

Building a Basic Rocket

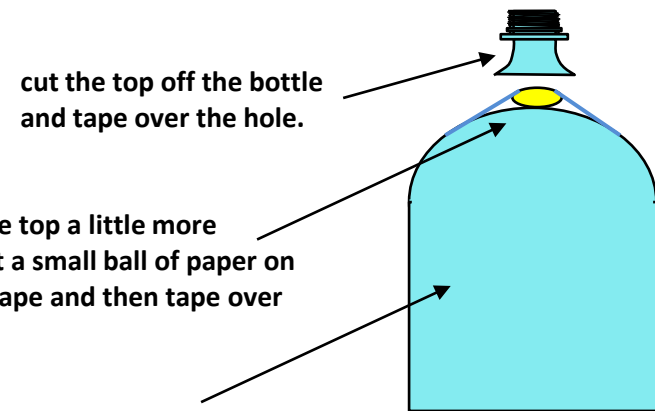
www.rocket-fun.com

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Materials:

- Empty 2-liter plastic bottle x2
- Sheet of foam-core board
- Manual air pump
- Scissors or a sharp hobby knife
- Tape (duct tape works well)
- Small weight (Kids Modeling clay)

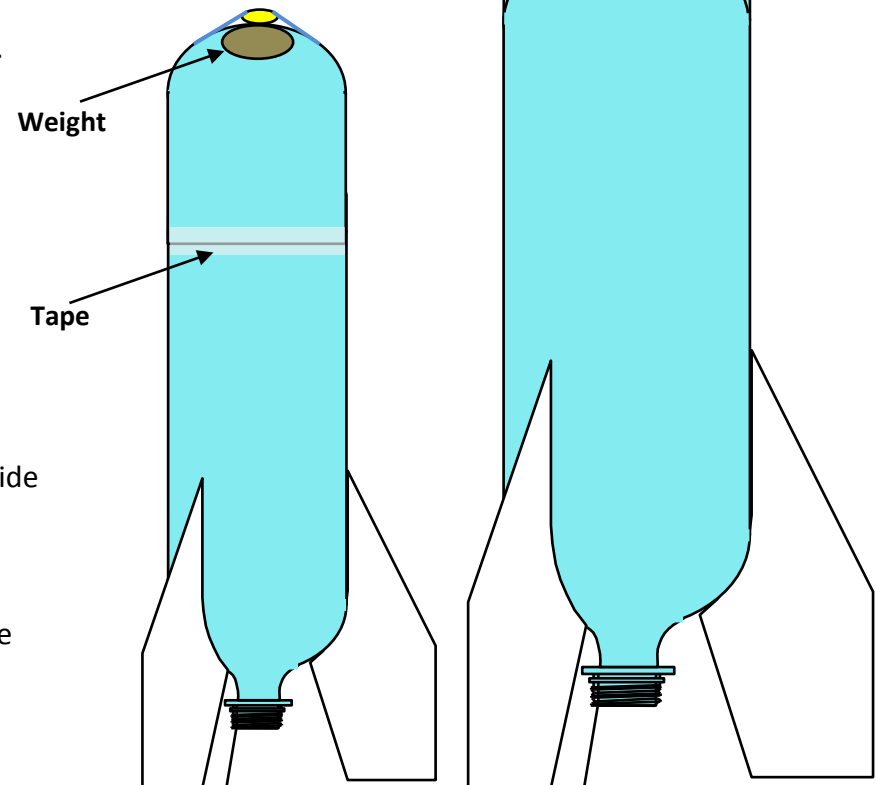
- Fill the bottle about 1/3 full of water.
- Turn the rocket over and place on the launcher.
- Operate the pump. Keep pumping until you get the pressure you want into the rocket.
- Don't forget the count down 5, 4, 3, 2, 1 launch!!!!
- The water will be violently forced out by the air inside and the rocket will launch. The higher air pressure will cause the water to come out much faster.
- The action is the rocket pushing the water down and out.
- The reaction is the water pushing the rocket up.
- To increase the stability of your rocket (making it fly straighter), put a small weight inside the nose cone. This moves the center of mass higher above the center of pressure (which is back where the fins are).
- Don't forget that what goes up.... will come down!!!! Check around the area for people



cut the top off the bottle and tape over the hole.

To make the top a little more pointed put a small ball of paper on top of the tape and then tape over the paper.

2ltr bottle cut in half and the top with the screw cap removed. Slide the top over the base of the other 2ltr bottle and tape together.



Weight

Tape

Use the template provided to trace out the shape of a fin on the foam-core board. Cut the fin out with the knife.

Use the tape to attach the fins to the bottle
I like to use foam core board for the fins. you can find it at any art supply store. You will need a nice sharp hobby knife to cut the foam core.

