



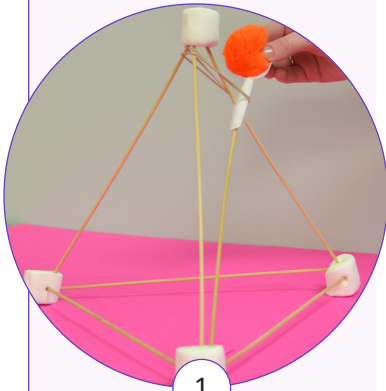
Build a 3-D shape and test its functionality as a launcher for an integrated math and science lesson.

TRIPOD CATAPULT ACTIVITY

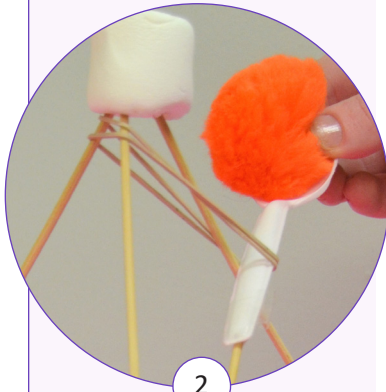
What you need:

4 marshmallows, 7 skewers (or wooden coffee sticks), elastic bands, a plastic spoon, a few pompoms, and tape.

What to do:

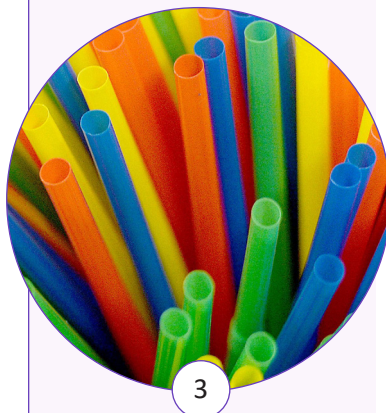


1. Make a triangle using 3 skewers and 3 marshmallows and lay it down on a flat surface. Push one of the remaining skewers into each of the 3 marshmallows so that they stick up vertically from the triangular base. Gather the three vertical skewers together and secure them with the remaining marshmallow. You should now have a triangular-based pyramid made from 6 skewers and 4 marshmallows. (Image 1)



2. Tape the handle of a plastic spoon onto the end of the seventh skewer.

3. Push the skewer with the attached spoon into one of the marshmallows so that it's on the outside of the prism.



4. Loop an elastic band (approximately 7 cm in length) over the top marshmallow and then put the spoon through the elastic. The elastic will act as a sling for the skewer spoon.

5. To use the catapult, it should be oriented so that the marshmallow containing the spoon skewer is pointed away from you.

6. Stabilize the catapult by holding the base. Load the spoon with a pompom or other soft object and pull back on the spoon. (Image 2)

Explore the variables with some open-ended play:

- Use different building materials (straws, coffee sticks, play dough)
 - Test different sized elastics or a different number of elastics
 - Build different 3-D shapes and compare launching tactics
- (Image 3)