

# Capture the Wind

## Activity 3—Rockets for Little Ones

Materials needed: Print out of the paper rocket and rocket back on the next two pages, scissors, tape, crayons or markers, bendy straw.

What to do:

Use the provided patterns, color the rocket if you'd like and then cut along the solid lines.

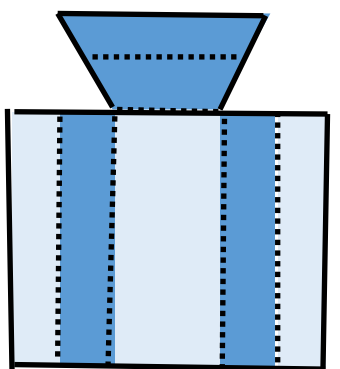
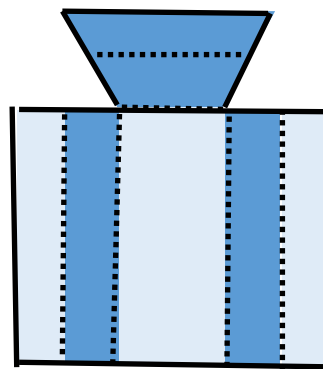
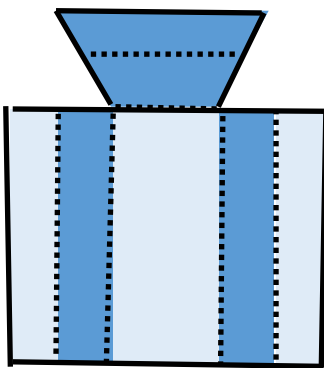
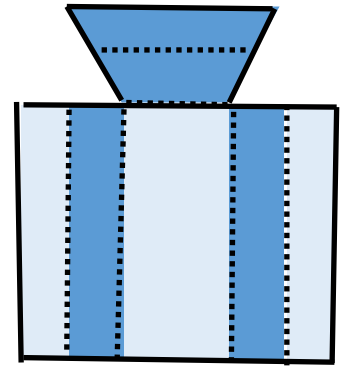
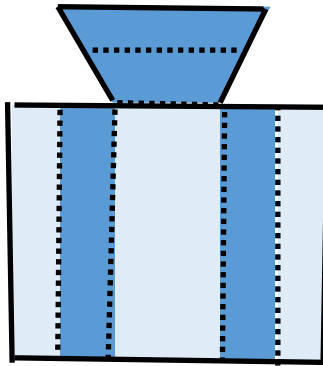
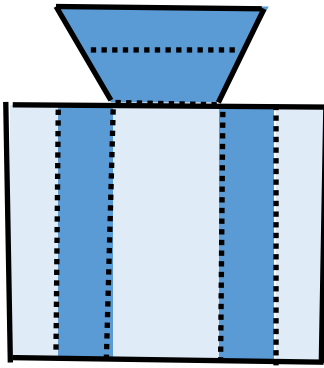
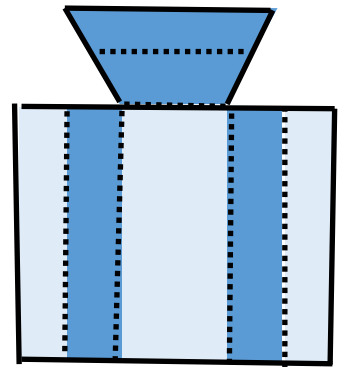
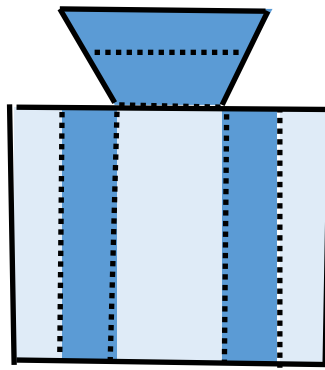
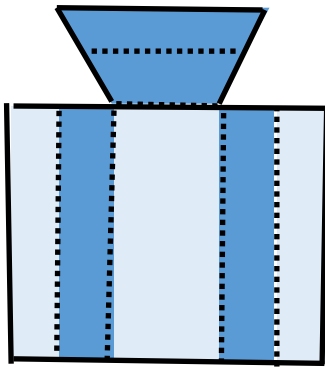
Fold on the dotted lines, then tape the pocket onto the back of the rocket along three sides.

Place the short end of a bendy straw into the pocket.

You are ready to fly!

Photo here





## STEM Connections

How do rockets work?

If you fill a long skinny balloon with air, then let it go without tying it, you will have created a rocket, of sorts. The fuel for the rocket comes from your lungs and creates thrust. This is the power that lifts the balloon off of the ground overcoming the weight and driving it upward. It creates a lift, which carries the rocket into the air. The weight of the balloon and the air that gets in the way as it rises is what carries it back down because the opposite force of lift is drag.

These Laws of Motion were first observed by Sir Isaac Newton in 1666 when he saw an apple fall from a tree. He wrote a book about it in 1687.

What happens if you add more weight to your rocket?

## Other Rocketry Sources

*Rocketry: Investigate the Science and Technology of Rockets and Ballistics* by Carla Mooney

*Maker Lab Outdoors: Smithsonian* by Jack Challoner

*Rocket Science* by Deborah Lock