



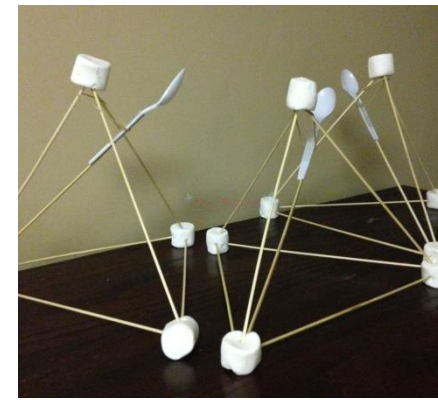
Marshmallow Catapult

You will need:

7 bamboo skewers, sellotape or masking tape, 5 marshmallows, 1 plastic teaspoon, small rubber band.

What to do:

1. Take 3 skewers and 3 marshmallows and place in a triangle.
2. Insert each skewer into the sides of the marshmallows to form the base (Careful as the skewers can be quite sharp)
3. Take 3 more skewers and 1 marshmallow and create a pyramid shape.
4. Take the last skewer and firmly tape the plastic teaspoon onto it (about $\frac{1}{2}$ way down the handle, using lots of tape to make secure).
5. Loop the rubber band over the top marshmallow of the pyramid.
6. Place the skewer and spoon through the rubber band and insert the other end of the skewer into a base marshmallow. You are now ready to launch – (if you can resist and leave overnight, the marshmallows will stiffen and the catapult will be stronger).
7. Place the 5th marshmallow on the spoon, pull back to stretch the rubber band, let go and launch your missile!!!



Take it further:

After some practise, test for distance and accuracy by trying to land on some targets; you could even set up a competition between members of your bubble!

The Science:

What energy changes take place in this experiment? Some of them include the chemical energy stored up in your body that allows you to pull back on the rubber band, the elastic energy stored in the rubber band as you stretched it back, the kinetic energy of the flying marshmallows, the gravitational potential energy of the marshmallow once it shot up high into the air.