

Geometry: Grade 1

Stage 1 Desired Results

ESTABLISHED GOALS:

Competencies:

- **Students will demonstrate the ability to reason with two- and three- dimensional shapes in order to compare, construct, compose, and partition.**

Content Standards:

- 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.
- 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.
- 1.G.3 Partition circles and rectangles into two and four equal shares, describe the shares using the words halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares.
- MP3 Construct viable arguments and critique the reasoning of others.
- MP6 Attend to precision.
- MP1 Make sense of problems and persevere in solving them.

Transfer

*Students will be able to independently use their learning to **compose and partition two and three dimensional shapes.***

Meaning

ENDURING UNDERSTANDINGS

Students will understand that...

- geometric attributes provide descriptive information about an object's properties and position in space, and support visualization and problem solving.
- geometric transformations occur on different planes.

ESSENTIAL QUESTIONS

- ***What would happen if everything was one shape and size?***
- ***How are shapes like numbers?***

Acquisition

Students will know...

- the names and defining attributes of 2-dimensional and 3-dimensional shapes.
- that the properties of shapes make them alike or different.
- that shapes can be measured (ie: number of sides, angles, and faces) and divided into halves and quarters.
- that decomposing an object into more equal shares creates smaller shares.

vocabulary:

defining attributes, non-defining attributes, sides, angles, faces, two-dimensional, three-dimensional, half, quarter, circle, half-circle, quarter-circle, rectangle, square, triangle, trapezoid, cube, rectangular prism, cone, cylinder, halves, half of, quarters, fourth of, quarter of, whole, compose, decompose, different, equal, equal shares, plane, solid

Students will be skilled at...

- distinguishing between defining (triangles have three sides) and non-defining (color, orientation, overall size) attributes.
- building and drawing 2D and 3D shapes with defining attributes.
- naming 2D and 3D shapes and their defining attributes.
- composing two-dimensional shapes to create a composite shape (ex. 2 trapezoids to create a hexagon).
- composing three-dimensional shapes (ex. 6 squares to create a cube).
- composing new shapes from multiple 2D composite shapes.
- partitioning circles and rectangles into two and four equal shares, and describing the shares using the words halves, fourths, and quarters.
- explaining that decomposing into more equal shares created smaller pieces.

<i>Content Area Literacy Standards</i>	<i>21st Century Skills</i>
not applicable	- reason effectively - think creatively

Stage 2 - Evidence	
<i>Evaluative Criteria</i>	<i>Assessment Evidence</i>
	PERFORMANCE TASK(S):
	OTHER EVIDENCE:

Stage 3 – Learning Plan	
<i>Summary of Key Learning Events and Instruction</i>	
<i>Language Arts Integration</i>	<i>Mathematics Integration</i>
1.OA.1 Use	not applicable
<i>Technology Integration</i>	<i>District Materials</i>
1.OA.1 Use	