










DOMAIN: Geometry

CLUSTER: Reason with shapes and their attributes^o

STANDARDS FOR MATHEMATICAL CONTENT	STANDARDS FOR MATHEMATICAL PRACTICE	WHOLE GROUP RESOURCES	CENTER RESOURCES	FORMATIVE ASSESSMENT
<p>1.G.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>	<p>MP1 Make sense of problems and persevere in solving them. MP3 Construct viable arguments and critique the reasoning of others. MP4 Model with mathematics. MP7 Look for and make use of structure.</p>	<p>50 Problem Solving Lessons (Burns) <ul style="list-style-type: none"> Lessons with Geoboards, pp.33-35 <p>About Teaching Mathematics, 2nd Ed. (Burns) <ul style="list-style-type: none"> A Sample Activity – Pentominoes, p. 80 Explorations Using the Geoboard, p. 94 Sorting Shapes on the Geoboard, p. 96 <p>A Collection of Math Lessons from Grades 1 through 3 (Burns & Tank) <ul style="list-style-type: none"> Chapter 11: Box Sorting, pp. 117-128 <p>enVisionMATH <ul style="list-style-type: none"> 8-1, 8-2, 8-4, 8-5, 8-6 </p></p></p></p>	<p>About Teaching Mathematics, 2nd Ed. (Burns) <ul style="list-style-type: none"> Explorations Using the Geoboard, p. 95 Square Up, p. 96 Shape Construction on the Geoboard, p. 97 Geoboard Square Search, p. 97 <p>enVisionMATH <ul style="list-style-type: none"> Topic 8, pp. 198B, 202B, 210B, 214B, 218B Mindpoint Quizshow </p></p>	<p>enVisionMATH <ul style="list-style-type: none"> Quick Checks, pp. 198A, 202A, 210A, 214A, 218A Free-Response Test Master, p. 231B Performance Assessment, p. 231C <p>enVisionMATH: Transitioning to California's CCSS Teacher's Guide  <ul style="list-style-type: none"> Topic 8 Test Master, p. CC231 </p> </p>

STANDARDS FOR MATHEMATICAL CONTENT	STANDARDS FOR MATHEMATICAL PRACTICE	WHOLE GROUP RESOURCES	CENTER RESOURCES	FORMATIVE ASSESSMENT
<p>1.G.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>	<p>MP1 Make sense of problems and persevere in solving them. MP4 Model with mathematics. MP5 Use appropriate tools strategically. MP7 Look for and make use of structure.</p>	<p>About Teaching Mathematics, 2nd Ed. (Burns) <ul style="list-style-type: none"> A Sample Activity – Pentominoes, p. 80 The Four-Triangle Problem, p. 93 <p>A Collection of Math Lessons from Grades 1 through 3 (Burns & Tank) <ul style="list-style-type: none"> Chapter 9: The Four-Triangle Problem, pp. 99-105 <p>enVisionMATH <ul style="list-style-type: none"> 8-1, 8-2, 8-3, 8-7 <p>enVisionMATH: Transitioning to California's CCSS Teacher's Guide  <ul style="list-style-type: none"> 8-8A Building with Solid Figures, pp. 5A-8B </p></p></p></p>	<p>About Teaching Mathematics, 2nd Ed. <ul style="list-style-type: none"> The Pentomino Game, p. 82 Geometry Building, p. 85 Introductory Exploration with Pattern Blocks, p. 90 Hexagon Fill-In Puzzle, p. 90 Hexiamonds, p. 91 <p>enVisionMATH <ul style="list-style-type: none"> Topic 8, pp. 198B, 202B, 206B, 222B Mindpoint Quizshow <p>enVisionMATH: Transitioning to California's CCSS Teacher's Guide  <ul style="list-style-type: none"> 8-8A Math In Motion, p. 8B </p></p></p>	<p>enVisionMATH <ul style="list-style-type: none"> Quick Checks, pp. 198A, 202A, 206A, 222A Free-Response Test Master, p. 231B <p>enVisionMATH: Transitioning to California's CCSS Teacher's Guide  <ul style="list-style-type: none"> Quick Check, p. 8A Topic 8 Test Master, p. CC231 </p></p>

STANDARDS FOR MATHEMATICAL CONTENT	STANDARDS FOR MATHEMATICAL PRACTICE	WHOLE GROUP RESOURCES	CENTER RESOURCES	FORMATIVE ASSESSMENT
<p>1.G.3 Partition circles and rectangles into two and four equal shares, describe the shares using the words <i>halves</i>, <i>fourths</i>, and <i>quarters</i>, and use the phrases <i>half of</i>, <i>fourth of</i>, and <i>quarter of</i>. 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>	<p>MP4 Model with mathematics. MP5 Use appropriate tools strategically. MP6 Attend to precision MP7 Look for and make use of structure. MP8 Look for and express regularity in repeated reasoning.</p>	<p>50 Problem-Solving Lessons Grades 1-6 (Burns)</p> <ul style="list-style-type: none"> Sharing an Apple, pp. 43-45 (<i>Adaptation: Share one apple with two or four students instead of three students</i>) Exploring Halves, pp. 53-54 Dividing Cakes, pp. 55-56 Cutting Cake, pp. 97-98 <p>enVisionMATH: Transitioning to California's CCSS Teacher's Guide </p> <ul style="list-style-type: none"> 8-8B Making Equal Parts, pp. 9A-12B 8-8C Describing Equal Parts of Whole Objects, pp. 13A-16B 8-8D Making Halves and Fourths of Rectangles and Circles, pp. 17A-20B 	<p>enVisionMATH</p> <ul style="list-style-type: none"> Mindpoint Quizshow Pizza Eater ² Cuckoo for Symmetry ² <p>enVisionMATH: Transitioning to California's CCSS Teacher's Guide </p> <ul style="list-style-type: none"> 8-8B Look and See, p. 12B 8-8C Cover 3, p. 16B 8-8D Try Together, p. 20B 	<p>enVisionMATH: Transitioning to California's CCSS Teacher's Guide </p> <ul style="list-style-type: none"> Quick Checks, pp. 12A, 16A, 20A Topic 8 Test Master, p. CC231

Domain Legend

■ **Major Cluster:** Areas of intensive focus, where students need fluent understanding and application of the core concepts (approximately 70%)

▣ **Supporting Cluster:** Rethinking & linking; some material is being covered, but in a way that applies core understandings (approximately 20%)

● **Additional Cluster:** Expose students to other subjects, may not connect explicitly to the major work of the grade (approximately 10%)

* Students do not need to learn formal names such as "right rectangular prism."

 Online resource located at **PearsonSuccessNet.com**, click **Other Resources**

² Online game located at **envisionmathca.com**, click **Teacher Resources**

³ Online game located at **PearsonSuccessNet.com**, click **Premium**, click **Search**, type keyword "**game**"

ADDITIONAL SUPPORT

LANGUAGE OBJECTIVES	ENDURING UNDERSTANDINGS	ESSENTIAL QUESTIONS	KEY VOCABULARY
<ul style="list-style-type: none"> Students will be able to describe plane shapes and solid figures by their attributes to a partner. Students will be able to construct a Double Bubble Map to compare and contrast one geometric figure to another. Students will be able to describe pieces using the words <i>halves</i>, <i>fourths</i>, and <i>quarters</i> to a partner. Student will be able to use the phrases <i>half of</i>, <i>fourth of</i>, and <i>quarter of</i> when describing models. 	<ul style="list-style-type: none"> Plane shapes have many properties that make them different from one another. Attributes can be used to sort solid figures. Many sets of solids can be sorted in more than one way. Plane shapes can be combined to make new plane shapes. Solid figures can be combined to make other solid figures. Shapes can be divided into equal parts called halves and quarters or fourths. Decomposing shapes into equal shares creates smaller shares. 	<p>1.G.1</p> <ul style="list-style-type: none"> How can identifying the properties of plane shapes help you sort the shapes? How can attributes be used to sort solid figures? <p>1.G.2</p> <ul style="list-style-type: none"> How can plane shapes be combined to make new plane shapes? How can solid figures be combined to make new solid figures? <p>1.G.3</p> <ul style="list-style-type: none"> How can shapes be divided into equal halves and fourths? How does decomposing shapes into equal shares affect the size of the shares? 	<ul style="list-style-type: none"> circle cone corner cube cylinder equal parts fair sharing flat surface fourth of four of fourths fraction half of halves plane shape pyramid quarter of quarters rectangle rectangular prism side solid figure sort sphere square triangle two of vertex (vertices) whole





DAILY ROUTINES

- MP3** Students bring in magazine and newspaper cutouts that represent the shape/figure of the day. Classmates describe the object: "I know this is a ___, because..." Students agree or disagree with support.
- MP4** Students name real-world objects matching the shape/figure of the day. Record responses on class Tree Map. Students look for examples of the shape/figure in their community during and outside of the school day.
- MP4** Students look at a picture and name the shapes/figures they see.
- MP6** Students compare/contrast shapes/figures on a Double Bubble Map.
- MP6** Students reach into a bag and try to guess the concealed shape/figure. "I know this is a ___, because..."
- MP6** A student lists attributes as the class tries to guess the shape/figure. Clues can be recorded on index cards ahead of time by students or the teacher.
- MP8** Create a pattern by adding a shape/figure to the calendar each day of the week. Recite the names of the shapes/figures daily starting from day 1. Students predict the next shape/figure with reasoning.

LITERATURE CONNECTIONS

- *Eating Fractions* by Bruce MacMillan
- *Fraction Action* by Loreen Leedy
- *Fraction Fun* by David A. Adler
- *The Greedy Triangle* by Marilyn Burns
- *Shape Up!* by David A. Adler
- *The Village of Round and Square Houses* by Ann Grifalconi

DIFFERENTIATION 

FRONT LOADING	ENRICHMENT	INTERVENTION
<p>enVisionMATH</p> <ul style="list-style-type: none"> • The Language of Math, Topic 8, pp. 193I-193J • Interactive Math Story, Topic 8, pp. 193K-193L • Review What You Know, Home-School Connection, My New Math Words, Topic 8, p. 193 • Shape Hunt, Topic 8, p. 194 	<p>About Teaching Mathematics, 2nd Ed. (Burns)</p> <ul style="list-style-type: none"> • Sharing Brownies, p. 230 • The Tangram Puzzle, p. 83 • That's Just Half the Story, p. 84 <p>enVisionMATH</p> <ul style="list-style-type: none"> • Fractions ³ • Geometry ³ • Shape (Grade 2) ³ • Universal Access, Topic 8, p. 193G • California Math Project, Topic 8, p. 194 • Step 1 Problem of the Day • Step 4 Enrichment Master 	<p>enVisionMATH</p> <ul style="list-style-type: none"> • Universal Access, Topic 8, p. 193G • Step 4 Intervention, pp. 198B, 202B, 206B, 210B, 214B, 218B, 222B • Math Diagnosis and Intervention System: Booklet D, Grades K-3 • Topic 8 Reteaching Black Line Masters • Reteaching, p. 232 • eTools <p>enVisionMATH: Transitioning to California's CCSS Teacher's Guide </p> <ul style="list-style-type: none"> • 8-8A Building Matching Objects, , p. 8B • 8-8B Equal Parts, p. 12B • 8-8C Folding Equal Parts, p. 16B • 8-8D Matching Shapes, p. 20B