. Read and write numbers to 1000 using base-ten numerals, number names, and expanded form	<ul style="list-style-type: none"> ▪ Harcourt Hands on Activities by chapters ▪ Harcourt Online Website Game ▪ Chapter 27 ▪ Numbers to 1,000 ▪ Numbers to 1,000 in Different Ways ▪ Chapter 28 ▪ Gumball Surprise ▪ Exploring Greater Numbers & Operations Unit 6 Chapter 27 ▪ Place Value flip charts – for expanded notation ▪ Place Value Classroom Poster 		
4. Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using $>$, $=$, and $<$ symbols to record the results of comparisons.	<p>Essential Skills</p> <ul style="list-style-type: none"> ▪ The student will show their ability to apply place value knowledge to make comparisons (e.g., Looking at two given numbers students will compare the digits in each number to determine the greatest or lowest number by each digit's place value.) ▪ Math Journals ▪ Word problems that correlate with each unit. Journals are used about 2 to 3 times a week ▪ Math Club ▪ Activities correlate with each unit skills 	<ul style="list-style-type: none"> ▪ Classroom game Guess My Number ▪ Harcourt Assessments for both chapters and units ▪ Teacher observations during group lessons or small group instruction, looking at student work ▪ Construct possible arguments and comment on the reasoning of others ▪ Model by using mathematics ▪ Use appropriate math tools strategically ▪ SuccessMaker Math Concepts 	<ul style="list-style-type: none"> ▪ TouchMath ▪ The Mystery Number is... ▪ Harcourt Online Website Game ▪ Chapter 28 ▪ Gumball Surprise

Grade 2-Operations and Algebraic Thinking

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
Understand place value.			
4. Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using $>$, $=$, and $<$ symbols to record the results of comparisons.	<ul style="list-style-type: none"> ▪ Touch Math Strategies when needed ▪ Harcourt chapter/lesson 28.1 ▪ Harcourt Chapter Math Game ▪ Chapter 28 Small Number Road ▪ Harcourt Hands on Activities by chapters ▪ Exploring Greater Numbers & Operations Unit 6 Chapter 28 ▪ Math Practice Games ▪ Guess My Card ▪ What's My Number? ▪ TouchMath ▪ The Mystery Number is... ▪ Harcourt Online Website Game ▪ Chapter 28 ▪ Gumball Surprise 		<ul style="list-style-type: none"> ▪ Harcourt chapter / lesson 28.1 ▪ Harcourt Chapter Math Game ▪ Chapter 28 Small Number Road ▪ Math Journals ▪ Word problems that correlate with each unit. Journals are used about 2 to 3 times a week ▪ Math Club ▪ Activities correlate with each unit skills. ▪ Touch Math Strategies when needed ▪ Scholastic Mega Fun Card Game Math

Grade 2-Number and Operations in Base Ten

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
<p>Use place value understanding and properties of operations to add and subtract.</p>			
<p>5. Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.</p>	<p>Essential Skills</p> <ul style="list-style-type: none"> ▪ The student will show their knowledge of addition and subtraction fact families ▪ The student will show their ability to model regrouping using base ten manipulatives (e.g., base ten blocks, place value cards) ▪ The student will show their knowledge that when regrouping, the value of the number does not change but the place values of the digits within that number change (e.g., When regrouping the problem $324 - 116$, 324 becomes $300 + 10 + 14$ in order to regroup) ▪ Eye on Education ▪ Math Interventions ▪ Adding and Subtracting Tens p. 122 to 124 ▪ Partial Sums p. 137 to 141 ▪ Partial Difference p. 142 to 146 ▪ Near Tens for Addition and Subtraction p. 147 to 151 	<ul style="list-style-type: none"> ▪ Harcourt Assessments for both chapters and units ▪ Teacher observations during group lessons or small group instruction, looking at student work ▪ Construct possible arguments and comment on the reasoning of others ▪ Model by using mathematics ▪ Use appropriate math tools strategically. ▪ SuccessMaker Math Concepts 	<ul style="list-style-type: none"> ▪ Harcourt chapters/lessons: (8.1, 8.2, 8.3, 8.4, 8.5, 8.6, 9.1, 9.2, 9.3, 9.4, 9.5, 10.1, 10.2, 10.4, 10.5, 10.6, 10.7, 11.1, 11.2, 11.3, 11.4, 11.5, 11.6) ▪ Harcourt Chapter Math Games ▪ Chapter 7 Trail of Numbers ▪ Chapter 8 Addition Math ▪ Chapter 9 The Regrouping Game ▪ Chapter 10 The Case of the Missing Numbers ▪ Chapter 11 Build a House ▪ Math Journals ▪ Word problems that correlate with each unit ▪ Journals are used about 2 to 3 times a week. ▪ Math Club ▪ Activities correlate with each unit skills ▪ Touch Math Strategies when needed ▪ Eye on Education ▪ Math Interventions ▪ Adding and Subtracting Tens p. 122 to 124 ▪ Partial Sums p. 137 to 141

Grade 2-Number and Operations in Base Ten

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
<p>Use place value understanding and properties of operations to add and subtract.</p>			
<p>5. Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.</p>	<ul style="list-style-type: none"> ▪ Math Journals ▪ Word problems that correlate with each unit. Journals are used about 2 to 3 times a week ▪ Math Club ▪ Activities correlate with each unit skills ▪ Touch Math Strategies when needed ▪ Harcourt chapters/lessons: (8.1, 8.2, 8.3, 8.4, 8.5, 8.6, 9.1, 9.2, 9.3, 9.4, 9.5) ▪ Equal Differences p. 152 to 157 ▪ 10.1, 10.2, 10.4, 10.5, 10.6, 10.7, 11.1, 11.2, 11.3, 11.4, 11.5, 11.6) ▪ Harcourt Chapter Math Games ▪ Chapter 7 Trail of Numbers Chapter 8 Addition Math ▪ Chapter 9 The Regrouping Game ▪ Chapter 10 The Case of the Missing Numbers ▪ Chapter 11 Build a House ▪ Harcourt Hands on Activities by chapters regrouping 		<ul style="list-style-type: none"> ▪ Partial Difference p. 142 to 146 ▪ Near Tens for Addition and Subtraction p. 147 to 151 ▪ Equal Differences p. 152 to 157 ▪ Instructional Fair ▪ Math Practice Games ▪ Scholastic Mega Fun ▪ Card Game Math ▪ Harcourt Online Website Games ▪ Chapter 8 ▪ Math Model: Add a 1-digit number and a 2-digit number with regrouping ▪ Math Model: Add two 2-digit numbers without regrouping ▪ Math Model: Add two 2-digit numbers with regrouping ▪ Chapter 9 ▪ Math Model: Regroup Tens as Ones ▪ Chapter 10 ▪ Math Model: Subtract a 1-digit number from a 2-digit number with regrouping

Grade 2-Number and Operations in Base Ten

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
<p>Use place value understanding and properties of operations to add and subtract.</p>			
<p>5. Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.</p>	<ul style="list-style-type: none"> ▪ Exploring Greater Numbers & Operations Unit 2 ▪ Calculator skills ▪ Math Practice Games ▪ Magic Squares ▪ Addition 3 in a row ▪ Subtraction 3 in a row ▪ Eat a Whole Pie ▪ Hole in 100 ▪ Hi-Lo Numbers ▪ 500 ▪ Calculating Cards ▪ Harcourt Online Website Games ▪ Chapter 8 ▪ Math Model: Add a 1-digit number and a 2-digit number with regrouping ▪ Math Model: Add two 2-digit numbers without regrouping ▪ Math Model: Add two 2-digit numbers with regrouping ▪ Chapter 9 ▪ Math Model: Regroup Tens as Ones 		<ul style="list-style-type: none"> ▪ Math Model: Subtract two 2-digit numbers without regrouping ▪ Math Model: Subtract two 2-digit numbers with regrouping ▪ Chapter 11 ▪ Math Model: Add a 1-digit number and a 2-digit number with regrouping ▪ Math Model: Add two 2-digit numbers without regrouping ▪ Math Model: Add two 2-digit numbers with regrouping ▪ Math Model: Subtract a 1-digit number from a 2-digit number with regrouping ▪ Math Model: Subtract two 2-digit numbers without regrouping ▪ Math Model: Subtract two 2-digit numbers with regrouping

Grade 2-Number and Operations in Base Ten

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
<p>Use place value understanding and properties of operations to add and subtract.</p>			
<p>5. Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.</p>	<ul style="list-style-type: none"> ▪ Chapter 10 ▪ Math Model: Subtract a 1-digit number from a 2-digit number with regrouping ▪ Math Model: Subtract two 2-digit numbers without regrouping ▪ Math Model: Subtract two 2-digit numbers with regrouping ▪ Chapter 11 ▪ Math Model: Add a 1-digit number and a 2-digit number with Math Model: Add two 2-digit numbers without regrouping ▪ Math Model: Add two 2-digit numbers with regrouping ▪ Math Model: Subtract a 1-digit number from a 2-digit number with regrouping Math Model: Subtract two 2-digit numbers without regrouping ▪ Math Model: Subtract two 2-digit numbers with regrouping 		

Grade 2-Number and Operations in Base Ten

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
<p>Use place value understanding and properties of operations to add and subtract.</p>			
<p>6. <i>Add up to four two-digit numbers using strategies based on place value and properties of operations.</i></p>	<p>Essential Skills</p> <ul style="list-style-type: none"> ▪ The student will show their knowledge of and ability to apply strategies such as expanded form, empty number line and partial sums ▪ Math Journals ▪ Word problems that correlate with each unit. Journals are used about 2 to 3 times a week ▪ Math Club ▪ Activities correlate with each unit skills ▪ Touch Math Strategies when needed ▪ Dice within a Dice Game use different color dice to add or subtract two-digit numbers ▪ Calculator skills ▪ Harcourt Chapter Math Games ▪ Chapter 7 Trail of Numbers ▪ Chapter 8 Addition Math ▪ Chapter 9 The Regrouping Game ▪ Chapter 10 The Case of the Missing Numbers ▪ Chapter 11 Build a House 	<ul style="list-style-type: none"> ▪ Harcourt Assessments for both chapters and units ▪ Teacher observations during group lessons or small group instruction, looking at student work ▪ Construct possible arguments and comment on the reasoning of others ▪ Model by using mathematics ▪ Use appropriate math tools strategically. ▪ SuccessMaker Math Concepts 	<ul style="list-style-type: none"> ▪ Harcourt Chapter Math Games ▪ Chapter 7 Trail of Numbers ▪ Chapter 8 Addition Math ▪ Chapter 9 The Regrouping Game ▪ Chapter 10 The Case of the Missing Numbers ▪ Chapter 11 Build a House ▪ Math Journals ▪ Word problems that correlate with each unit. Journals are used about 2 to 3 times a week ▪ Math Club ▪ Activities correlate with each unit skills ▪ Touch Math Strategies when needed

Grade 2-Number and Operations in Base Ten

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
<p>Use place value understanding and properties of operations to add and subtract.</p>			
<p>7. Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.</p>	<p>Essential Skills</p> <ul style="list-style-type: none"> ▪ The student will show understand how to add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction ▪ The student will relate the strategy to a written method. The student will have a strong understanding that in adding or subtracting three digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds ▪ Math Journals ▪ Word problems that correlate with each unit. Journals are used about 2 to3 times a week. ▪ Math Club 	<ul style="list-style-type: none"> ▪ Harcourt Assessments for both chapters and units ▪ Teacher observations during group lessons or small group instruction, looking at student work ▪ Construct possible arguments and comment on the reasoning of others ▪ Model by using mathematics ▪ Use appropriate math tools strategically ▪ SuccessMaker Math Concepts 	<ul style="list-style-type: none"> ▪ Harcourt Chapters/lessons: 29.1, 29.2, 29.3, 29.4, 29.5, 29.6 ▪ Harcourt Chapter Math Games ▪ Chapter 29 Every Number Tells a Story ▪ Graph paper to teach how to keep numbers in the correct columns when adding or subtracting large numbers ▪ Harcourt Online Website Games ▪ Chapter 29 ▪ Math Model: Add two 3-digit numbers without regrouping ▪ Math Model: Add two 3-digit numbers with regrouping ▪ Math Model: Subtract two 3-digit numbers without regrouping ▪ Math Model: Subtract two 3-digit numbers with regrouping ▪ Math Journals ▪ Word problems that correlate with each unit. Journals are used about 2 to 3 times a week. ▪ Math Club

Grade 2-Number and Operations in Base Ten

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
<p>Use place value understanding and properties of operations to add and subtract.</p>			
<p>7. Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.</p>	<ul style="list-style-type: none"> ▪ Activities correlate with each unit skills. ▪ Touch Math Strategies when needed ▪ Eye on Education ▪ Math Interventions ▪ Composing and Decomposing Numbers p.59 to 63 ▪ Take Away Subtraction p. 11 to 114 ▪ Harcourt Chapters/lessons: 29.1, 29.2, 29.3, 29.4, 29.5, 29.6 ▪ Harcourt Chapter Math Games ▪ Chapter 29 Every Number Tells a Story ▪ Harcourt Hands on Activities by chapters ▪ Exploring Greater Numbers & Operations Unit 2 ▪ Chapter 9 Choose the Operation ▪ Chapter 10 Use Addition to Check Subtraction and Choose the Computational Method ▪ Harcourt Online Website Games ▪ Chapter 29 ▪ Math Model: Add two 3-digit numbers without regrouping ▪ Math Model: Add two 3-digit numbers with regrouping ▪ Math Model: Subtract two 3-digit numbers without regrouping ▪ Math Model: Subtract two 3-digit numbers with regrouping 		<ul style="list-style-type: none"> ▪ Activities correlate with each unit skills ▪ Touch Math Strategies when needed ▪ Eye on Education ▪ Math Interventions ▪ Composing and Decomposing Numbers p.59 to 63 ▪ Take Away Subtraction p. 111 to 114

Grade 2-Number and Operations in Base Ten

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
<p>Use place value understanding and properties of operations to add and subtract.</p>			
<p>8. Mentally add 10 or 100 to a given number 100–900, and mentally or 100 from a given number 100–900.</p>	<p>Essential Skills</p> <ul style="list-style-type: none"> ▪ The student will show their ability to skip count from a number by 10 and/or 100 up to 1000 ▪ The student will show their ability to model using base ten manipulatives ▪ The student will show their ability to recognize and use patterns in a thousands chart ▪ Math Journals ▪ Word problems that correlate with each unit. Journals are used about 2 to 3 times a week ▪ Math Club ▪ Activities correlate with each unit skills ▪ Touch Math Strategies when needed ▪ Classroom posters ▪ 200 Classroom Poster - to model skip counting ▪ Use Desk Top Charts to make chart puzzles (100 board puzzle Trailblazers) ▪ Number Charts (1 to 200) ▪ Number Charts (100 to 199), (200 to 299), (300 to 399), (400 to 499), (500 to 599), (600 to 699), (700 to 799), (800 to 899), (900 to 999) 	<ul style="list-style-type: none"> ▪ Harcourt Assessments for both chapters and units ▪ Teacher observations during group lessons or small group instruction, looking at student work ▪ Construct possible arguments and comment on the reasoning of others ▪ Model by using mathematics ▪ Use appropriate math tools strategically. ▪ SuccessMaker Math Concepts 	<ul style="list-style-type: none"> ▪ Math Journals ▪ Word problems that correlate with each unit. Journals are used about 2 to 3 times a week ▪ Math Club ▪ Activities correlate with each unit skills. ▪ Touch Math Strategies when needed

Grade 2-Number and Operations in Base Ten

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
<p>Use place value understanding and properties of operations to add and subtract.</p>			
<p><i>9. Explain why addition and subtraction strategies work, using place value and the properties of operations.</i></p>	<p>Essential Skills</p> <ul style="list-style-type: none"> ▪ The student will show their ability to use the properties (commutative property for addition, associative property for addition, zero property, identity property) to compute and to support their explanation (CCSS, Page 185, Table 3) ▪ The student will show their ability to reason mathematically and explain why their chosen strategy works using words, pictures, and/or symbols to support their explanation ▪ Math Journals ▪ Word problems that correlate with each unit. Journals are used about 2 to 3 times a week ▪ Math Club ▪ Activities correlate with each unit skills ▪ Touch Math Strategies when needed ▪ Use of Ten frames ▪ Base ten blocks 	<ul style="list-style-type: none"> ▪ Harcourt Assessments for both chapters and units ▪ Teacher observations during group lessons or small group instruction, looking at student work ▪ Construct possible arguments and comment on the reasoning of others ▪ Model by using mathematics ▪ Use appropriate math tools strategically ▪ SuccessMaker Math Concepts 	<ul style="list-style-type: none"> ▪ Math Journals ▪ Word problems that correlate with each unit. Journals are used about 2 to 3 times a week ▪ Math Club ▪ Activities correlate with each unit skills. ▪ Touch Math Strategies when needed

Grade 2-Measurement and Data

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
<p>Measure and estimate lengths in standard units.</p>			
<p>1. Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.</p>	<p>Essential Skills</p> <ul style="list-style-type: none"> • The student will show their ability to measure to the nearest inch, centimeter, yard, or meter • The student will show their knowledge of and ability to explain why we use standard units of measurement instead of non-standard units • The student will show their ability to estimate before measuring to help determine the appropriate measurement tool and unit • The student will show their knowledge of the connection between a ruler and a number line <ul style="list-style-type: none"> ▪ The student will show their ability to measure real-world objects ▪ Math Journals ▪ Word problems that correlate with each unit. Journals are used about 2 to 3 times a week ▪ Math Club ▪ Activities correlate with each unit skills ▪ Touch Math Strategies when needed ▪ Harcourt chapters/lessons (22.3, 22.4, 22.6) ▪ Harcourt Chapter Math Games ▪ Chapter 22 Measure Up ▪ Harcourt Online Website Games ▪ Chapter 22 ▪ Length Strength: Paper Clips ▪ Length Strength: Inches ▪ Math Practice Games ▪ Stick Measure ▪ Mountain Run 	<ul style="list-style-type: none"> ▪ Harcourt Assessments for both chapters and units ▪ Teacher observations during group lessons or small group instruction, looking at student work ▪ Construct possible arguments and comment on the reasoning of others ▪ Model by using mathematics ▪ Use appropriate math tools strategically. ▪ SuccessMaker Math Concepts 	<ul style="list-style-type: none"> ▪ Harcourt chapters/lessons (22.3, 22.4, 22.6) ▪ Harcourt Chapter Math Games ▪ Chapter 22 Measure Up ▪ Math Journals ▪ Word problems that correlate with each unit. Journals are used about 2 to 3 times a week ▪ Math Club ▪ Activities correlate with each unit skills ▪ Touch Math Strategies when needed ▪ Harcourt Online Website Games ▪ Chapter 22 ▪ Length Strength: Paper Clips ▪ Length Strength: Inches

Grade 2-Measurement and Data

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
Measure and estimate lengths in standard units.			
<p>2. Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.</p>	<p>Essential Skills</p> <ul style="list-style-type: none"> ▪ The student will show their ability to recognize the equivalent units of 12 inches = 1 foot and 100 centimeters = 1 meter as well as non-standard equivalent measurements ▪ Math Journals ▪ Word problems that correlate with each unit Journals are used about 2 to 3 times a week ▪ Math Club ▪ Activities correlate with each unit skills. ▪ Touch Math Strategies when needed 	<ul style="list-style-type: none"> ▪ Harcourt Assessments for both chapters and units ▪ Teacher observations during group lessons or small group instruction, looking at student work ▪ Construct possible arguments and comment on the reasoning of others ▪ Model by using mathematics ▪ Use appropriate math tools strategically ▪ SuccessMaker Math Concepts ▪ Harcourt Online Website Game 	<ul style="list-style-type: none"> ▪ Math Journals ▪ Word problems that correlate with each unit. Journals are used about 2 to 3 times a week ▪ Math Club ▪ Activities correlate with each unit skills ▪ Touch Math Strategies when needed

Grade 2-Measurement and Data

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
<p>Measure and estimate lengths in standard units.</p>			
<p>3. Estimate lengths using units of inches, feet, centimeters, and meters.</p>	<p>Essential Skills</p> <ul style="list-style-type: none"> • The student will show their ability to use a benchmark when estimating • The student will show their ability to compare estimates to actual measurements <ul style="list-style-type: none"> ▪ Harcourt chapters /lessons (24.1 (cm/m), 25.1 (perimeter)) ▪ Math Journals ▪ Word problems that correlate with each unit. Journals are used about 2 to 3 times a week ▪ Math Club ▪ Activities correlate with each unit skills ▪ Touch Math Strategies when needed ▪ Harcourt Chapter Math Games ▪ Chapter 24 Metric World ▪ Chapter 25 Cover the Perimeter ▪ Harcourt Online Website Games ▪ Chapter 24 ▪ Length Strength: Centimeters ▪ Chapter 25 ▪ Tile the Floor ▪ Practice finding areas of figures 	<ul style="list-style-type: none"> ▪ Harcourt Assessments for both chapters and units ▪ Teacher observations during group lessons or small group instruction, looking at student work ▪ Construct possible arguments and comment on the reasoning of others. ▪ Model by using mathematics ▪ Use appropriate math tools strategically ▪ Measurement Task Cards 29 to 40 ▪ SuccessMaker Math Concepts 	<ul style="list-style-type: none"> ▪ Harcourt chapters /lessons (24.1 (cm/m), 25.1 (perimeter)) ▪ Math Journals ▪ Word problems that correlate with each unit ▪ Journals are used about 2 to 3 times a week ▪ Math Club ▪ Activities correlate with each unit skills ▪ Touch Math Strategies when needed ▪ Harcourt Chapter Math Games ▪ Chapter 24 Metric World ▪ Chapter 25 Cover the Perimeter ▪ Harcourt Online Website Games ▪ Chapter 24 ▪ Length Strength: Centimeters ▪ Chapter 25 ▪ Tile the Floor ▪ Practice finding areas of figures

Grade 2-Measurement and Data

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
Measure and estimate lengths in standard units.			
<p>4. Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.</p>	<p>Essential Skills</p> <ul style="list-style-type: none"> ▪ The student will show their ability to connect measurement comparisons to subtraction (comparing) and addition (counting on) ▪ Math Journals ▪ Word problems that correlate with each unit. Journals are used about 2 to3 times a week ▪ Math Club ▪ Activities correlate with each unit skills ▪ Touch Math Strategies when needed 	<ul style="list-style-type: none"> ▪ Harcourt Assessments for both chapters and units ▪ Teacher observations during group lessons or small group instruction, looking at student work. ▪ Construct possible arguments and comment on the reasoning of others ▪ Model by using mathematics ▪ Use appropriate math tools strategically ▪ SuccessMaker Math Concepts 	<ul style="list-style-type: none"> ▪ Math Journals ▪ Word problems that correlate with each unit. Journals are used about 2 to 3 times a week ▪ Math Club ▪ Activities correlate with each unit skills. ▪ Touch Math Strategies when needed

Grade 2-Measurement and Data

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
<p>Relate addition and subtraction to length.</p>			
<p>5. Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem.</p>	<p>Essential Skills</p> <ul style="list-style-type: none"> ▪ The student will show their ability to develop equations to represent word problems ▪ The student will show their knowledge of inverse relationships ▪ The student will show their ability to justify the reasonableness of their responses ▪ Math Journals ▪ Word problems that correlate with each unit Journals are used about 2 to 3 times a week ▪ Math Club ▪ Activities correlate with each unit skills ▪ Touch Math Strategies when needed ▪ Math Generated Worksheets ▪ Math Worksheet Wizard ▪ Half or Double lengths 	<ul style="list-style-type: none"> ▪ Harcourt Assessments for both chapters and units ▪ Teacher observations during group lessons or small group instruction, looking at student work ▪ Construct possible arguments and comment on the reasoning of others ▪ Model by using mathematics ▪ Use appropriate math tools strategically ▪ SuccessMaker Math Concepts 	<ul style="list-style-type: none"> ▪ Math Journals ▪ Word problems that correlate with each unit. Journals are used about 2 to 3 times a week ▪ Math Club ▪ Activities correlate with each unit skills ▪ Touch Math Strategies when needed ▪ Math Generated Worksheets ▪ Math Worksheet Wizard ▪ Half or Double lengths

Grade 2-Measurement and Data

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
<p>Relate addition and subtraction to length.</p>			
<p>6. Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., and represent whole-number sums and differences within 100 on a number line diagram.</p>	<p>Essential Skills</p> <ul style="list-style-type: none"> ▪ The student will show their ability to locate and represent points on a number line ▪ The student will show their ability to apply knowledge of anchor points (e.g., 5, 10, 25, 50, 75) as being half-way points between numerals ▪ Math Journals ▪ Word problems that correlate with each unit. Journals are used about 2 to 3 times a week ▪ Math Club ▪ Activities correlate with each unit skills ▪ Touch Math Strategies when needed ▪ Math Generated worksheets ▪ Math Worksheet Wizard order 	<ul style="list-style-type: none"> ▪ Harcourt Assessments for both chapters and units ▪ Teacher observations during group lessons or small group instruction, looking at student work ▪ Construct possible arguments and comment on the reasoning of others ▪ Model by using mathematics ▪ Use appropriate math tools strategically ▪ SuccessMaker Math Concepts 	<ul style="list-style-type: none"> ▪ Math Journals ▪ Word problems that correlate with each unit. Journals are used about 2 to 3 times a week ▪ Math Club ▪ Activities correlate with each unit skills ▪ Touch Math Strategies when needed ▪ Math Generated Worksheets ▪ Math Worksheet Wizard order

Grade 2-Measurement and Data

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
Work with time and money.			
<p>7. Tell and write time from analog and digital clocks to the nearest five mMA.7 a</p> <p>Know the relationships of time, including seconds in a minute, minutes in an hour, hours in a day, days in a week, a month, and a year, and weeks in a month and year.</p>	<p>Essential Skills</p> <ul style="list-style-type: none"> ▪ The student will show their knowledge of and ability to apply skip counting by 5 ▪ The student will show their knowledge that there are 60 minutes in a hour, 60 seconds in a minute, 24 hours in a day, 12 hours in a.m. and 12 hours in p.m., and know when a.m. and p.m. occur ▪ The student will show their knowledge of the difference between the minute and hour hands and their purposes ▪ The student will show their knowledge of concept of quarter-hours and half-hours ▪ The student will show their knowledge that there are five-minute intervals between each number on the clock face ▪ The student will show their knowledge in the relationship of time, , including seconds in a minute, minutes in an hour, hours in a day, days in a week, a month, and a year, and weeks in a month and year 	<ul style="list-style-type: none"> ▪ Harcourt Assessments for both chapters and units ▪ Teacher observations during group lessons or small group instruction, looking at student work ▪ Construct possible arguments and comment on the reasoning of others ▪ Model by using mathematics ▪ Use appropriate math tools strategically ▪ Calendar Task Cards 1 to 37 ▪ Math Task Cards 45 to 48 ▪ I Have Who Has Cards ▪ Whole Class Assessment ▪ SuccessMaker Math Concepts 	<ul style="list-style-type: none"> ▪ Harcourt chapters/lessons (14.1, 14.2, 14.3, 14.4, 14.5, 14.6) ▪ Harcourt Chapter Math Games ▪ Chapter 14 What Time Is It Now? ▪ Math Journals ▪ Word problems that correlate with each unit. Journals are used about 2 to 3 times a week ▪ Math Club ▪ Activities correlate with each unit skills. ▪ Touch Math Strategies when needed ▪ Harcourt Online Website Game ▪ Chapter 14 ▪ Telling Time ▪ Touch Math Puzzle Games ▪ I Have Who Has Cards ▪ Whole Class Assessment ▪ Scholastic Success ▪ Generated Worksheet

Grade 2-Measurement and Data

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
Work with time and money.			
<p>7. Tell and write time from analog and digital clocks to the nearest five mMA.7 a</p> <p>Know the relationships of time, including seconds in a minute, minutes in an hour, hours in a day, days in a week, a month, and a year, and weeks in a month and year.</p>	<ul style="list-style-type: none"> ▪ Math Journals ▪ Word problems that correlate with each unit. Journals are used about 2 to 3 times a week ▪ Math Club ▪ Activities correlate with each unit skills ▪ Touch Math Strategies when needed ▪ Touch Math ▪ Blank Calendars ▪ Clock Master ▪ Time Puzzles Match ▪ Time Information Puzzle Match ▪ I Have Who Has Cards ▪ Whole Class Assessment ▪ Scholastic Success Worksheet ▪ Snuggle Up with a Book ▪ Harcourt chapters/lessons (14.1, 14.2, 14.3, 14.4, 14.5, 14.6) ▪ Harcourt Chapter Math Games ▪ Chapter 14 What Time Is It Now? ▪ Harcourt Online Website Game ▪ Chapter 14 ▪ Telling Time 		

Grade 2-Measurement and Data

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
Work with time and money.			
<p>8. Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately. <i>Example: If you have 2 dimes and 3 pennies, how many cents do you have?</i></p>	<p>Essential Skills</p> <ul style="list-style-type: none"> ▪ The student will show their ability to identify both sides of currency ▪ The student will show their ability to count money (dollar bills, quarters, dimes, nickels, and pennies) ▪ The student will show their ability to count mixed sets of currency ▪ The student will show their ability to count on ▪ The student will show their knowledge of and ability to apply possible strategies such as drawing pictures, using coins, using a number grid, using a number line, using symbols and/or numbers ▪ Math Journals ▪ Word problems that correlate with each unit. Journals are used about 2 to 3 times a week. ▪ Math Club ▪ Activities correlate with each unit skills. ▪ Touch Math Strategies when needed 	<ul style="list-style-type: none"> ▪ Harcourt Assessments for both chapters and units ▪ Teacher observations during group lessons or small group instruction, looking at student work ▪ Construct possible arguments and comment on the reasoning of others ▪ Model by using mathematics ▪ Use appropriate math tools strategically ▪ Coin-cessions ▪ Fuel the Brain ▪ I Have Who Has Cards ▪ Whole Class Assessment ▪ Money Task Cards 29 to 44 ▪ SuccessMaker Math Concepts 	<ul style="list-style-type: none"> ▪ Harcourt chapters/lessons (12.1, 12.2, 12.3, 12.4, 12.5, 13.1, 13.2, 13.3, 13.4, 13.5, 13.6, 13.7, 15.4 (limited)) ▪ Harcourt Chapter Math Games ▪ Chapter ▪ Chapter 13 Keep the Change ▪ Math Journals ▪ Word problems that correlate with each unit. Journals are used about 2 to 3 times a week ▪ Math Club ▪ Activities correlate with each unit skills ▪ Touch Math Strategies when needed ▪ Harcourt Online Website Game ▪ Chapter 12 ▪ Count by Fives and Tens ▪ Chapter 13 ▪ Let's Compare! ▪ Math Generated Worksheets ▪ Math Worksheet Wizard ▪ Math with Money ▪ Touch Math ▪ Money Puzzle Match ▪ Coin-cessions ▪ Fuel the Brain ▪ I Have Who Has Cards ▪ Whole Class Assessment

Grade 2-Measurement and Data

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
Represent and interpret data.			
<p>9. Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units.</p>	<p>Essential Skills</p> <ul style="list-style-type: none"> • The student will show their understanding that a line plot is a representation of data along a number line • The student will show their ability to identify patterns within the set of data and analyze what the data represents <ul style="list-style-type: none"> ▪ Eye on Education ▪ Math Interventions ▪ Number Line Proficiency p. 107 to 110 ▪ Math Journals ▪ Word problems that correlate with each unit. Journals are used about 2 to 3 times a week ▪ Math Club ▪ Activities correlate with each unit skills ▪ Touch Math Strategies when needed 	<ul style="list-style-type: none"> ▪ Harcourt Assessments for both chapters and units ▪ Teacher observations during group lessons or small group instruction, looking at student work ▪ Construct possible arguments and comment on the reasoning of others ▪ Model by using mathematics ▪ Use appropriate math tools strategically. ▪ SuccessMaker Math Concepts 	<ul style="list-style-type: none"> ▪ Math Journals ▪ Word problems that correlate with each unit. Journals are used about 2 to 3 times a week ▪ Math Club ▪ Activities correlate with each unit skills ▪ Touch Math Strategies when needed ▪ Eye on Education ▪ Math Interventions ▪ Number Line Proficiency p. 107 to 110

Grade 2-Measurement and Data

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
Represent and interpret data.			
<p>10. Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put together, take-apart, and compare problems⁴ using information presented in a bar graph.</p>	<p>Essential Skills</p> <ul style="list-style-type: none"> ▪ The student will show their ability to collect, sort, organize and graph data ▪ The student will show their knowledge of the elements of picture graphs and bar graphs ▪ The student will show their ability to analyze graphs, answer questions about the data, and make decisions based on the data ▪ Math Journals ▪ Word problems that correlate with each unit. Journals are used about 2 to 3 times a week ▪ Math Club ▪ Activities correlate with each unit skills ▪ Touch Math Strategies when needed ▪ Harcourt chapters/lessons (4.4 (bar graph), 4.5 (pictograph), 12.6, 16.1 (make bar graph)) ▪ Harcourt Chapter Math Game 	<ul style="list-style-type: none"> ▪ Harcourt Assessments for both chapters and units ▪ Teacher observations during group lessons or small group instruction, looking at student work ▪ Construct possible arguments and comment on the reasoning of others ▪ Model by using mathematics ▪ Use appropriate math tools strategically ▪ SuccessMaker Math Concepts 	<ul style="list-style-type: none"> ▪ Harcourt chapters/lessons (4.4 (bar graph), 4.5 (pictograph), 12.6, 16.1 (make bar graph)) ▪ Harcourt Chapter Math Game ▪ Chapter 4 Spinning Coins ▪ Chapter ▪ Chapter 16 What's the Point ▪ Math Journals ▪ Word problems that correlate with each unit Journals are used about 2 to 3 times a week ▪ Math Club ▪ Activities correlate with each unit skills. ▪ Touch Math Strategies when needed ▪ Harcourt Online Website Game ▪ Chapter 4 ▪ Let's Graph! ▪ Chapter 12 ▪ Count by Fives and Tens ▪ Chapter 16 ▪ Build-A-Saurus ▪ Points on a Grid

Grade 2-Measurement and Data

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
Represent and interpret data.			
<p>10. Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put together, take-apart, and compare problems⁴ using information presented in a bar graph.</p>	<ul style="list-style-type: none"> ▪ Chapter 4 Spinning Coins ▪ Chapter ▪ Chapter 16 What's the Point ▪ Harcourt Online Website Game ▪ Chapter 4 ▪ Let's Graph! ▪ Chapter 12 ▪ Count by Fives and Tens ▪ Chapter 16 ▪ Build-A-Saurus ▪ Points on a Grid 		
Reason with shapes and their attributes.			
<p>1. Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces.⁵ Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.</p>			
<p>2. Partition a rectangle into rows and columns of same-size squares and count to find the total number of them.</p>			

Grade 2-Measurement and Data

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
Reason with shapes and their attributes.			
<p>3. Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words <i>halves</i>, <i>thirds</i>, <i>half of</i>, <i>a third of</i>, etc., and describe the whole as two halves, three thirds, four fourths.</p> <p>Recognize that equal shares of identical wholes need not have the same shape.</p>			

Grade 3-Operations and Algebraic Thinking

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
Represent and solve problems involving multiplication and division.			
1. Interpret products of whole numbers, e.g., interpret 5×7 as the total number of objects in 5 groups of 7 objects each. <i>For example, describe a context in which a total number of objects can be expressed as 5×7.</i>	<ul style="list-style-type: none"> ▪ Circles and Stars ▪ Multiplication Stories ▪ Multiply in the Sky 	<ul style="list-style-type: none"> ▪ Observation ▪ Questioning ▪ Math Journals ▪ In Twos, Threes and More (Trailblazers) ▪ January "Writing in Math" prompt 	<ul style="list-style-type: none"> ▪ Harcourt Math Chapters 8-11 ▪ Math Trailblazers: Unit 3:lesson 3, p.39 ▪ Harcourt Math: Challenge page CW42 ▪ Dice, paper/booklet
2. Interpret whole-number quotients of whole numbers, e.g., interpret $56 \div 8$ as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each. <i>For example, describe a context in which a number of shares or a number of groups can be expressed as $56 \div 8$.</i>	<ul style="list-style-type: none"> ▪ Fact Family practice ▪ Division Stories ▪ Various Harcourt workbook pages 	<ul style="list-style-type: none"> ▪ Observation ▪ Questioning ▪ Morning work ▪ Math Journals ▪ <i>Needs to be developed</i> 	<ul style="list-style-type: none"> ▪ Harcourt Math Chapters 12-14 ▪ Harcourt Practice workbook ▪ Dice, paper/booklet
3. Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.	<ul style="list-style-type: none"> ▪ Various Harcourt Problem Solving workbook pages ▪ Harcourt Unit 3: Problem Solving on Location p.234-235 	<ul style="list-style-type: none"> ▪ Observation ▪ Questioning ▪ Math Journals ▪ Harcourt chapter tests ▪ Harcourt Unit 3 test ▪ Harcourt Unit 3: Performance Task A ▪ <i>Test may need to be developed</i> 	<ul style="list-style-type: none"> ▪ Harcourt Math Chapters 8-14 ▪ Harcourt chapter tests ▪ Harcourt Problem Solving workbook

Grade 3-Operations and Algebraic Thinking

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
<p>Represent and solve problems involving multiplication and division.</p>			
<p>4. Determine the unknown whole number in a multiplication or division equation relating three whole numbers. <i>For example, determine the unknown number that makes the equation true in each of the equations $8 \times ? = 48$, $5 = \cdot \div 3$, $6 \times 6 = ?$.</i></p>	<ul style="list-style-type: none"> ▪ The Factor Game: Harcourt Challenge 9.4, CW50 ▪ Algebra: Missing Factors: Harcourt Challenge 9.5, CW51 ▪ <i>Need worksheets</i> 	<ul style="list-style-type: none"> ▪ Observation ▪ Questioning ▪ Math Journals ▪ Harcourt Unit 3: Performance Task B ▪ <i>Test may need to be developed</i> 	<ul style="list-style-type: none"> ▪ Harcourt Math Chapter 9
<p>Understand properties of multiplication and the relationship between multiplication and division.</p>			
<p>5. Apply properties of operations as strategies to multiply and divide. <i>2 Examples: If $6 \times 4 = 24$ is known, then $4 \times 6 = 24$ is also known. (Commutative property of multiplication.) $3 \times 5 \times 2$ can be found by $3 \times 5 = 15$, then $15 \times 2 = 30$, or by $5 \times 2 = 10$, then $3 \times 10 = 30$. (Associative property of multiplication.) Knowing that $8 \times 5 = 40$ and $8 \times 2 = 16$, one can find 8×7 as $8 \times (5 + 2) = (8 \times 5) + (8 \times 2) = 40 + 16 = 56$. (Distributive property.)</i></p>	<ul style="list-style-type: none"> ▪ Hands-on: Make Arrays ▪ Practice the Facts ▪ Multiplying 3 Factors ▪ Multiplication Factors ▪ Array Multiplication Table 	<ul style="list-style-type: none"> ▪ Observation ▪ Questioning ▪ Math Journals ▪ Harcourt Unit 3: Performance Task A (commutative property) ▪ <i>Additional assessments for properties need to be developed</i> 	<ul style="list-style-type: none"> ▪ Harcourt Math Chapters 8-11

Grade 3-Operations and Algebraic Thinking

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
<p>Understand properties of multiplication and the relationship between multiplication and division.</p>			
<p>6. Understand division as an unknown-factor problem. <i>For example, find $32 \div 8$ by finding the number that makes 32 when multiplied by 8.</i></p>	<ul style="list-style-type: none"> ▪ Fact Families: triangle flash cards (Trailblazers?) ▪ Various workbook pages – mixed reviews 	<ul style="list-style-type: none"> ▪ Observation ▪ Questioning ▪ Math Journals ▪ <i>Additional assessments need to be developed</i> 	<ul style="list-style-type: none"> ▪ Harcourt Math Chapters 8-11
<p>Multiply and divide within 100.</p>			
<p>7. Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$, one knows $40 \div 5 = 8$) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.</p>	<ul style="list-style-type: none"> ▪ It's in the Bag ▪ Timed multiplication tests ▪ <i>Develop additional practice sheets</i> 	<ul style="list-style-type: none"> ▪ Observation ▪ Questioning ▪ Math Journals ▪ Periodic timed multiplication and division tests ▪ Online Harcourt timed tests 	<ul style="list-style-type: none"> ▪ Harcourt Math Chapters 8-11 ▪ Otter Creek timed testing program

Grade 3-Operations and Algebraic Thinking

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
<p>Solve problems involving the four operations, and identify and explain patterns in arithmetic.</p>			
<p>8. Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.</p>	<ul style="list-style-type: none"> ▪ Multi-step Problems: Harcourt 11.5 ▪ Daily Harcourt "Problems of the Day" ▪ <i>Need additional activities</i> 	<ul style="list-style-type: none"> ▪ Observation ▪ Math Journals ▪ <i>Need additional assessment</i> 	<ul style="list-style-type: none"> ▪ Harcourt Math Various chapters – mostly problem solving lessons
<p>9. Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. <i>For example, observe that 4 times a number is always even, and explain why 4 times a number can be decomposed into two equal addends.</i></p>	<ul style="list-style-type: none"> ▪ Understanding multiplication table/multiples (Harcourt 9.2) ▪ Thinker's Corner p.185 ▪ Thinker's Corner p.215 ▪ Multiplication Circles 	<ul style="list-style-type: none"> ▪ Observation ▪ Questioning ▪ <i>Need additional assessment</i> 	<ul style="list-style-type: none"> ▪ Harcourt Math Various Chapters

Grade 3-Number and Operations in Base Ten

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
Use place value understanding and properties of operations to perform multi-digit arithmetic.			
1. Use place value understanding to round whole numbers to the nearest 10 or 100.	<ul style="list-style-type: none"> ▪ Rounding Riddles: Harcourt Math lesson 3.5 ▪ Practice workbook pages ▪ Estimating sum/differences ▪ Guess the Number: Harcourt Math lesson 5.1 	<ul style="list-style-type: none"> ▪ Observation ▪ Questioning ▪ Morning work ▪ Math Minutes ▪ Math Journals ▪ October "Writing in Math" prompt ▪ Harcourt chapter tests 3,4, & 5 ▪ Units 1 & 2 tests 	<ul style="list-style-type: none"> ▪ Harcourt Math Chapters 3-5
2. Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.	<ul style="list-style-type: none"> ▪ Break Apart: Harcourt lesson 4.2 ▪ Missing parts ▪ Base ten block addition ▪ Make addition posters ▪ Harcourt Practice Workbook 	<ul style="list-style-type: none"> ▪ Observation ▪ Math Journals ▪ Harcourt chapter tests 4 & 5 ▪ Harcourt Unit test 2 	<ul style="list-style-type: none"> ▪ Harcourt Math Chapters 4-5
3. Multiply one-digit whole numbers by multiples of 10 in the range 10–90 (e.g., 9×80 , 5×60) using strategies based on place value and properties of operations.	<ul style="list-style-type: none"> ▪ Hands-on: Base ten blocks (lesson 29.1) ▪ Properties of operations (lesson 29.1) ▪ <i>Need additional worksheets</i> 	<ul style="list-style-type: none"> ▪ Observation ▪ Questioning ▪ Morning work ▪ Math Minutes ▪ Math Journals ▪ <i>Test needs to be developed</i> 	<ul style="list-style-type: none"> ▪ Harcourt Math Chapter 29

Grade 3-Number and Operations-Fractions

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
Develop understanding of fractions as numbers			
1. Understand a fraction $1/b$ as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a parts of size $1/b$.	<ul style="list-style-type: none"> ▪ Fraction Bars: teacher led ▪ Fraction Bars: student directed ▪ Harcourt chapter 25 extra practice ▪ Harcourt Practice workbook pages 	<ul style="list-style-type: none"> ▪ Observation ▪ Questioning ▪ Math Journals ▪ Harcourt chapter 25 test 	<ul style="list-style-type: none"> ▪ Harcourt Math Chapter 25
2. Understand a fraction as a number on the number line; represent fractions on a number line diagram.	<ul style="list-style-type: none"> ▪ Fraction number line activity: Marilyn Burns 	<ul style="list-style-type: none"> ▪ Observation ▪ Questioning ▪ <i>Assessment needs to be developed</i> 	<ul style="list-style-type: none"> ▪ Harcourt 25.1
a. Represent a fraction $1/b$ on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into b equal parts. Recognize that each part has size $1/b$ and that the endpoint of the part based at 0 locates the number $1/b$ on the number line.	<ul style="list-style-type: none"> ▪ Fraction Bars: teacher led ▪ Fraction Bars: student directed ▪ Harcourt chapter 25 extra practice ▪ Harcourt Practice workbook pages 	<ul style="list-style-type: none"> ▪ Observation ▪ Questioning ▪ Math Journals ▪ Harcourt chapter 25 test 	<ul style="list-style-type: none"> ▪ Harcourt Math Chapter 25
b. Represent a fraction a/b on a number line diagram by marking off a lengths $1/b$ from 0. Recognize that the resulting interval has size a/b and that its endpoint locates the number a/b on the number line.	<ul style="list-style-type: none"> ▪ Ruler Fractions 	<ul style="list-style-type: none"> ▪ Observation ▪ Questioning ▪ <i>Assessment needs to be developed</i> 	<ul style="list-style-type: none"> ▪ Harcourt Math Chapter 25 ▪ Rulers

Grade 3-Number and Operations-Fractions

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
Develop understanding of fractions as numbers			
3. Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.	<ul style="list-style-type: none"> ▪ Fraction Bars Activity ▪ Paper Fraction Bars 	<ul style="list-style-type: none"> ▪ Observation ▪ Questioning ▪ Math Journals ▪ “Which one is not like the others” ▪ Harcourt Chapter 25 test ▪ <i>May need additional assessment</i> 	<ul style="list-style-type: none"> ▪ Harcourt Math Chapter 25 ▪ Harcourt Teacher resource TR24
a. Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line.	<ul style="list-style-type: none"> ▪ Fraction Bars Activity ▪ Number line Activity ▪ Ruler Fractions Activity 	<ul style="list-style-type: none"> ▪ Observation ▪ Questioning ▪ <i>Assessment needs to be developed</i> 	<ul style="list-style-type: none"> ▪ Harcourt Math Chapter 25 ▪ Harcourt Teacher resource TR24 ▪ Harcourt Teacher resource TR25
b. Recognize and generate simple equivalent fractions, e.g., $1/2 = 2/4$, $4/6 = 2/3$. Explain why the fractions are equivalent, e.g., by using a visual fraction model.	<ul style="list-style-type: none"> ▪ Paper Folding Activity ▪ Fraction Bars ▪ Money equivalents ▪ Fraction Concentration 	<ul style="list-style-type: none"> ▪ Observation ▪ Questioning ▪ Math Journals ▪ Harcourt Chapter 25 test ▪ <i>May need additional assessment</i> 	<ul style="list-style-type: none"> ▪ Harcourt Math Chapter 25
c. Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. <i>Examples: Express 3 in the form $3 = 3/1$; recognize that $6/1 = 6$; locate $4/4$ and 1 at the same point of a number line diagram.</i>	<ul style="list-style-type: none"> ▪ Number line activity ▪ <i>Need additional activities</i> 	<ul style="list-style-type: none"> ▪ Observation ▪ Questioning ▪ Math Journals? ▪ <i>Assessment needs to be developed</i> 	

Grade 3-Number and Operations-Fractions

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
<p>Develop understanding of fractions as numbers</p>			
<p>d. Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with the symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model.</p>	<ul style="list-style-type: none"> ▪ Using Diagrams to compare ▪ Writing in mathematics 25.4 ▪ Number lines 25.4 	<ul style="list-style-type: none"> ▪ Observation ▪ Questioning ▪ Math Journals? ▪ Harcourt Chapter 25 test ▪ <i>Additional tests?</i> 	<ul style="list-style-type: none"> ▪ Harcourt Math Chapter 25

Grade 3-Measurement and Data

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
<p>Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.</p>			
<p>1. Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.</p>	<ul style="list-style-type: none"> ▪ Judy Clocks ▪ Elapsed time – Judy clocks ▪ TV schedules ▪ Time number lines 	<ul style="list-style-type: none"> ▪ Observation ▪ Questioning ▪ Math Journals ▪ Harcourt chapter 7 test ▪ <i>Additional tests?</i> 	<ul style="list-style-type: none"> ▪ Harcourt Math Chapter 7 ▪ Elapsed time number lines
<p>2. Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l).6 Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.</p>	<ul style="list-style-type: none"> ▪ Mass of objects ▪ Science carrot experiment ▪ Visualizing units of capacity ▪ Container guess ▪ <i>Additional word problems</i> 	<ul style="list-style-type: none"> ▪ Observation ▪ Questioning ▪ Math Journals ▪ Modified chapter 18 test ▪ <i>Additional tests</i> 	<ul style="list-style-type: none"> ▪ Harcourt Math Chapters 18 ▪ Science experiment: All dried up

Grade 3-Measurement and Data

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
Represent and interpret data.			
<p>3. Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step “how many more” and “how many less” problems using information presented in scaled bar graphs. <i>For example, draw a bar graph in which each square in the bar graph might represent 5 pets.</i></p>	<ul style="list-style-type: none"> ▪ Partner pictograph ▪ School pictograph ▪ Survey says pictograph ▪ Partner bar graph ▪ School bar graph ▪ Survey says bar graph 	<ul style="list-style-type: none"> ▪ Observation ▪ Questioning ▪ Math Journals ▪ Harcourt chapter 16 test ▪ Make a graph 	<ul style="list-style-type: none"> ▪ Harcourt Math Chapter 16
<p>4. Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units— whole numbers, halves, or quarters.</p>	<ul style="list-style-type: none"> ▪ Let’s measure 	<ul style="list-style-type: none"> ▪ Observation ▪ Questioning ▪ <i>Assessment needs to be developed</i> 	<ul style="list-style-type: none"> ▪ Harcourt Math Chapter 15 & 17

Grade 3-Measurement and Data

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
Geometric measurement: understand concepts of area and relate area to multiplication and to addition.			
5. Recognize area as an attribute of plane figures and understand concepts of area measurement.	<ul style="list-style-type: none"> ▪ Grid measurement ▪ Real life 	<ul style="list-style-type: none"> ▪ Observation ▪ Questioning ▪ Math Journals ▪ Harcourt chapter 22 test 	<ul style="list-style-type: none"> ▪ Harcourt Math Chapter 22
a. A square with side length 1 unit, called "a unit square," is said to have "one square unit" of area, and can be used to measure area.	<ul style="list-style-type: none"> ▪ Definition ▪ <i>Additional?</i> 	<ul style="list-style-type: none"> ▪ Observation ▪ Questioning ▪ <i>Additional assessment?</i> 	<ul style="list-style-type: none"> ▪ Harcourt Math Chapter 22
b. A plane figure which can be covered without gaps or overlaps by n unit squares is said to have an area of n square units.	<ul style="list-style-type: none"> ▪ Grid measurement 	<ul style="list-style-type: none"> ▪ Observation ▪ Questioning ▪ Math Journals ▪ Harcourt chapter 22 test 	<ul style="list-style-type: none"> ▪ Harcourt Math Chapter 22

Grade 3-Measurement and Data

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
Geometric measurement: understand concepts of area and relate area to multiplication and to addition.			
6. Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units).	<ul style="list-style-type: none"> ▪ Grid measurement ▪ Create diagrams ▪ Harcourt workbook pages 	<ul style="list-style-type: none"> ▪ Observation ▪ Questioning ▪ Math Journals ▪ Harcourt chapter 22 test ▪ <i>Additional tests?</i> 	<ul style="list-style-type: none"> ▪ Harcourt Math Chapter 22
7. Relate area to the operations of multiplication and addition.		<ul style="list-style-type: none"> ▪ Observation ▪ Questioning ▪ Math Journals 	<ul style="list-style-type: none"> ▪ Harcourt Math Chapter 22
a. Find the area of a rectangle with whole-number side lengths by tiling it, and show that the area is the same as would be found by multiplying the side lengths.	<ul style="list-style-type: none"> ▪ Area arrays 	<ul style="list-style-type: none"> ▪ Observation ▪ Questioning 	<ul style="list-style-type: none"> ▪ Harcourt Math Chapter 22

Grade 3-Measurement and Data

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
Geometric measurement: understand concepts of area and relate area to multiplication and to addition.			
b. Multiply side lengths to find areas of rectangles with whole number side lengths in the context of solving real world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning	<ul style="list-style-type: none"> ▪ Harcourt workbook pages PS116 & CW116 ▪ <i>Additional word problems needed</i> 	<ul style="list-style-type: none"> ▪ Observation ▪ Questioning ▪ Morning work ▪ Math Journals ▪ <i>Additional tests?</i> 	<ul style="list-style-type: none"> ▪ Harcourt Math Chapter 22
c. Use tiling to show in a concrete case that the area of a rectangle with whole-number side lengths a and $b + c$ is the sum of $a \times b$ and $a \times c$. Use area models to represent the distributive property in mathematical reasoning.	<ul style="list-style-type: none"> ▪ <i>Refer to distributive property of multiplication.</i> ▪ <i>Needs to be developed</i> 	<ul style="list-style-type: none"> ▪ Observation ▪ Questioning ▪ Math Journals ▪ <i>Needs to be developed</i> 	<ul style="list-style-type: none"> ▪ Harcourt Math Chapter 22
d. Recognize area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real world problems.	<ul style="list-style-type: none"> ▪ Student created models ▪ Harcourt workbook pages RW116 & PW116 	<ul style="list-style-type: none"> ▪ Observation ▪ Questioning ▪ Math Journals ▪ Harcourt chapter 22 test ▪ <i>Need additional real world problems</i> 	<ul style="list-style-type: none"> ▪ Harcourt Math Chapter 22

Grade 3-Measurement and Data

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
<p>Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.</p>			
<p>8. Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters</p>	<ul style="list-style-type: none"> ▪ Perimeter in the classroom ▪ Perimeter riddles ▪ Generalizations of perimeter and area: grid paper ▪ Generalizations of perimeter and area: geoboards ▪ Toothpicks 	<ul style="list-style-type: none"> ▪ Observation ▪ Questioning ▪ Math Journals ▪ Harcourt chapter 22 test 	<ul style="list-style-type: none"> ▪ Harcourt Math Chapter 22

Grade 3-Geometry

Standard	Benchmark Task (Activities)	Benchmark Assessments	Resources
Reason with shapes and their attributes.			
<p>1. Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.</p>	<ul style="list-style-type: none"> ▪ Definition cards ▪ Categorizing 	<ul style="list-style-type: none"> ▪ Observation ▪ Questioning ▪ Math Journals ▪ Harcourt chapter 19 test 	<ul style="list-style-type: none"> ▪ Harcourt Math Chapter 19 ▪ Index cards
<p>2. Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. <i>For example, partition a shape into 4 parts with equal area, and describe the area of each part as 1/4 of the area of the shape.</i></p>	<ul style="list-style-type: none"> ▪ <i>Not currently part of curriculum.</i> ▪ <i>Needs to be developed</i> 	<ul style="list-style-type: none"> ▪ Observation ▪ Questioning ▪ Math Journals ▪ <i>Needs to be developed</i> 	<ul style="list-style-type: none"> ▪ ??