

## Gumdrop Geometry

**Objective:** Reviews the attributes of plane and solid geometric shapes.

**Materials:** Gumdrops (20 per participant)  
Toothpicks (20 per participant)  
Napkins

### Procedures:

1. Pass out gumdrops and toothpicks to each participant.
2. Hold up a toothpick and tell them that it represents a line. Hold up a toothpick with one end stuck into a gumdrop, and tell them this represents a ray. The toothpicks represent lines, if you can picture the toothpicks going on in both directions indefinitely, and the gumdrops represent endpoints or vertices.
3. Ask each participant to make a right angle, and hold it up. Then ask them to make a triangle and hold it up. When you are convinced everyone understands the activity, ask them to make:
  - a. Triangular pyramid
  - b. Rectangular prism
  - c. Hexagonal pyramid
  - d. Square pyramid
  - e. Triangular prism
  - f. Cube
  - g. Hexagonal prism
4. Divide the participants into groups of four and challenge them to use all of their gumdrops and toothpicks to make the highest structure that they can, that will stand alone. The structure does not have to be limited to any certain kinds of shapes, just as long as when time is called all of the participants can move away from the structure and it will stand alone. Tell them they have five minutes to complete their structure. Give the winning team applause.

5. Ask the winning group what geometric characteristics they think aided in their success.

Notes:

1. You may want to suggest to participants that if in the classroom they have a large number of students, and expense, is a factor, that the gumdrops can be replaced by stale miniature marshmallows.