Math Pacing Guide Kindergarten

Processes, Content Statements & Expectations (Disciplinary Knowledge)	Math Chapter	Resources	Vocabulary	Assessment
GLCE's Geometry: Create, explore and describe attributes G.GS.00.02 Identify, sort, and classify objects by attribute and identify objects that do not belong in a particular group. Common Core K.MD.3 Classify objects into given categories; count the number of objects in each category and sort the categories by count.	Chapter One Classification, Positions, and Patterns 1.1 Alike and Different 1.2 Sort by Color 1.3 Sort by Size 1.4 Sort by Shape 1.5 Sort by Kind 1.6 Sort by Own Rule 1.7 Problem Solving: using Logical Reasoning	Chapter One Student Pages Chapter One Practice Pages Colored cubes Attribute blocks Assorted pasta (lesson 1. 4) Literature Connections: Brown Bear By Eric Carle Who Said Red (Hoghton Mifflin Reading book) Five Creatures By Emily Jenkins Mouse Paint By Ellen Stoll Walsh	alike different sort big small circle triangle square rectangle	Chapter One Test Observation Kindergarten Assessment for shapes

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GLCE's Number and Operations: Explore number patterns N.MR.00.10 Create, describe, and extend simple number patterns Geometry: Explore geometric patterns G.GS.00.03 Create, describe, and extend simple geometric patters	Chapter Two Positions and Patterns 2.1 Top, middle, bottom 2.2 Before, after, between 2.3 left and right 2.4 Inside and outside 2.5 More position words 2.6 Patterns with Sounds and Motions 2.7 Extend Patterns 2.8 Translate Patterns 2.9 Problem Solving: use a Pattern	Chapter Two Student Pages Chapter Two Practice Pages Colored cubes Snap cubes Beads (pattern bracelets) Attribute blocks Games: Simon Says Musical chairs	Top Middle Bottom Before, After Between Left, Right Inside Outside over, under on, up, down on top of pattern	Chapter Two Test Observation Student creates an AB, ABB, AAB, and ABC pattern
Common Core K.MD.3 Classify objects into given categories; count the number of objects in each category and sort the categories by count. K.G.1 Describe objects in the environment using names of shapes, describe the relative position of these objects using terms such as above, below, beside, in front of, behind and next to.		Musical Connections: Head, shoulders, knees and toes The Bunny Hop Hokey, Pokey	pattern	

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GLCE's Number and Operations: Count, write, and order numbers N.ME.00.02 Use one-to-one correspondence to compare and order sets of objects to 30 using phrases such as "same number", "more than", or "less than"; use counting and matching.	Chapter Three Comparing Sets, Data, and Graphing 3.1 Match One to One 3.2 Same Number 3.3 More 3.4 Fewer 3.5 Sort and Graph 3.6 Make a Real Graph 3.7 Pictographs 3.8 Problem Solving: use a graph	Chapter 3 student pages Chapter 3 practice pages Workmat 5 (ten frame) Two-color counters Two-color spinners Snap cubes Balance (from science kits) Enrichment activities: Graph favorite color Graph how I get to school Graph M&M's (individually)	One-to-one Same number More Fewer Sort Graph	Chapter 3 Test Observation Student creates a graph using a handful of M&Ms
Common Core		Introduce weather graph and calendar time		
K.CC.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.		Literature Connections: A Pair of Socks By Stuart Murphy A Tree for Me By Nancy Van Laan		

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Number and Operations: Count, write, and order numbers N.ME.00.01 Count objects in sets up to 30 N.ME.00.04 Read and write numbers to 30 and connect them to the quantities they represent. Common Core K.CC.3 Write numbers from 0-20. Represent a number of objects with a written numeral 0-20	Chapter Four: Represent and Read Numbers 0-5 4.1 One and Two 4.2 Three 4.3 Four 4.4 Five 4.5 Zero 4.6 Using 0-5 4.7 Problem Solving: use logical reasoning 4.8 Ordinal numbers	Chapter 4 student pages Chapter 4 practice pages Additional number writing practices sheets (math file) Dominos Snap cubes Counters Laminated numbers build number line 0-5 with students holding the numbers After numbers 0-5 are learned, introduce the touch math numbers 1-5 Literature Connections: Mouse Count By Ellen Walsh One Fish, Two Fish, Red Fish, Blue Fish By Dr. Seuss	One two Three four Five zero More fewer Between First second Third fourth Fifth	Chapter Four Test Observation Students identify numbers 0-5 from flash cards Students write numbers 0-5 in order from memory. Student represent a number with a picture

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GLEC's Geometry: Explore geometric patterns G.GS.00.03 Create, describe, and extend simple geometric patters Common Core K.G.2 Correctly name shapes regardless of their orientations or overall size. K.G.3 Identify shapes as two-dimensional or three-dimensional. K.G.5 Model shapes in the world by building shapes from components and drawing shapes. K.G.6 Compose simple shapes to form larger shapes.	Chapter Five: Plane Shapes and Fractions 5.1 Circle and Rectangle 5.2 Square and Triangle 5.3 Patterns with Shapes and Positions 5.4 Combine Plane Shapes 5.5 Symmetry 5.6 Equal Parts 5.7 Halves 5.8 Problem Solving: Use a Picture 5.9 Likely and Unlikely 5.10 Predict and Record Outcomes	Chapter 5 student pages Chapter 5 practice pages Use additional math resources for shapes. Teach how to make tally marks for numbers 1-5 Activities: Shape scavenger hunt Symmetry-Name monsters How to make a monster with shapes Literature Connections: The Shape of Things By Dayle Ann Dodds Bear in a Square By Stella Blackstone Shapes, Shapes, Shapes By Tana Hoban	Circle Rectangle Square Triangle Up Down Right Left Symmetry Equal parts Halves Likely unlikely Tally	Chapter 5 Test Observation Identify and draw a circle, rectangle, square, and triangle (kindergarten assessment) Recognize symmetry

Math Chapter	Resources	Vocabulary	Assessment
Chapter Six: Solid Shapes 6.1 Sort Solid Shapes 6.2 Identify Solid Shapes 6.3 Build Solid Shapes 6.4 Surfaces of Solid Shapes 6.5 Combine Solid Shapes 6.6 Problem-Solving: Make a graph	Chapter 6 student pages Chapter 6 practice pages Solid Shapes Solid Shapes song on math CD Solid Shapes scavenger hunt Marshmallows and toothpicks	Stack Roll Slide Cube Sphere Pyramid Rectangular prism Cone Cylinder Surface	Chapter 6 Test Observation Student identifies each solid shape by name (kindergarten assessment)
	to create 3D shapes Play Dough	Graph	
	Chapter Six: Solid Shapes 6.1 Sort Solid Shapes 6.2 Identify Solid Shapes 6.3 Build Solid Shapes 6.4 Surfaces of Solid Shapes 6.5 Combine Solid Shapes	Chapter Six: Solid Shapes 6.1 Sort Solid Shapes 6.2 Identify Solid Shapes 6.3 Build Solid Shapes 6.4 Surfaces of Solid Shapes 6.5 Combine Solid Shapes 6.6 Problem-Solving: Make a graph Chapter 6 student pages Chapter 6 practice pages Solid Shapes Solid Shapes Solid Shapes Solid Shapes song on math CD Solid Shapes scavenger hunt Marshmallows and toothpicks to create 3D shapes	Chapter Six: Solid ShapesChapter 6 student pages Chapter 6 practice pagesStack Roll Slide6.1 Sort Solid ShapesSolid ShapesCube Sphere6.2 Identify Solid ShapesSolid ShapesCube Sphere6.3 Build Solid ShapesSolid ShapesSolid Shapes song on math CDPyramid Rectangular prism6.5 Combine Solid ShapesCDRectangular prism6.6 Problem-Solving: Make a graphSolid Shapes scavenger huntCone Cylinder Surface Graph

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GLCE's Number and Operation: Count, write, and order numbers N.ME.00.01 Count objects in sets up to 30 N.ME.00.03 Compare and order numbers to 30 using phrases as "more than" or "less than" N.ME.00.04 Read and write numbers to 30 and connect them to the quantities they represent Number and Operation: Explore number patterns N.MR.00.10 Create, describe, and extend simple number patterns Common Core K.CC.7 Compare two numbers between 1 and 10 presented as written numerals. K.CC.3 Write numbers from 0-20. Represent a number of objects with a written numeral 0-20 K.CC.4 Understand the relationship between numbers and quantities; connect counting to cardinality. When counting objects, say the number name in the standard order, pairing each object with one and only one number name and each number name with one and only one object. 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. Understand that each successive number name refers to a quantity that is one later.	Chapter Seven: Represent and Read Numbers 6-12 7.1 Six 7.2 Seven 7.3 Eight 7.4 Nine 7.5 Ten 7.6 Problem Solving: Use a Pattern 7.7 Eleven 7.8 Twelve Chapter Eight: Using Numbers 0-12 8.1 Names for 1-12 8.2 Order Number to 12 8.3 Sort by Number 8.4 More and Fewer 8.5 Estimate Quantities 8.6 Problem Solving: Act it Out	Chapter 7 & 8 student pages Chapter 7 & 8 practice pages Workmats Additional number writing practice pages (Math File) Counters Ten Frames Snap cubes Dice Roll Race Laminated dot cards, digit cards, and number word cards Create a number line with 0- 12 laminated cards. Cover numbers and working figuring out what number is missing. Literature Connection: Ten Black Dots By Donald Crews (Houghton Mifflin Reading Book) James and the Rain By Karl Kuskin	Six Seven Eight Nine Ten Eleven Twelve Pattern Sort More Fewer Estimate Equal groups Before After Between	Chapter 7 Test Observation Students identify and write numbers 6-12 (kindergarten assessment) Chapter 8 Test Observation

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GLCE's Number and Operations: Count, write, and order numbers N.ME.00.01 Count objects in sets up to 30 N.ME.00.03 Compare and order numbers to 30 using phrases as "more than" or "less than" N.ME.00.04 Read and write numbers to 30 and connect them to the quantities they represent Measurement: Explore concepts of time M.UN.00.01 Know and use the common words for the parts of the day (morning, afternoon, evening, night) and relative time (yesterday, today, tomorrow, last week, next year). M.TE.00.02 Identify tools that measure time (clocks measure hours and minutes; calendars measure days, weeks, and months). M.UN.00.03 Identify daily landmark times to the nearest hour (lunchtime is 12 o'clock; bedtime is 8 o'clock). Common Core	Chapter nine: Time 9.1 Times of Day 9.2 Days and Months on the Calendar 9.3 Comparing Temperature 9.4 Problem Solving: Use a Picture 9.5 More time, Less time 9.6 Order Events 9.7 Time to the Hour 9.8 More Time to the Hour 9.9 Compare Analog and Digital Clocks	Chapter 9 Student pages Chapter 9 Practice pages Student clocks Literature Connections: Bunny Day By Rick Walton	Morning Afternoon Evening Calendar Yesterday Today Tomorrow Hotter Colder Warmer Cooler First Last Second Third next analog clock digital clock Minute hand Hour hand	Chapter 9 Test Observation Days of the week Song Months of the year Song Calendar Time

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GLCE's	Chapter Ten: Money 10.1 Sort and Graph Coins 10.2 Penny 10.3 Nickel 10.4 Dime 10.5 Quarter	Chapter 10 student pages Chapter 10 practice pages Touch money Coins	Coin Dime Penny Nickel Quarter Money Sort	Chapter 10 Test Observation
Common Core	10.5 Quarter 10.6 Problem Solving: Act it Out		Graph	

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GLCE's Measurement: Explore other measurement attributes M.UN.00.04 Compare two or more objects by length, weight, and capacity M.PS.00.05 Compare length and weight of objects by comparing to reference objects, and use terms such as shorter, longer, taller, lighter, heavier. Common Core	Chapter Eleven: Length 11.1 Compare Length 11.2 Order Length 11.3 Measure Length 11.4 Estimate and Measure Length 11.5 Explore Area 11.6 Problem Solving: Act it Out	Chapter 11 student pages Chapter 11 practice pages Scale/Balance Attribute blocks Classroom objects	Long short Longer shorter Tall taller Longest Shortest Tallest Measure Estimate Area	Chapter 11 test Observation
 K.MD.1 Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object. K.MD.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. 	Chapter Twelve: Weight and Capacity 12.1 Compare Weight 12.2 Order by Weight 12.3 Measure by Weight 12.4 Estimate and Measure Wight 12.5 Compare Capacity 12.6 Order by Capacity 12.7 Measure Capacity 12.8 Estimate and Measure Capacity 12.9 Tools for Measuring 12.10 Problem Solving: Use Logical Reasoning	Chapter 12 student pages Chapter 12 practice pages Attribute blocks Scale/Balance Classroom objects Bag of beans Plastic cup Rulers Thermometer Measuring cup Clock	Heavy Light Heavier Lighter Lightest Heaviest Balance Empty Full Holds more Holds less Calendar Ruler Thermometer Clock	Chapter 12 test Observation

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GLCE's Number and Operations: Compose and decompose numbers N.ME.00.06 Understand the numbers 1 to 30 as having one, or two or three groups of ten and some ones. Also count by tens with objects in ten-groups to 100. N.MR.00.07 Compose and decompose numbers from 2 to 10, with attention to the additive structure of number systems N.MR.00.08 Describe and make drawings to represent situations/stories involving putting together and taking apart for totals up to 10; use finger and object counting.	Chapter Thirteen: Addition 13.1 Model Addition 13.2 Add 1 to Numbers 0-9 13.3 Add 2 to Numbers 0-5 13.4 Add 2 to Numbers 6-8 13.5 Add Pennies 13.6 Practice Addition 13.7 Doubles 13.8 Problem Solving: Draw a Picture	Chapter 13 student pages Chapter 13 practice pages Cubes, beads, counters Work mat 7 & 8	Add Join Put together Plus sign Equals sign Addition sentence sum doubles	Chapter 13 Test Observation
Common Core K.OA.1 Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g. claps) acting out situations, verbal explanations, expression, or equations. K.OA.2 Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem. K.OA.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 $5 = 4 + 1$). K.OA.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. K.OA.5 Fluently add and subtract within 5.	Chapter Fourteen: Subtraction 14.1 Model Subtraction 14.2 Subtract 1 from 1-10 14.3 Subtract 2 from 2-5 14.4 Subtract 2 from 2-10 14.5 Subtract Pennies 14.6 Practice Subtraction 14.7 Relate Addition and Subtraction 14.8 Problem Solving: Choose the Operation	Chapter 14 student pages Chapter 14 practice pages Cubes, beads, counters Work mat 1, 7, and 8	Subtract Minus sign Subtraction sentences difference	Chapter 14 Test Observation

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Common Core K.NBT.1Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (such as 18=10 + 8); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones. K.CC.5 Count to answer "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. K.CC.2 Count forward beginning from a given number within the known sequence (instead of having to begin at 1).	Chapter Sixteen: Numbers Greater than 20 16.1 Numbers 21-25 16.2 Numbers 26-30 16.3 Order Numbers 0-31 16.4 Calendar: Using Numbers 1-31 16.5 Count by Twos, Fives, Tens 16.6 Problem Solving: Use a Pattern	Chapter 16 Student pages Chapter 15 Practice pages Ten frames Workmat 5 and 6 Cubes/counters Counting by 2 song 2,4,6,8,10 Here we go, lets count again 12,14,16,18 Keep it up, we're a great team 20 (clap) 22 (head), 24 (shoulders) 26 (hips), 28(knees) 30	Numbers 21-30 calendar count by 2 count by 5 count by 10 patterns	Chapter 16 Test Observation Kindergarten Assessment