

# Cotton Ball Launcher

## Materials

- Paper or plastic cup
- Balloon
- Rubber Band (optional)
- Scissors
- Cotton ball or other lightweight and soft projectile

### Going Further

Can you design your own cotton ball launcher?

Students will make a simple contraption to launch a cotton ball across the room!

3rd - 5th  
Grade

## Directions

1. Carefully cut the bottom out of the cup.
2. Blow up the balloon and let the air out a few times to stretch it out. Make sure all the air is OUT of the balloon and tie it closed.
3. Cut off the bottom part of the balloon.
4. Stretch the opening at the bottom of the balloon over the bottom of the cup. Make sure the knot in the balloon is lined up with the center of the opening you cut in the bottom of the cup.
5. Wrap the rubber band around the place where the balloon is overlapping the sides of the cup for extra security.

## To Launch

Drop a cotton ball into the cup. Hold the cup firmly in one hand with the open end pointing away from you. Grab the knot in the balloon with your other hand. Pull back to stretch the balloon like a slingshot - be careful you don't pull so hard that the balloon comes off the cup! Let go of the balloon and watch the cotton ball fly!

## What's Happening?

Rubber is elastic. That means it stretches when you pull on it but doesn't stay stretched out when you let it go. When you stop stretching rubber it wants to go back to its original shape.

The balloon at the bottom of the cup is also made of rubber. So when you stretch it and let it go the balloon snaps back to where it was before you stretched it. When the balloon snaps back into place it pushes the cotton ball forward very fast and launches it out of the cup!

