TEACHER PAGE

Lesson: Faces of a Cube

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New Arizona Math Strand 4 Geometry and Measurement **Grade 3**
Articulated 4M31-02 Name concrete objects and pictures of three-dimensional solids (cones, spheres and cubes); **4M31-03** Describe relationships between 2-D and 3-D objects.
Old Arizona Math Standard 4 Geometry **Grades 1-3**
4MF1-PO3 Identify three-dimensional figures by name and /or attribute

Materials:
Wooden or plastic blocks (cubes and rectangular prisms)
Paper (8.5 X11) for printing two activities in DIG DEEPER and TALK ABOUT IT!
Scissors, glue and pencils.

Learning Objectives: Students will be able to:
•identify cubes by the number of faces
•identify face on a 3-Dimesional figure
•explain the attribute of “same size” face on a cube.
•explain the 2-D shape of the faces of a cube and its relationship to to the 3-D cube.

Overview and Content:
Students will identify face on a 3-dimensional shape and the particular shape of faces for cubes. They will count the number of faces on a cube. In SHOW, students will build a cube by matching colored square faces to the correct word for that color. This lesson is also available with English narration and has a script.

Engaging Students:
Using similar sized cubes and rectangular prisms (blocks); students will explore their differences. Give them the vocabulary: face, same shape and size, square and be sure they know the colors red, green, blue, orange, yellow and purple (needed in the SHOW).

Follow-up:
There are printing, cutting and pasting and drawing activities in both DIG DEEPER and TALK ABOUT IT! Be sure to set the printer to horizontal. Explore the attributes of rectangular prisms and compare to cubes. Describe the change in the faces?

Assessment:
Students will first see all the squares of various colors needed to build a cube. They are given a form for a cube with colors labeled on each face. Students will drag the shapes to their correct position, matching shape and color to make a cube.