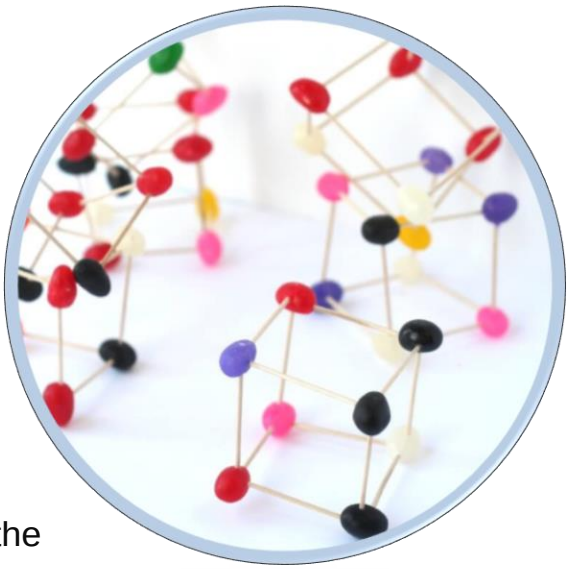
babcock™

Building Jelly Bean Structures

1 HOUR

Materials

- Jelly beans/marshmallows or playdough
- Toothpicks
- Structure worksheet



Activity Overview

- Build a variety of 3D and complex structures

Activity Plan

- Use the worksheet to build simple 3D shapes with the toothpicks and jelly beans, marshmallows or playdough
- Complete the worksheet for each structure
- Experiment with various complex structures with different heights and shapes

Learning Objective

- Understand the difference between 2D and 3D shapes
- Understand the structure of different 3D shapes
- Understand the importance of stability within structures

Reflection Questions

- What 2D shapes make up the 3D shape?
- How many faces, vertices and edges does the structure have?
- Which type of structure is more stable/stronger? What makes it stronger?

Challenge: Build a complex tower structure with as many 2D shapes within it as you can. Test the strength and stability of the structure by placing books on top.

Now try to build a stronger structure to hold more books, using the same number of toothpicks and jelly beans as before.

3D Structure	Number of…		
	Faces	Vertices	Edges
CUBE Draw the 2D shapes used to make the structure:			
CUBOID Draw the 2D shapes used to make the structure:			
TRIANGLE BASED PYRAMID Draw the 2D shapes used to make the structure:			

3D Structure	Number of…		
	Faces	Vertices	Edges
SQUARE BASED PYRAMID Draw the 2D shapes used to make the structure:			
TRIANGULAR PRISM Draw the 2D shapes used to make the structure:			
HEXAGONAL PRISM Draw the 2D shapes used to make the structure:			