

SIMPLE CATAPULTS

SUMMARY OF ACTIVITY:

Activity Description: Participants will build their own catapults and test them out by launching marshmallows.

STEAM Skills: Engineering - building, fine motor skills, problem solving

Activity Details:

- Age range - All ages
- Length - ~45 min (includes time for launching)

MATERIALS AND SUPPLIES:

● 4 marshmallows (plus some for shooting)
● Plastic spoon
● 7 wooden skewers
● 1 thin elastic band

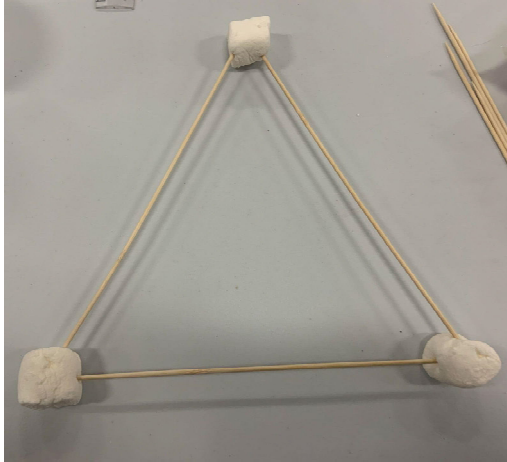
General supplies needed: masking tape

TALKING POINTS AND BACKGROUND:

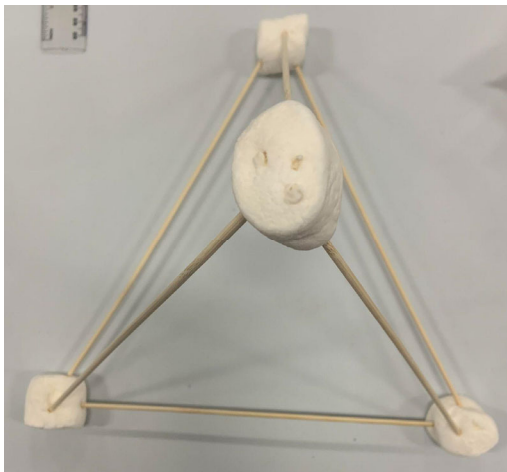
- Catapults are the perfect example of how energy can be transferred.
- **Potential energy** stored in the rubber band when it is stretched is converted to **kinetic energy** when it snaps back to its loose state!

PROCEDURE:

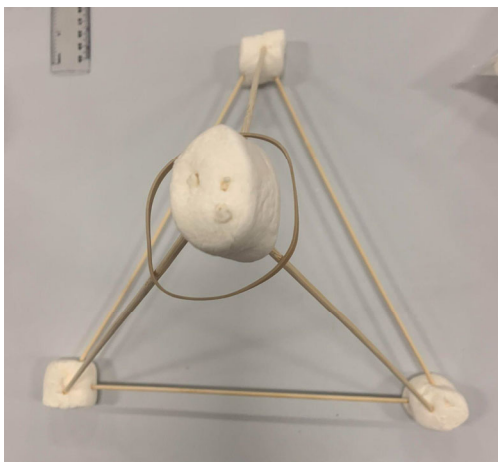
1. Form a triangle using 3 skewers and 3 marshmallows.



2. Form a pyramid using three more skewers and the last marshmallow.



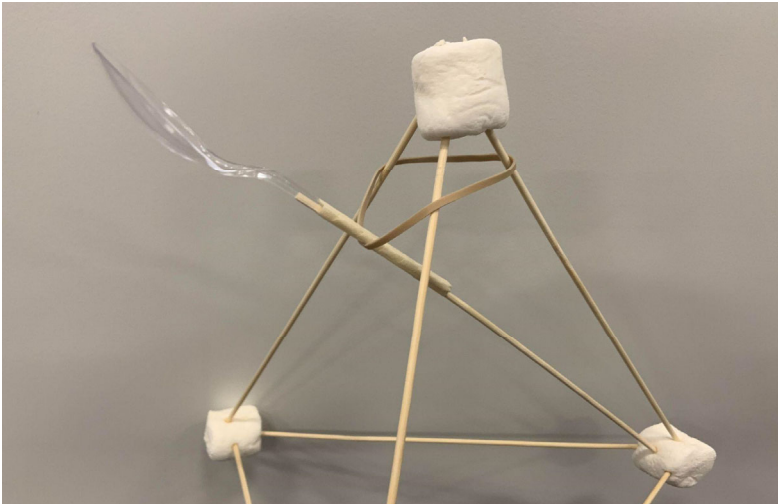
3. Loop a regular sized rubber band around the marshmallow at the top.



4. Tape the plastic spoon (tightly) to the end of a skewer using the masking tape.



5. Insert the skewer/spoon through the rubber band and poke it into one of the marshmallows at the base so that the spoon is facing up.



6. Load a small marshmallow into the spoon. To launch, hold the top marshmallow with one hand to keep it steady and pull the spoon back with the other!

TIPS AND TRICKS:

- Hold the structure steady when launching so the whole thing doesn't move.

REFERENCES OR OTHER LINKS:

<https://www.itsalwaysautumn.com/easy-marshmallow-catapults-summer-fun-for-kids.html> -

Activity inspiration

https://theworks.org/wp-content/uploads/2017/06/Catapults-G3-6-Resource_Guide.pdf -

Background info