

Curriculum Parent Overview (Grade 2)

MATHEMATICS

UNIT #2: ATTRIBUTES OF SHAPES AND PARTS OF A WHOLE (GEOMETRY AND FRACTIONS)

CONTENT FOCUS:

Students develop visual images of 2-D and 3-D shapes and geometric language for identifying and describing them. Students investigate attributes of 2-D shapes as they sort shapes and categorize polygons. Students will focus on equal parts of a whole.

UNIT FOCUS:

- Describing, identifying, and comparing attributes of 2-D and 3-D shapes: students will be drawing and identifying 2-D shapes and 3-D shapes, using geometric language to describe their defining attributes.
- Visualizing the structure of arrays: Students will be arranging square tiles in rows and columns to form rectangles, describing a rectangular array, making different arrays using the same number of soiree tiles.
- Understanding equal parts of a whole: Students will be understanding equal parts of a whole, by partitioning the shape and recognizing parts of a whole. Students will recognize that halves and fourths of the same shape can look different, as well as identify halves, thirds, and fourths of regions.

MATHEMATICAL PRACTICES:

MP3: Construct viable arguments and critique the reasoning of others.

MP7: Look for and make use of structure.

CONNECTIONS TO PREVIOUS CONTENT:

Work in kindergarten and grade 1 focused on describing, identifying, and composing 2-D and 3-D shapes. Students looked for and identified shapes in their environment and used a variety of 2-D and 3-D materials - including pattern blocks, Power Polygons, Shape Cards, dot paper, Geoboards, Geoblocks, and geometric solids - as they worked to identify name, compare, sort, draw, build, and compose 2-D and 3-D shapes. Students were encouraged to analyze characteristics of shapes and think about which characteristics are (and are not) important, mathematically.

CONNECTIONS TO FUTURE CONTENT:

The geometric ideas presented in this unit are extended in later grades as students continue to work in more specific ways with classifying 2-D shapes, identifying and measuring angles, and investigating geometric measurements such as perimeter, area, and volume. Ideas about equal parts of a whole arise again in Grade 2 in various measurement contexts, as students encounter and consider how to account for and represent partial units when measuring length (Unit 6) and how to describe half and quarter hours as they measure time (Classroom Routine: Telling Time). Work with partitioning shapes in Grades 1 and 2 lays the foundation for the extensive work with rational numbers in Grades 3-5.

MATH AT HOME:

- Play any of the following games with your child on Savvas Site after it has been introduced in the classroom:
 - Double Arrays

- Review the Math Words and Ideas videos for this unit on Savvas Site