



2nd Grade Unit 6: Exploring Geometry and Patterns



Overview:

In this unit, students will reason about attributes (features) of shapes as they describe, compare, and draw them. Students identify lines of symmetry in everyday objects. Students partition circles and rectangles and recognize that equal shares may be different shapes. Students will use shapes to create growing and shrinking patterns and identify and describe these patterns using addition and subtraction. During this unit, students will continue to review and develop their understanding of the value of numbers to 1,000, the counting sequence, and solve real world problems involving addition and subtraction within 1,000.

Learning Targets:

In Unit 6, students will:

- Further developing understandings of basic geometric figures.
- Identifying plane figures and solid figures based on geometric properties.
- Describing plane figures and solid figures according to geometric properties.
- Recognize lines of symmetry.
- Expanding the ability to see geometry in the real world.
- Partitioning shapes into equal shares by cutting, slicing, or dividing.
- Represent halves, thirds, and fourths using rectangles and circles to create fraction models.
- Compare fractions created through partitioning same-sized rectangular or circular wholes in different ways.

Key Vocabulary: (linked to GA DOE Interactive Glossary)

Attribute	Circle	Column	Cone
Cube	Cylinder	Edge	Equal
Fourths	Fractions	Halves/half of	Hexagon
Irregular polygon	Partition	Pentagon	Quadrilateral
Quarter of	Rectangle	Rectangle prism	Solid figure
Symmetry	Third of	Triangle	Vertex/vertices

Supporting Resources:

<http://ctlslearn.cobbk12.org/>

<https://gavirtual.instructure.com/courses/34720#modules>

<https://www.abcya.com/games/symmetree-symmetry>

[Quadrilateral - Geometry - PhET Interactive Simulations \(colorado.edu\)](https://phet.colorado.edu/en/simulations/geometry)

<https://toytheater.com/shape-fall/>

<https://toytheater.com/category/math-games/patterns/>

