Here’s a Geometry lesson in which students create 2D and 3D Shapes with Toothpicks and Chick-Peas

Subject: Math

Grades: 4, 5, 6, 7

Title – Create 2D and 3D shapes   
By – Paula Maritz   
Primary Subject – Math   
Secondary Subjects – Art   
Grade Level – 4-7 

In this creative Math activity the students will create 2D and 3D shapes out of tooth picks and raw chick-peas.

**Materials:** Toothpicks and chick-peas.

**Preparations:** Put chick-peas in water over night, to make them a little bit soggy.

**Warm-up activity**: Reveiw the names of 2D and 3D shapes and list the names on the board.

Give each child some chick-peas and toothpicks.

1. Which 2D shapes can we make? Let the students work individually. The chick peas will be used as “corners” and the toothpicks as the sides.

2. When all students seem confident in making 2D shapes. Let them continue by making different 3D shapes on their own.

3. Thereafter let the children work in pairs, to create one 3D shape of their own choice, using as many tooth picks and chick peas as they want, as long as they can keep the 3D shape from falling apart.

When they are done with their shape, let it dry and use a string to hang it on the classroom ceiling. Underneath each shape they put a note, on which they have written their names, and also a “name” for their shape.

Extension activities:   
-Discuss where in real life the students have seen shapes, like the ones they have created?   
-Draw 2D shapes from the 3D shapes. Copy from different angles, and write the names of the 2D shapes.   
-Measurement activities: Count the number of toothpicks and chick-peas or calculate the area, circumference, volume, weight etc.

Regards,   
Miss Paula