



## Build a Bubble-Powered Rocket!

Make these yummy star cookies with genuine star-colored centers you can see through.

**Suggestion: Find a grown-up to do this activity with you.**

### What you need:

- Paper, regular 8-1/2- by 11-inch paper, such as computer printer paper or even notebook paper.
- Plastic 35-mm film canister (see hints below)
- Cellophane tape
- Scissors
- Effervescing (fizzing) antacid tablet (the kind used to settle an upset stomach)
- Paper towels
- Water
- Eye protection (like eye glasses, sun glasses, or safety glasses)

### Hints:

- The film canister **MUST** be one with a cap that fits **INSIDE** the rim instead of over the outside of the rim. Sometimes photography shops have extras of these and will be happy to donate some for such a worthy cause.
- Just like with real rockets, the less your rocket weighs and the less air resistance (drag) it has, the higher it will go.

### What to do:

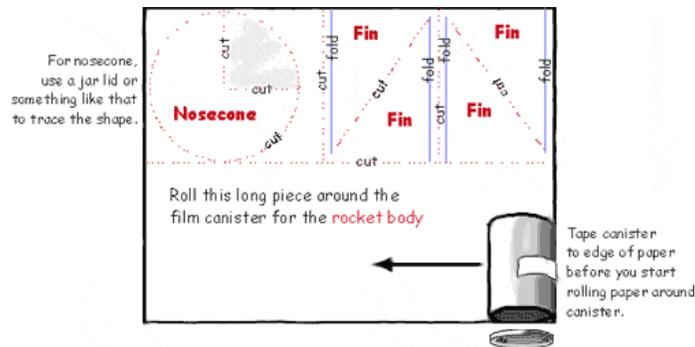
#### ***Making the Rocket***

*You must first decide how to cut your paper. You may cut it the short way or the long way to make the body of the rocket. There is no one right way to make a paper rocket. Try a long, skinny rocket or a short, fat rocket. Try a sharp nosecone or a blunt nosecone. Try it with fins or without fins. Experiment!*

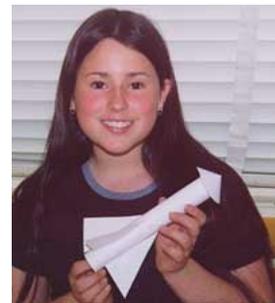
Find this activity online by visiting NASA's Space Place website: <http://spaceplace.nasa.gov/pop-rocket>.  
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Here's just one idea for how you might cut your whole rocket from one piece of paper:



1. Cut out all the pieces for your rocket.
2. Wrap and tape a tube of paper around the film canister. **Hint:** Tape the canister to the end of the paper before you start wrapping.
3. **Important!** Place the lid end of the canister **down**.
4. Tape fins to your rocket body, if you want.
5. Roll the circle (with a wedge cut out) into a cone and tape it to the rocket's top.



### ***Blasting Off***

1. Put on your eye protection.
2. Turn the rocket upside down and remove the canister's lid.
3. Fill the canister one-third full of water.

### ***Now work quickly on the next steps!***

1. Drop one-half of an effervescent antacid tablet into the canister.
2. Snap the lid on tight.
3. Stand your rocket on a launch platform, such as your sidewalk or driveway.
4. Stand back and wait. Your rocket will blast off!

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