Make Your Own Catapult!

What you will need:
- 15 popsicle sticks
- Tape
- Rubber band
- Glue
- A small Styrofoam cup
- A small square of paper
- A small square of aluminum foil

Step 1. Take three popsicle sticks and arrange them into a triangle and tape the ends together.

Step 2. Do this two more times so that you have three complete triangles.

Step 3. Tape the three popsicle stick triangles together into a pyramid.

Step 4. Take two of your three leftover popsicle sticks and place them end to end. Place a third popsicle over the connection point between the other two popsicle sticks and tape them together. This makes a new, longer popsicle stick.

Step 5. At one end of your new, longer popsicle stick, glue on the small Styrofoam cup with the cup facing up, like a basket.

Step 6. Now tape the end of your long popsicle stick that does not have the Styrofoam cup to a corner on the base of your pyramid.

Step 7. Wrap a rubber band around long popsicle stick near the base of the Styrofoam cup and connect it to the top point on your popsicle stick pyramid.

Step 8. Now ball up your piece of paper or your piece of aluminum foil, place it in the Styrofoam cup. Pull back on the long popsicle stick and see how far you can catapult your piece of paper or aluminum foil!

Questions:

1. What were some of the things you found challenging about making your catapult?

2. How can you modify your catapult?

3. What are some of the things you found that made your objects fly further?

4. What might happen if you used something heavier in your catapult, like a metal ball? Would you expect the ball to go further than your piece of paper or a shorter distance?