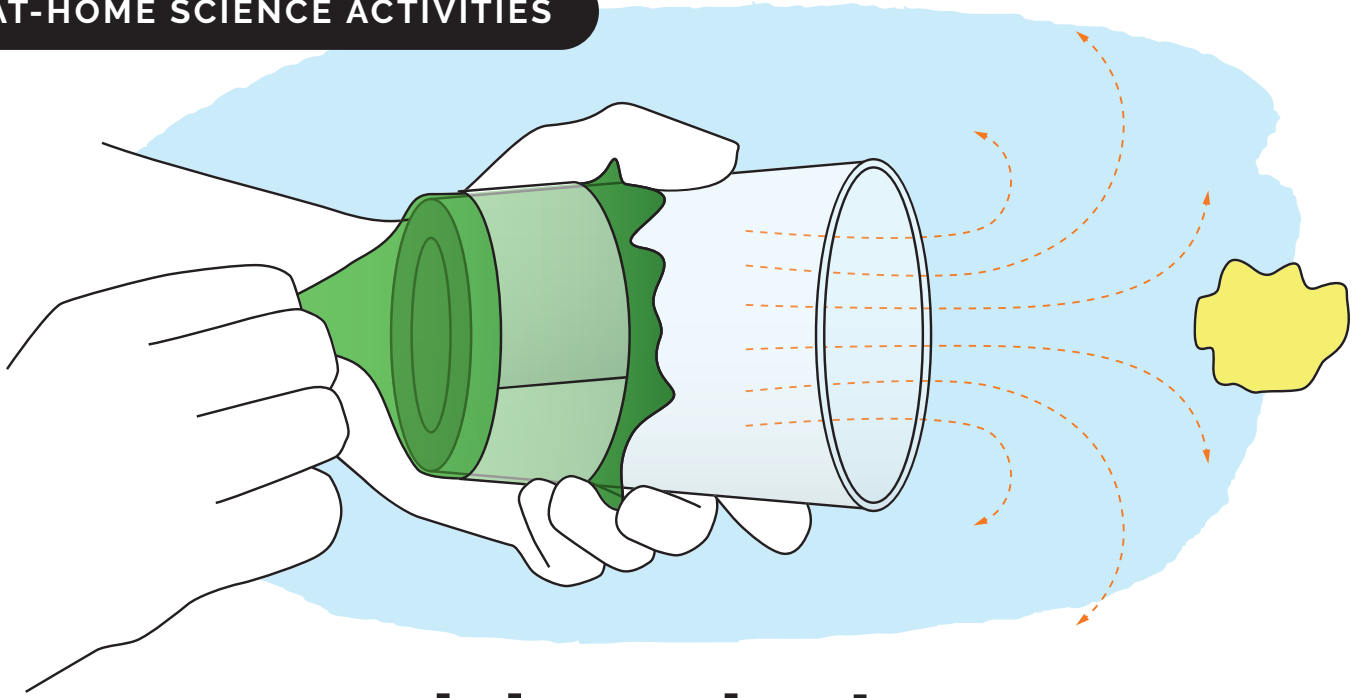


AT-HOME SCIENCE ACTIVITIES



air launcher!

MATERIALS

- balloon
- cup
- packing tape
- scissors
- small objects to launch
(such as wads of paper,
marshmallows, pom poms)

DIRECTIONS

Tie a knot at the “neck” of your uninflated balloon. This knot will be the “trigger” that you release to propel the air and your projectile. Next, snip off the bottom, or rounded part of your balloon. Be sure to leave enough to stretch over your cup. Then, cut off the bottom of a cup. Stretch the open end of the balloon over the bottom of the cup. Use the packing tape to secure the balloon edges around the cup. Your launcher is ready to go!

THE SCIENCE

When you hold the cup steady and pull the balloon back before the launch, it has a high level of potential energy. Once you release the balloon that potential energy is changed or converted into kinetic energy. If you place an object in the cup and repeat this action the object becomes a projectile and will move through the air until gravity gradually causes it to fall to the ground or its flight is interrupted by a wall or if someone else catches it!

EXPERIMENTS

- Have a competition to see who can launch an object the farthest.
- Measure to see which of your objects goes the farthest.
- Compare a small object to a large object (large marshmallow to a small marshmallow) and see how they compare.
- Make a variety of air launchers using different sized cups or tubes. Which design launches projectile the farthest?

#MuseumFromHome