

Throw a Shape

Learning Objective: Create and classify 3D shapes

Intended Outcome: Identification of edges and vertices of 3D shapes

Materials:

- Matchsticks or toothpicks, small blobs of blutak or marshmallows, or pieces of sticky tape
- OR
- 3D shape building materials (K'nex, Connecta straws, Zometool)

Game Objective: To create as many different 3D shapes as possible

Instructions:

- For this game, students need to be organised into small groups
- Roll the dice and collect that many edges (sticks) OR vertices (blutak). You can only collect one or the other on each throw, not a mixture of both
- When you have enough edges and vertices, build a 3D shape. You can only build one of each shape (one cube, one tetrahedron, one square based pyramid.....)
- Score 1 point for each edge and each vertex used in complete shapes and 5 points for each completed shape

Discussion Points:

What are the regular polygons?

What shapes can you make using the same size edges?

Which shape will give you the most points?