

# How to Make a Soda Bottle Rocket



## Steps:

### Building your rocket:

(There are many designs for this. Use your imagination)

1. Get an empty, clean 1, 2, or 3 liter bottle.
2. Attach some cardboard or foam and cut out in triangles with a flap on the end to tape to the bottle.
3. Paint if desired.

### Make a cork for your bottle (Mr. Deane will provide this):

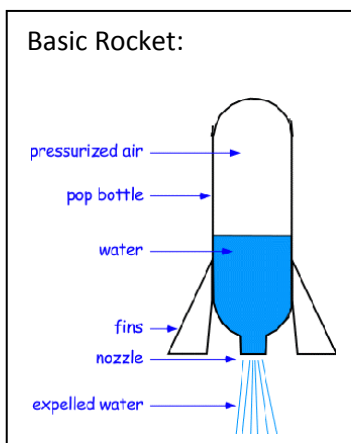
1. You can make a cork by getting an old bicycle tire inner tube.
2. Cut the stem off the tube.
3. Cut a strip of rubber from the inner tube about 1 inch wide and 18 inches long.
4. Wrap the rubber around the stem until it fits in the mouth of the bottle snugly.
5. To prevent the rubber from unwinding wrap some duct tape around the rubber. Your cork is now ready.

### Launching your rocket:

1. Remove the cork of your rocket. Fill your rocket with about  $\frac{1}{4}$  the way with water (rocket fuel).
2. Replace the cork so it is on snugly.
3. Get an orange play cone with a hole at the top.
4. Flip the cone upside down.
5. Place your rocket inside the cone.
6. Attach a bike pump to the cork of your rocket.
7. Begin to pump the rocket. Make sure the cone is pointed AWAY from anyone (including you) or any buildings or windows. Wear safety goggles.
8. As the air pressure begins to build inside your rocket the cork will slip off and your rocket will take to the sky.
9. Refill your rocket with water and you ready to launch again!



### Pictures of Rocket Designs:



March 24, 2011

Dear Parents:

We are studying space for the next few weeks. We will be learning about the sun, the Earth, the moon, and how the first astronauts flew to the moon. Next week we are going to do an experiment with soda bottle rockets. Your child will need a clean 1, 2, or 3 liter plastic soda bottle. If your child wishes to decorate their bottle, they are welcome to do so. I've attached an instruction sheet to this note. Our class times for launch are:

A Day: Friday, April 1<sup>st</sup> Time \_\_\_\_\_

B Day: Tuesday, March 29<sup>th</sup> Time \_\_\_\_\_

You are invited to come watch your rocket scientist at their launch time. I am looking for a few parent helpers and non-electric bike pumps as well. If you are able to come and assist our launch, please let me know. Thanks.

Mr. Deane



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\_\_\_\_\_ Yes I am able to assist with the rocket launch.

Child's name: \_\_\_\_\_



Parent Signature: \_\_\_\_\_

Class:        **A Day**        **B Day** (circle one)        Time: \_\_\_\_\_

We        **DO**        **DO NOT**        (circle one)        have a bike pump to bring.