

Balloon Rockets

Did you know you can make a rocket with 4 simple tools? Let's try it!

Materials

- Straws
- Balloons
- Paper
- Tape

Instructions

1. Attach balloon to straw using tape, making sure to get a good seal.
2. Decorate your rocket! Add fins, decorations, etc.
3. Test it out! Blow up your balloon, cover the end of the straw when done, and release when ready! If you're doing this in a group, write your name on your rockets so you're not sharing straws (and germs).

The Science Behind it

It's all about the air -- and thrust. As the air rushes out of the balloon, it creates a forward motion called THRUST. Thrust is a pushing force created by energy. In the balloon rockets, our thrust comes from the energy of the balloon forcing the air out. Different sizes and shapes of balloons will create more or less thrust. In a real rocket, thrust is created by the force of burning rocket fuel as it blasts from the rocket's engine -- as the engines blast down, the rocket goes up!

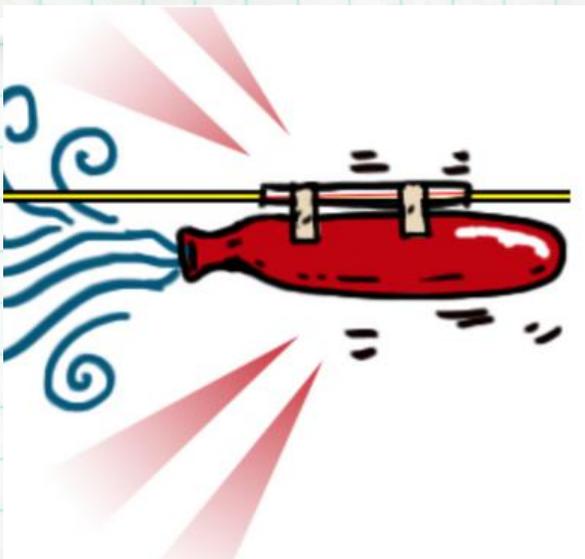
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Try these additional rocket set-ups for more fun!

Instructions

Additional Materials

- Blue tape
- fishing line or string (length of the room)



1. Tie one end of the string to a chair, door knob, or other support.
2. Put the other end of the string through the straw.
3. Pull the string tight, and tie it to another support in the room.
4. Blow up the balloon (but don't tie it).
5. Pinch the end of the balloon and tape the balloon to the straw as shown above. You're ready for launch.
6. Let go, and watch the rocket fly!
7. Make some adjustments to your rocket using paper and other craft materials. How does this impact the launch?