

Stem Project

Building a tower

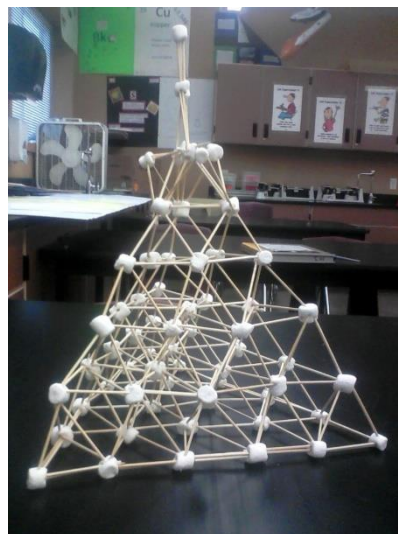
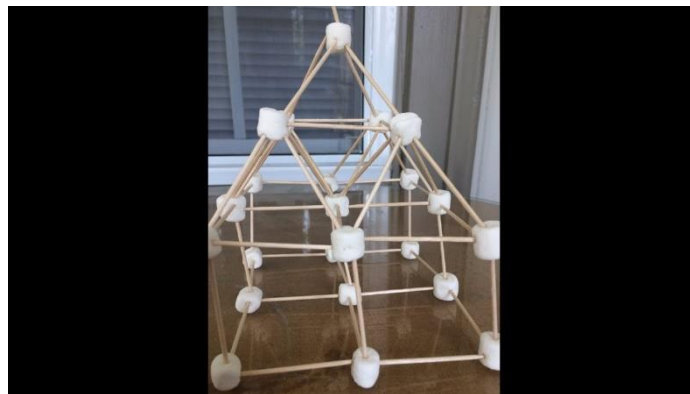
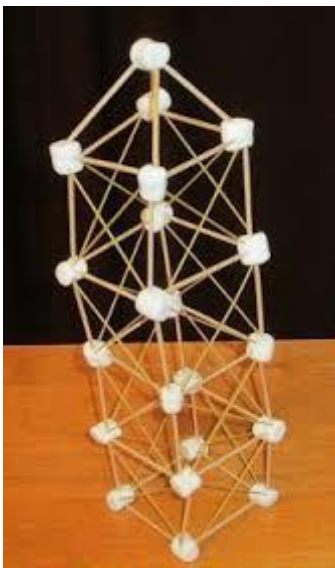
Materials...

Cocktail sticks
Mini marshmallows
Ruler

The brief

Try to build a tower made out of your materials, use the ruler to measure the height and width of your build and record on this sheet. You will have a time limit of **30 minutes** to complete this activity.

See below for ideas to get you started but try to use your own design.



This piece of paper measures 21cm wide and 28cm length, if you have no ruler measure your tower with this sheet.

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My tower was _____ cm high

My tower was _____ cm wide

Was it easy or hard to build a high building using those materials? _____

Work skills you have used:

- Problem-solving
- Organisation and planning
- Working to a deadline
- Following instructions
- Maths (measuring and calculations)

How building a tower works

A tower is a tall structure, taller than it is wide, often by a significant factor. Towers are distinguished from masts by their lack of guy-wires and are therefore, along with tall buildings, self-supporting structures.

Up to a certain height, a tower can be made with the supporting structure with parallel sides. However, about a certain height, the compressive load of the material is exceeded and the tower will fall. This can be avoided if the tower's support structure tapers up the building.

