

KINDERGARTEN MATHEMATICS CURRICULUM MAP 2007-08

| UNITS OF STUDY | STANDARDS, BENCHMARKS, GLCES OR HSCES | BIG IDEAS / KEY CONCEPTS | ASSESSMENTS | | LEARNING STRATEGIES <i>Skills</i> | CONTENT ACTIVITIES <i>Knowledge</i> | VOCABULARY | INSTRUCTIONAL RESOURCES |
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| | | | FOR LEARNING <i>(Formative)</i> | OF LEARNING <i>(Summative)</i> | | | | |
| | GEOMETRY | | | | | | | |
| Create, Explore, and Describe Shapes | G.GS.00.01 Relate familiar three-dimensional objects inside and outside the classroom to their geometric name, e.g., ball/sphere, box/cube, soup can/cylinder, ice cream cone/cone, refrigerator/prism. | Three-dimensional Objects | Create 3-D Objects Describe attributes of 3-D Objects | End-of-Year Assessment | Display and describe various objects and their common 3-D shape | Ability to draw pictures of objects according to their 3-D shapes | Ball / Sphere Box / Cube Soup Can / Cylinder Ice Cream Cone / Cone Refrigerator / Rectangular Prism | Bridges Home Connection #22 (100) p. 424 Can You Build It? (117) p. 493 |
| | G.GS.00.02 Identify, sort, and classify objects by attribute and identify objects that do not belong in a particular group. | Sort and Classify Objects | Arrange Objects According to Attributes Identify objects that do not belong in a group | End-of-Year Assessment | Identify objects with straight edges – box, objects with circles – cylinders, objects with no straight edges – sphere, objects with a point – cone | Match and sort objects according to their attributes | Ball / Sphere Box / Cube Soup Can / Cylinder Ice Cream Cone / Cone Refrigerator / Rectangular Prism | Bridges – Number Corner Home Connection (1) Sorting Shapes (1, 5, 7, 9, 10) Goodbye Shapes (11, 12, 14, 15) Geoboard Shapes (3) p. 35 Pattern Block Designs (34) Pattern Block Puzzles (34, 44) There’s a Shape in My Pocket (53, 54) p. 212 Geoboard Shapes Triangles and Squares (119) Grandma Buttons AIMS Fall ShapeTown p. 62 |
| Explore Geometric Patterns | G.GS.00.03 Create, describe, and extend simple geometric patterns. | Geometric Patterns | Create And Name Patterns | End-of-Year Assessment | Review and display a variety of geometric patterns | Create own geometric patterns by drawing and coloring; also by organizing objects | Triangle Square Circle Rectangle Diamond Star Heart | Bridges Pattern Blocks (2) p. 33 Quilt (14) p. 66 Quilt (38) p. 159 Pages: 1, 42, 86, 91 |
| | NUMBERS AND OPERATIONS | | | | | | | |
| Count, Write, and Order Numbers | N.ME.00.01 Count objects in sets up to 30. | Counting in Sets | Verbal Counting with Objects | End-of-Year Assessment | Count objects creating different sets Draw objects in a variety of sets | Sort objects into different sets | Amount Less Than More Than Tally Sets | Bridges Bugs (4) p. 40 Frogs (27) p. 131 Sea Creatures (59) p. 257 Frog Handfuls (92) p. 373 Sea Creatures Handfuls (85) p. 353 |
| | 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. | Compare and Order Sets of Numbers | Verbal Assessment Check-up Quiz Test | End-of-Year Assessment | Represent a set of objects compared to another set of objects Draw objects in sets and reorder objects in different sets | Match sets of objects that are the same Compare sets of objects and order as greater than or less than | Same As Less Than More Than (Greater Than) | Bridges Which Bug Will Win? (17) p. 80 All the <i>Beat You To....</i> games All the <i>Race You To.....</i> games |

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| | N.ME.00.03 Compare and order numbers to 30 using phrases such as "more than" or "less than". | Compare and Order Numbers | Verbal Assessment | End-of-Year Assessment | Organize several sets of numbers to show quantity of "more than" and/or "less than" | Proper placement of sets of numbers | Same As Less Than More Than (Greater Than) | Bridges Munch and Crunch (19) p. 101 Butterfly Countdown (31) p. 141 Bugs to 10 (43) p. 174 Mystery Number (68) p. 299 |
| | N.ME.00.04 Read and write numbers to 30 and connect them to the quantities they represent. | Read and Write Numbers | Verbal Assessment Writing Assessment | End-of-Year Assessment | Write numbers and draw objects to represent the number Read numbers from flashcards and documents | Ability to read and write numbers | Numbers 1 - 30 | Bridges Which Numeral Will Win? (46) p. 186 Sing and Write (59) p. 303 Frog Handfuls (92) p. 373 Patterns and Number (101-103) p. 426 Calendars |
| | N.ME.00.05 Count orally to 100 by ones. Count to 30 by 2's, 5's and 10's using grouped objects as needed. | Verbal Counting | Verbal Assessment | End-of-Year Assessment | Practice skip counting as a class unit Alternate skip counting between students-one student says 2, the next students says 4, the third says 6, and so on Draw and organize objects into groups | Verbally count using skip counting | Numbers 1 – 100 By 2's, 5's, and 10's | Bridges - Number Corner - counting days of month - counting links by 1's and 10's - 100 day Activities Bridges Popsicle Tallying by 5's (25) p. 103 Ladybugs Counting by 2's (52) p. 208 Frog Counting by 2's p. 393 All activities with counting mats Bugs (4) p. 40 Frogs (27) p. 131 Sea Creatures (59) p. 373 Unifix Cubes (97) p. 411 |
| 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. | Groups of Tens and Ones | Add and Subtract with Objects | End-of-Year Assessment | Divide whole numbers into different size groups Group numbers into sets and combine to form a specific number | Regroup numbers into various sets by drawing and/or rearranging individual objects | Number of Groups | Bridges All activities with counting mats Bugs (4) p. 40 Frogs (27) p. 131 Sea Creatures (59) p. 373 Bugs/Tallies/Number (30) p. 139 Unifix Cubes (97) p. 411 Bridges – Number Corner - Counting Links |
| | N.MR.00.07 Compose and decompose numbers from 2 to 10, e.g., $5 = 4 + 1 = 2 + 3$, with attention to the additive structure of number systems, e.g., 6 is one more than 5, 7 is one more than 6. | Compose And Decompose Numbers | Check-up Quiz Test | End-of-Year Assessment | Combine numbers to create addition facts Separate numbers into subtraction facts | Write number sentences of addition and subtraction | Plus Minus Equal Equation | Bridges Shark/Seal/Whale Drama (73,74) p. 315 Sea Creatures Picture (75-83) p. 322 Frog Picture Problems (105-111) p. 439 Where Do You See It? (115) p. 483 Which Ones Do Not Belong? (116) p. 489 |
| | 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. | Object Counting Including Drawings | Draw Addition And Subtraction Stories | End-of-Year Assessment | Develop stories to represent addition and subtraction of objects | Creating own stories to display addition and subtraction of objects | Altogether Difference | Bridges Shark/Seal/Whale Drama (73,74) p. 315 Sea Creatures Picture (75-83) p. 322 Frog Picture Problems (105-111) p. 439 Think and Draw Adding p. 12 -15 Subtracting p. 16 - 20 |
| Add and Subtract Numbers | N.MR.00.09 Record mathematical thinking by writing simple addition and subtraction sentences, e.g., $7 + 2 = 9$, $10 - 8 = 2$. | Addition and Subtraction Sentences | Check-up Quiz Test | End-of-Year Assessment | Review writing numbers Set up format for writing equations | Practice writing addition and subtraction sentences | Plus Minus Equal | Bridges Pages 317 – 321 Bridges Manipulatives |

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| Explore Number Patterns | N.MR.00.10 Create, describe, and extend simple number patterns. | Number Patterns | Count by 2's, 5's, and 10's | End-of-Year Assessment | Demonstrate number patterns using objects Draw and color a variety of patterns | Recognize different number patterns by counting color blocks, objects, or sequence of drawings Count sets of numbers by 2's, 5's, and 10's | Pattern Skip Counting | Bridges Ladybugs (52) p. 208 Frogs Counting p. 393 Patterns & Counting (101-103) p. 426 Bridges – Number Corner Calendar |
| 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). | Parts of Day/Week Relative Time | Verbal Assessment Check-up Quiz Test | End-of-Year Assessment | Identify parts of day and week with a calendar and pictures | Verbally explain relationship of the parts of a day and week | Hours Minutes Yesterday Today Tomorrow Morning Afternoon Night | Bridges – Number Corner Calendar Bean Clock - Home Connection (25) p. 473 Pages: 55, 79, 80 Science Big Books The Four Seasons |
| | M.TE.00.02 Identify tools that measure time (clocks measure hours and minutes; calendars measure days, weeks, and months). | Tools to Measure Time | Check-up Quiz Test | End-of-Year Assessment | Display tools that measure time | Recognize tools of measure | Clocks Watch Calendars | Bridges – Number Calendar Calendar Activities Bean Clock Activities |
| | M.UN.00.03 Identify daily landmark times to the nearest hour (lunchtime is 12 o'clock; bedtime is 8 o'clock). | Clock Time | Tell time to the hour using a clock | End-of-Year Assessment | Reference daily activities to specific times during the day | Identify and connect the times of day with daily/routine activities | Breakfast Lunch Dinner Bedtime | Bridges – Number Calendar Calendar Activities Bean Clock Activities |
| Explore other Measurement Attributes | M.UN.00.04 Compare two or more objects by length, weight and capacity, e.g., which is shorter, longer, taller? | Compare Objects | Measure with Cubes Measure with a Balance and Scale | End-of-Year Assessment | Demonstrate different lengths, weights, and capacities of objects Compare lengths of objects Compare weight of objects Compare capacity of objects | Recognize and compare lengths, weights, and capacities of different objects | Heavier Lighter Taller Shorter Longer | Bridges Unifix Cube Measuring (94) p. 401 Frog Jump Measuring (113) p. 474 Pages: 38, 44, 45, 69, 97, 98 AIMS Fall - How Tall Are You? p. 11 - A Weigh We Go p. 18 Winter - Whoa – That's Heavy p. 71 Spring - Eggstra Exploration p. 23 - Feet Findings p. 38 |
| | 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. | Object Comparison | Verbal Assessment | End-of-Year Assessment | Identify objects as standards or benchmarks, ie. gallon of milk, loaf of bread, tube of toothpaste, new pencil, ruler | Compare objects to standard objects | Shorter Longer Taller Wider Heavier Lighter | Bridges Pages: 44, 45, 97 Math Excursions K Unit 4 Are You Sure It's Twenty p. 129 |

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| <p>Pacing</p> | <p>September - 2-D Shapes - Numbers to 30 - Number writing 0-9 - Sorting - Pattern – Introduction - Counting to 10 - One to one Correspondence</p> <p>October - Continue 2-D Shapes - Introduce 3-D Shapes - Reading numbers 0-9 - Tally – groups of 5 - Begin counting by 10's - Sets to 10 - Decomposing by 1 (counting down) - Introduce composing and decomposing numbers 1-4 using manipulatives - Continue counting to 30, sorting, patterns</p> <p>November - Continue counting to 30 - Read, write, and order number 11-19 - Introduce function of clock - Introduce comparing length, weight, and capacity of two objects</p> <p>December - Counting by 2's - Function of the clock - Introduce 100's chart and relate it to number patterns (2's, 5's, and 10's)</p> <p>January - Introduce reading, writing, and ordering numbers 20-30 - Introduce sets to 30</p> <p>February - Introduce number sentences - Introduce yesterday, today, and tomorrow - Continue to practice counting to 100 - Continue counting by 2's, 5's, and 10's - Expand on number patterns</p> <p>March - Begin writing number sentences to 10 - Begin to compare three or more objects by length, weight, and capacity - Introduce 3-D objects</p> <p>April - Begin to sort and classify objects by two attributes and identify objects that do not belong</p> <p>May/June - Expand and work on all math concepts - End-of-Year Assessments</p> | | | | | | | |
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