

Kindergarten Math Unit 7

Canterbury Public Schools

Subject	Math
Grade Level	Kindergarten
Unit Title	Solid Shapes All Around Us
Unit Goals	Students identify, describe, analyze, and compose two and 3 dimensional shapes. Counting, addition, and subtraction are revisited in the geometric contexts
Pacing (# of weeks)	4 - 6 weeks
Standards	<p>Section A K.CC, K.CCA.1, K.CC.A.3, K.CC.B.5, K.CC.C.6, K.CC.C.7, K.G.B.5, K.G.B.6, K.NBT.A.1, K.OA., K.OA.1, K.OA.2, K.OA.A.3, K.OA.A.4, K.OA.A.5 Compose shapes from smaller shapes Count and compare numbers , and solve story problem involving shapes Compose and count with flat shapes</p> <p>Section B K.CC.A.1, K.CC.B.5, K.G, K.G.A.1, K.G.A.2, K.G.A .3 , K.G.B.4, K.G.B.5, K.G.B.6, K.MD.A, K.MD.A.1, K.MD. A.2, K.MD. B.3, K.OA. A.5 Compare weight and capacity of objects Compose shapes from smaller shapes Describe and compare three-dimensional shapes</p> <p>Match equations to story problems solve story problems involving shapes</p>
Content/Conceptual Knowledge (know)	Distinguish solid shapes from flat shapes, weight is an attribute of solid shapes and compare weights, and develop understand of a three-dimendioaal shape
Skills (be able to do)	Compose figures with pattern blocks and count up to 20 Write and compare numbers Solve story problems and create equations to match them Distinguish between flat and solid shapes Consider the weight and capacity of solid objects Identify the solid shapes around them Describe attributes of solid shapes Compare and sort shapes Choral counts centers Count to answer ‘How many?’ questions Represent a quantity with a number

	<p>Show student thinking using objects, drawings, numbers or words</p> <p>Subitize a group of things to describe how many</p> <p>Count and write numbers/identify a quantity</p> <p>Solve a puzzle using only one pattern block shape</p> <p>Ask mathematical questions and recognize mathematical features of shapes and model with shapes</p> <p>Explain connections between objects, drawings, story problems, an equations</p> <p>Distinguish between flat and solid shapes</p> <p>Describe and compare weights of objects/ capacity</p>
Essential Questions	<p>How do you distinguish three-dimensional shapes (identify by attribute)?</p> <p>Can shapes be manipulated and morph into other shapes?</p> <p>How can you use shapes/ then change shapes to make the same larger shape</p> <p>What kind of experiences help develop number sense</p> <p>How do geometric models describe spatial relationships?</p> <p>How are geometric shapes and objects classified?</p>
Enduring Understandings	<p>Solid shapes are three-dimensional</p> <p>Shapes can be made up of smaller shapes</p> <p>Shapes can be manipulated, turned to fit a space</p> <ul style="list-style-type: none"> + Equals addition <ul style="list-style-type: none"> - Equals subtraction <p>Equations may be written in two ways</p> <p>$6=2+4$ $2+4=6$</p> <p>Changing the order of addends does not change the sum of the parts</p> <p>Number families are created from addition/subtraction equations</p> <p>$6 = 2+4, 6 = 4+2, 6 - 4 = 2, 6 - 2=4$</p> <p>Geometry and spatial sense offer ways to interpret and reflect on our physical environment</p> <p>Analyzing geometric relationships develops reasoning and justification skills</p>
Vocabulary	<p>Equals, flat, solid</p> <p>Rhombus, triangle, trapezoid, hexagon, octagon,</p> <p>Lighter than, heavier than, heavy, light</p> <p>Sphere, cylinder, cube, cone</p> <p>Sides, points, corners</p>
Common Learning	<p>Lesson 6 /activity 2, Many Ways to Make 10</p>

<p>Experiences broken down by standard addressed in the unit</p>	<p>Lesson 11, Activity 1 Compare Solid Shapes Create models siding solid shapes to represent objects in their world Tell and solve addition or subtraction story problems using shapes Observe how things are the same/different Use comparison language Describe solid shapes /sort Build solid shapes Compare rectangular prisms</p> <p>Estimate a reasonable number based on experience and known information</p>
<p>Assessments</p>	<p>Count shapes, sort and count, tell how many, complete puzzles, write a number, Student self assess.... Question: at the end of an asking sentence (?) Accurately retell a story problem in their own words, use objects, drawings, or equations to represent a story problem, explain connections between objects, drawings, story problems, and equations Checkpoints: count all to determine the total Write a number to represent a quantity up to 20 Accurately retell a story problem in their own words Use objects, drawings, or equations to represent a story problem Explain connections between objects, drawings, story problems, and equations Reason why something doesn't belong Describe and compare attributes of solid shapes Sort solid shapes Use positional words to describe locations of solid shapes Put solid shapes together to compose new shapes Build solid shapes</p>
<p>Student Resources</p>	<p>Geoblocks, everyday objects, connecting cubes, solid shapes, clay, pattern blocks, number cards, blocks, puzzles, 10 frames, 5 frames, shape puzzles</p>
<p>Teacher Resources</p>	<p>For example: Texts, literature, math mats Texts: Mighty Maddie by Stuart J. Murphy Just a Little Bit by Ann Tompert The SeeSaw by Judith Koppens Balancing Act by Ellen Stoll Walsh</p>
<p>Strategies</p>	<p>Use of manipulatives, small group, learning centers, build shapes using straws, grouping strategies, noticing, partner work, notice and wonder Hands on centers/ activities Use Number Talks</p>

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