

DIY PINWHEEL

This easy paper craft is so much fun for all ages!

INSTRUCTIONS

STEP 1: Color both sides of your pinwheel.

STEP 2: Cut out along the black lines. Stop before reaching the center dot.

STEP 3: Gently bend every other corner toward the center, but don't fold the paper. You are creating a curve.

STEP 4: Line up the dots at the center and use the straight pin to se-cure in place.

STEP 5: Stick the straight pin into a pencil eraser.

SUPPLIES

Scissors

Straight pin

Pencil with eraser

Crayons/Markers

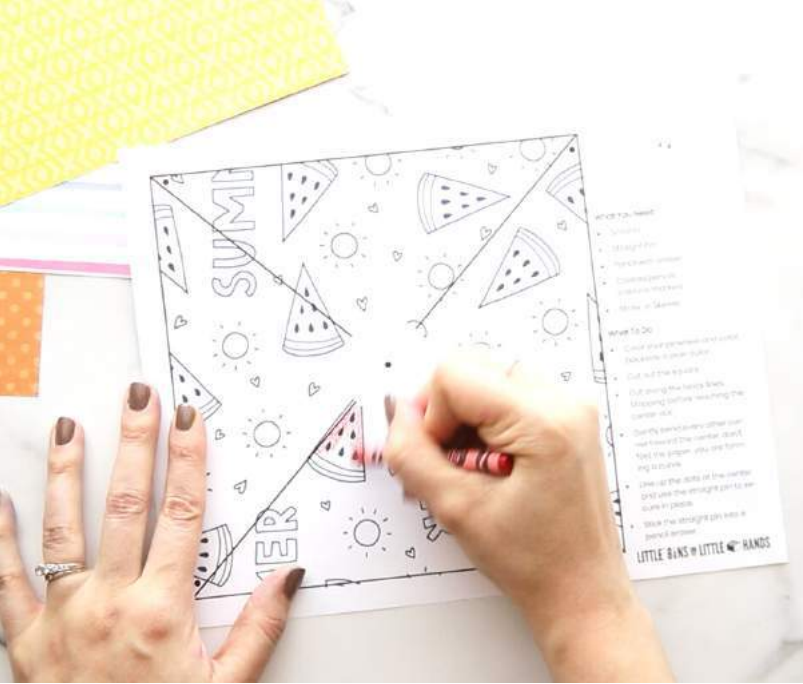
Straw or

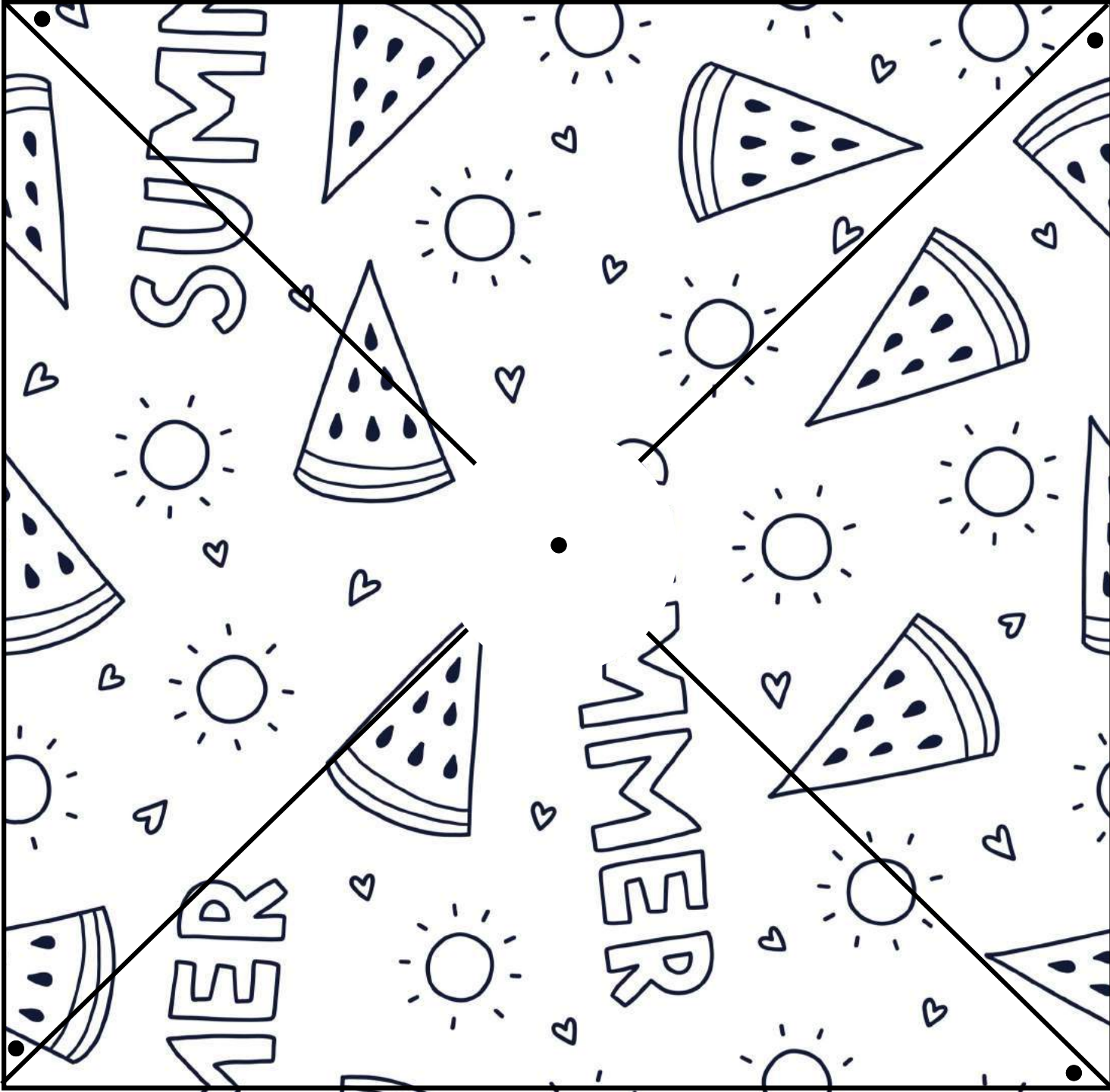
Skewer

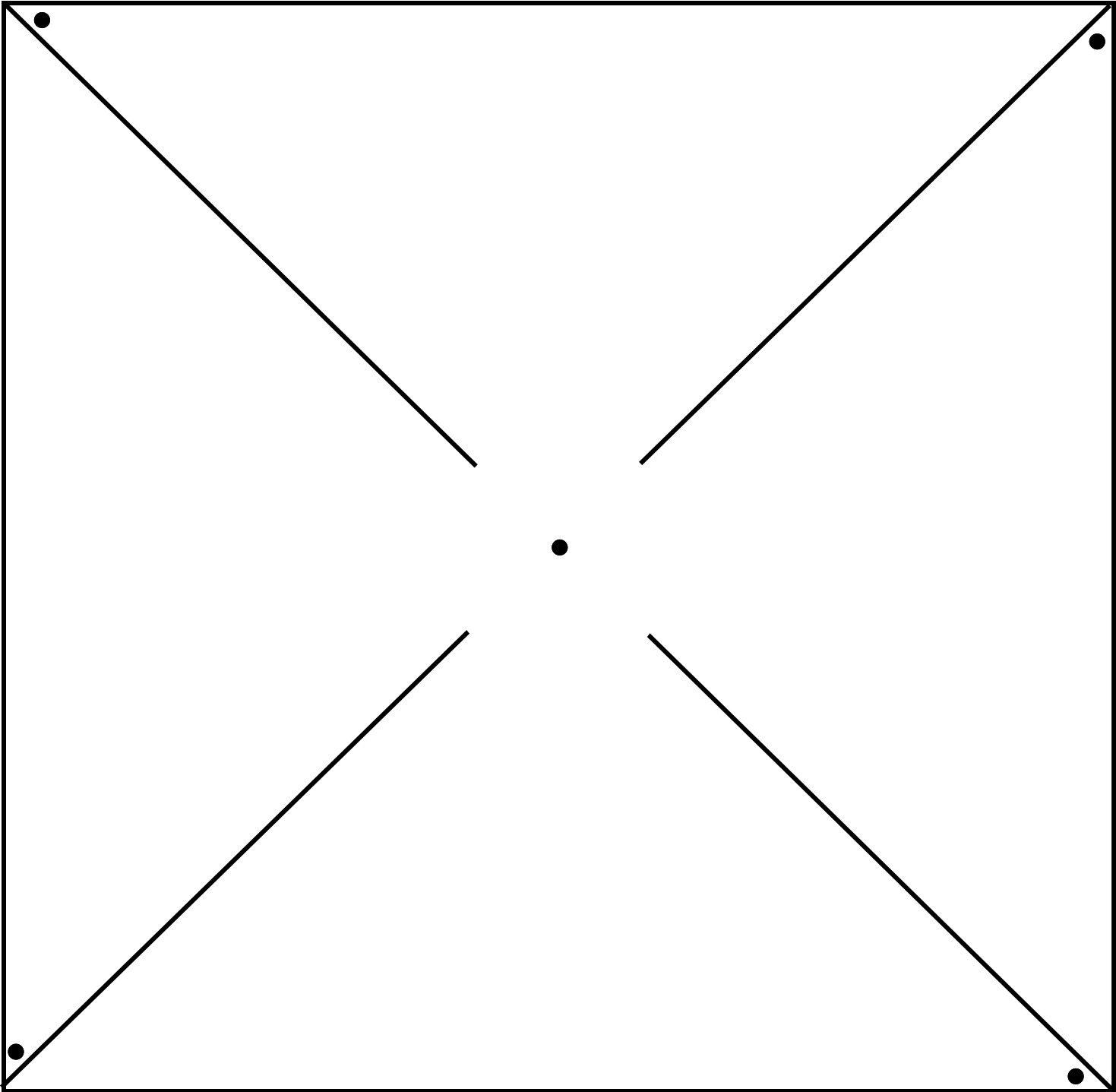
THE SCIENCE OF WINDMILLS

A windmill has blades that spin around when wind blows. The blades are connected to a tall shaft. When the blades spin, they turn this shaft. The shaft can do a number of things like grind grain, power a pump, or produce electricity. Today wind turbines, produce electricity for many people in the world.

Wind turbines are good for the environment, as they do not release emissions that can pollute the air or water.







PAPER ROCKET

Make a straw rocket and see how far it flies!

INSTRUCTIONS

STEP 1: Cut out the rocket template and color as desired.

STEP 2: Wrap the rectangle paper template tightly around a pencil the long way and tape it together. This will be the base tube of the rocket.

STEP 3: Remove the paper tube from the pencil. Now, fold over a small portion of one end of the paper tube to make the nose. Tape it in place.

STEP 4: Next, tape one of the rocket designs onto the paper tube making sure the folded over nose part is covered by your rocket design.

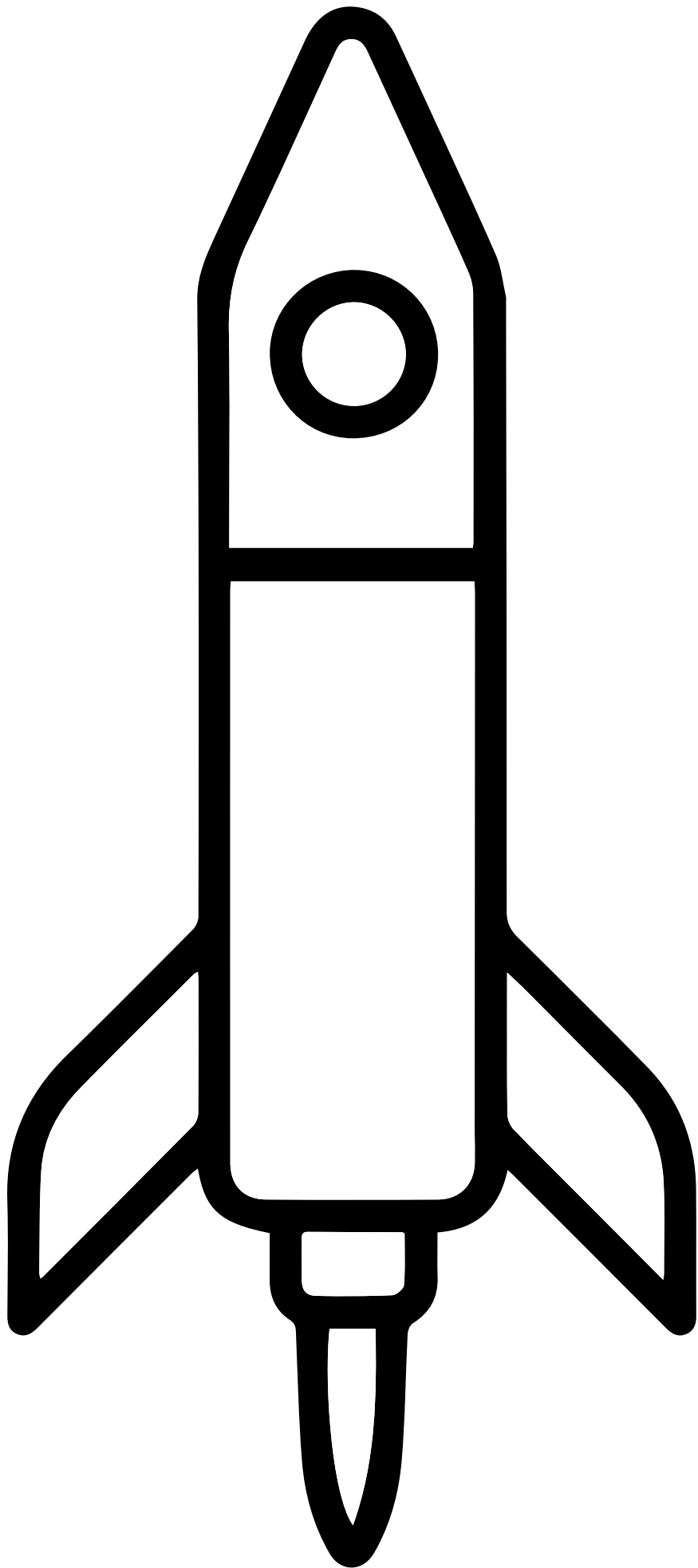
STEP 5: Slide the tube of the rocket onto the straw. Take a big breath and blow! How far does it go?

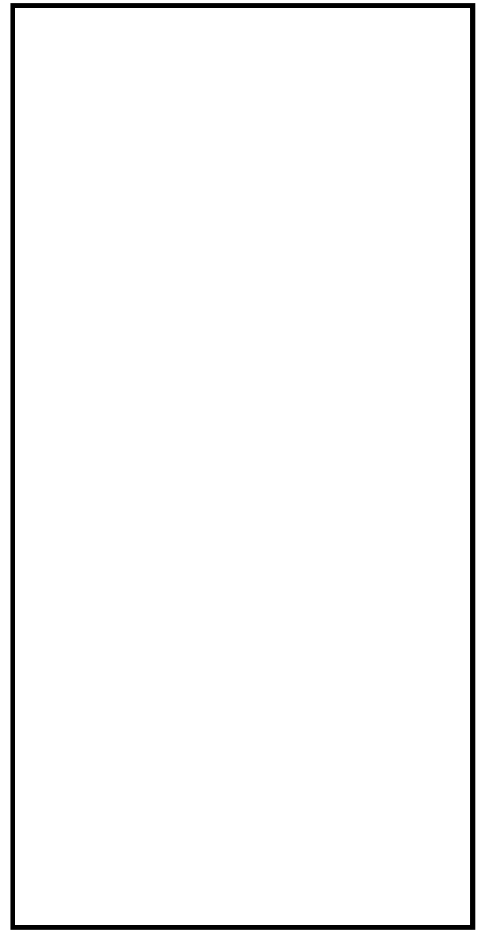
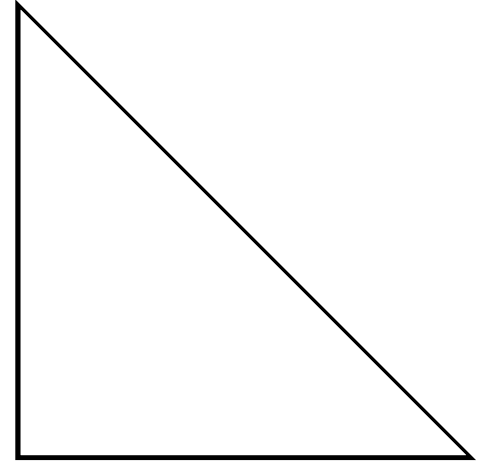
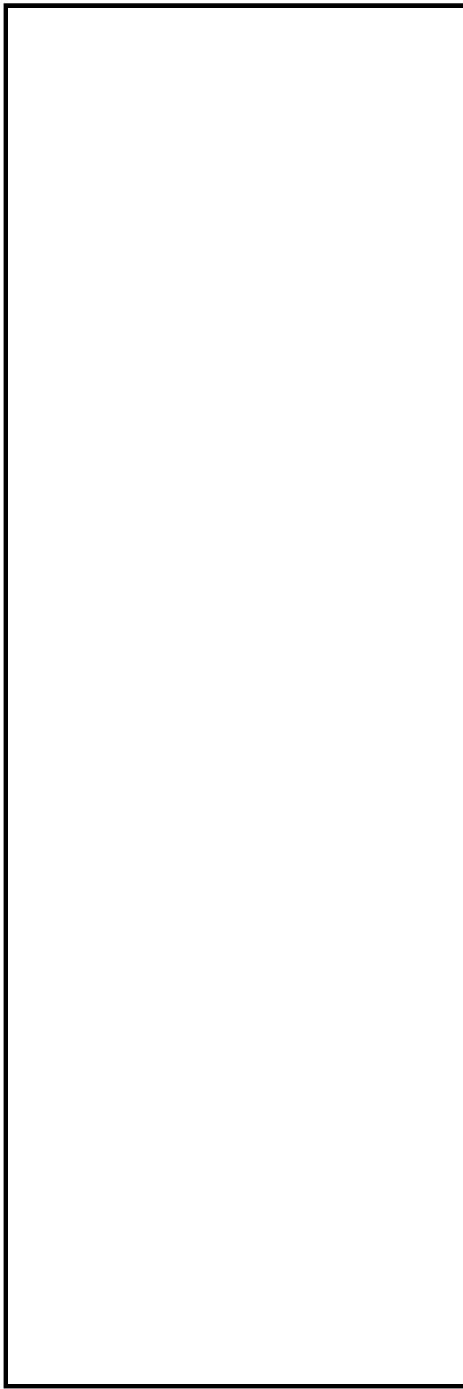
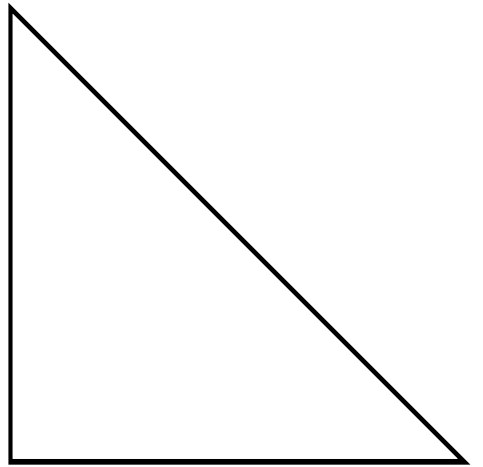
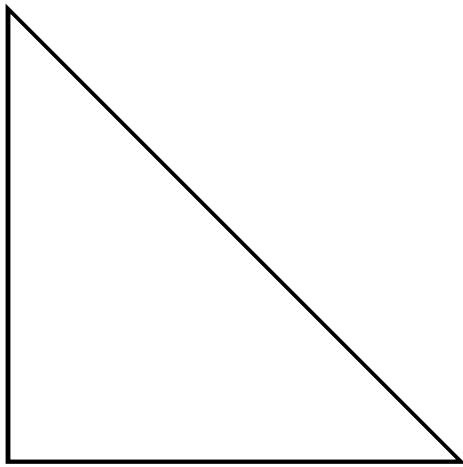
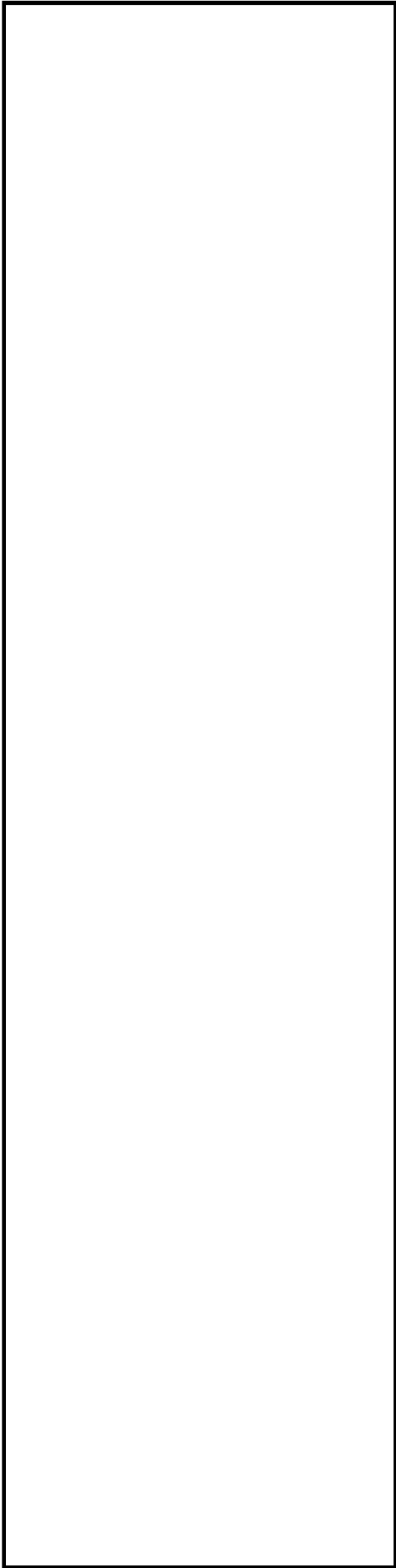
EXTEND THE ACTIVITY

- You can measure and record how far the rocket flies and change the angle you use to blast it off the straw.
- You can also test the length of different rockets! Cut the paper tube template in half and see how far it flies compared to the longer tube.
- How about less weight? Remove your rocket design and blast off just the paper tube. Does it fly farther? Can you add small fins to it?

SUPPLIES

**Template
Straws
Scissors
Tape
Markers
(optional)**





ROCKET CUT AND COLOR

