**A08\_Kelly**

**Standard**

MCC.2.G.1 Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.

**Essential Questions**

Where can we find geometric figures in the world around us?

How do we use the terms angles, vertices, faces, sides, and edges to describe geometric figures?

**Materials**

*Captain Invincible and the Space Shapes*

3-D Shape Characteristic Chart

Various 3-D figures for students to explore (spheres, prisms, cylinders, cones, and pyramids)

NCTM Geometric Solids Manipulative: <http://illuminations.nctm.org/ActivityDetail.aspx?ID=70>

BrainPOPJr: <http://www.brainpopjr.com> (Click Math-Geometry – Plane Shapes and Solid Shapes) <http://www.brainpopjr.com/math/geometry/planeshapes/>

http://www.brainpopjr.com/math/geometry/solidshapes/

Wordle - [www.Wordle.net](http://www.Wordle.net)

ThinkCentral - [www.thinkcentral.com](http://www.thinkcentral.com) (http://www-k6.thinkcentral.com/content/hsp/math/gomath2014/ga/gr2/assessment\_guide\_se\_9780547878416\_/launch.html)

Paper for riddle

Pencils

Promethean Board

Computer

**Objectives**

Working with a partner, students will correctly identify 3-D shapes, the number of faces, the number of equal faces, and the shape of the faces with 80% mastery.

Working with a partner, students will correctly identify 3-D shapes and give examples of them found in the real world with 80% mastery.

Working with a partner, students will write riddles about the 3-D shapes.

Students will create a wordle according to the rubric.

Students will answer a summative assessment with 80% mastery.

**Learning Activities**

Engage: The teacher will read *Captain Invincible and the Space Shapes.* The students will volunteer to identify the faces, vertices, and edges on 3-D shapes as the book is read.

Explore: The students will manipulate 3-D shapes using the NCTM website.

Explain: Students will work together to complete the 3-D handouts. They will put a sticker on each face as they count them.

Elaborate: Students will write riddles about 3-D shapes. They will read them to the class to see who can identify the shape described.

Evaluate: Students will answer the easy and hard online quizzes on BrainPOPJr using clickers. After each question is answered by all the students, volunteers will click the correct answer on the Promethean Board.

Extend: Students will create a Wordle using as many geometry terms they can think of.

**Formative Assessments**

The teacher will monitor & provide help as needed while the students complete their charts.

The teacher will monitor each pair of students to make sure they include at least 2 clues in their riddles.

The students will answer the BrainPOPJr quizzes on their clickers.

**Summative Assessment**

Students will answer the online assessment on ThinkCentral using Go Math! Georgia Assessment Guide (SE), G2, Module 20, pp. AG139-140.

References

Georgia Department of Education. (2012). Mathematics, grade 2, unit 5: Understanding plane and solid figures.