

North Penn School District
Elementary Math Parent Letter






Grade 2

Unit 7 – Chapter 11: Geometry and Fraction Concepts

Examples for each lesson

Lesson 11.1

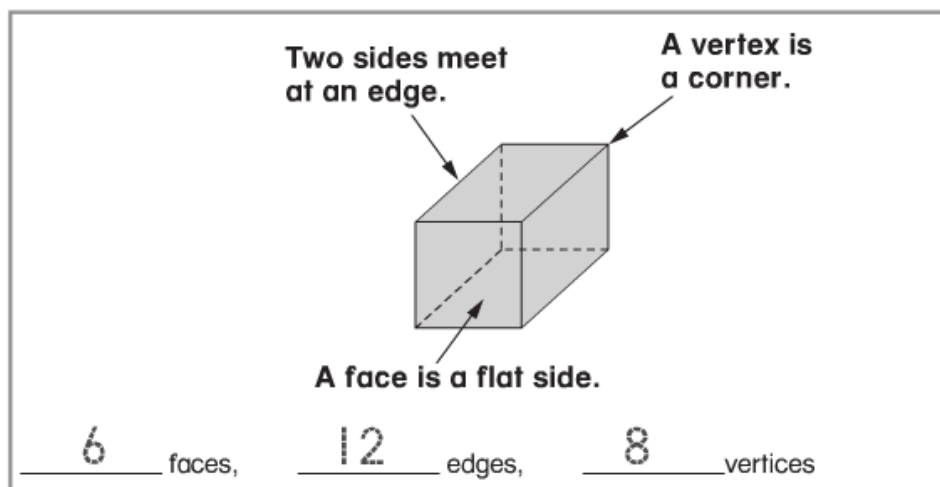
Three-Dimensional Shapes Reason with shapes and their attributes.

Three-dimensional objects come in different shapes.		
 sphere	 cone	 cylinder
 rectangular prism	 cube	

More information on this strategy is available on Animated Math Model #55.

Lesson 11.2

Attributes of Three-Dimensional Shapes Reason with shapes and their attributes.

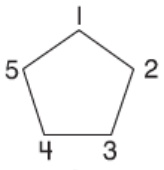


Lesson 11.3

Two-Dimensional Shapes

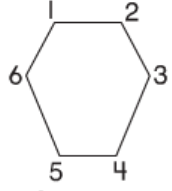
Reason with shapes and their attributes.

Count sides and vertices.
A pentagon has 5 sides.



pentagon

A hexagon has 6 vertices.



hexagon

More information on this strategy is available on Animated Math Model #56.

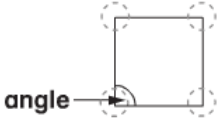
Lesson 11.4

Angles in Two-Dimensional Shapes

Reason with shapes and their attributes.

Two sides meet and form an angle.

There are 4 angles in a square.




angle

Lesson 11.5

Sort Two-Dimensional Shapes


Reason with shapes and their attributes.

Circle the shapes with 5 sides.



4 sides 3 sides 5 sides 6 sides

Circle the shapes with fewer than 5 angles.



3 angles 6 angles 4 angles 5 angles


More information on this strategy is available on Animated Math Model #57.

Lesson 11.6


Partition Rectangles

Reason with shapes and their attributes.

How many color tiles cover this rectangle?



Make a row of color tiles on the rectangle.
Trace around the square tiles.






How many squares? 3 squares

Lesson 11.7

Equal Parts

Reason with shapes and their attributes.

You can divide a whole into equal parts.




 <p><u>2</u> equal parts <u>halves</u></p>	 <p><u>3</u> equal parts <u>thirds</u></p>	 <p><u>4</u> equal parts <u>fourths</u></p>
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Lesson 11.8

Show Equal Parts of a Whole

Reason with shapes and their attributes.

Trace to show the equal parts.

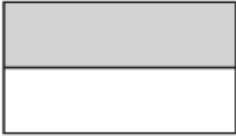
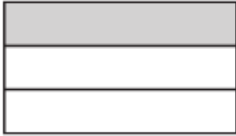
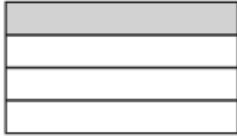
 <p>2 equal parts 2 halves</p>	 <p>3 equal parts 3 thirds</p>	 <p>4 equal parts 4 fourths</p>
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Lesson 11.9

Describe Equal Parts

Reason with shapes and their attributes.

One equal part of each shape is shaded.

 <p>A half of the shape is shaded.</p>	 <p>A third of the shape is shaded.</p>	 <p>A fourth of the shape is shaded.</p>
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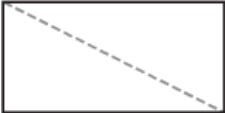

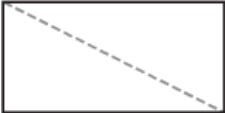

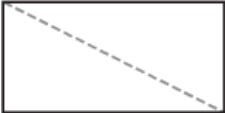
Lesson 11.10

Problem Solving • Equal Shares

Reason with shapes and their attributes.

Two gardens are the same size. Each garden is divided into halves, but the gardens are divided differently. How might the gardens be divided?

Unlock the Problem

<p>What do I need to find?</p> <p><u>how the gardens are</u> <u>divided</u></p>	<p>What information do I need to use?</p> <p>There are <u>2</u> gardens. Each garden is divided into <u>halves</u>.</p>		
<p>Show how to solve the problem.</p> <table><tr><td></td><td></td></tr></table>			
			

Vocabulary

Angle – a shape formed by two line segments that share the same endpoint

Cone – a three-dimensional shape with a circular base and a point at the top

Cube – a three-dimensional shape with six square faces

Cylinder – a three-dimensional shape with two circular parallel bases and a curved surface

Edge – where two faces of a three-dimensional shape meet

Face – a polygon that is a flat surface of a three-dimensional shape

Fourths – four equal parts

Halves – two equal parts

Hexagon – a polygon with six sides

Pentagon -- a polygon with five sides

Quadrilateral – a polygon with four sides

Rectangular prism – a three-dimensional shape with six faces that are rectangles

Side – one of the line segments that forms a polygon

Thirds – three equal parts

Vertex – the point where 2 sides of a polygon meet or 3 or more edges of a three-dimensional shape meet