

Aqua Launcher

(Remember always ask permission and clean up after you are done)

Materials Needed:

Empty 1-2 liter plastic bottle

A cork or other object that fits slightly snug in the opening of your bottle

A hand-held tire pump with a needle for pumping up a ball

A box

Water

Directions:

- You must be outdoors to do this activity
- Be sure you are safe when doing this experiment.
- Put about a cup of water in your empty bottle
- Put the needle from the pump through the center of the cork. Screw the needle into the pump.
- You will need a box (shoe box size is good) with a hole cut in the top large enough to let your bottle opening to rest in it but not allowing the bottle to go through. On the bottom of one of the sides cut a hole from the bottom up. Like a mouse hole. This will let the house portion of the pump rest smoothly on the ground without getting pinched.
- With your bottle upright place the box over the opening of the bottle through the small round hole you cut on top. Insert the cork tightly into the bottle. Invert the box and bottle. Your bottle should be upside down and the cork inside the bottle. The tube from your pump should be coming through your mouse hole on the side.

- Be sure to keep your head and face away from the bottle. Start to pump air into the bottle. It won't take long and your bottle should fly.
- To view a demonstration log in to your Beanstack account. Click on the link in Badge 2.4.

Air pressure inside the bottle builds up as you force more and more air into it. When it is too great, it blows the cork and launches the bottle