

Materials

- Balloon
- Straw
- String
- Tape
- Two chairs or other furniture to tie string to

1

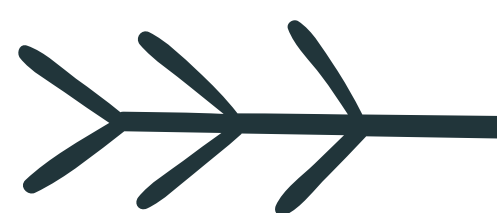
Use tape to attach the balloon to the straw. Make sure you can still blow up the balloon after you attach it and you do not block the openings of the straw.

2

Take a fairly long piece of string and tie one end to a chair or other piece of furniture. Blow up the balloon but do not let the air out. Put the string through the straw and make sure it is all the way at the tied end of the string with the opening of the balloon facing the chair. Tie the other end of the string to another chair or piece of furniture that is far enough away so that the string is nice and tight.

3

What do you think will happen to the balloon and straw when you release the balloon? How far do you think the balloon will go? Release the balloon and see how far it will go. Was your prediction correct? Why do you think the balloon and straw shot forward?



The Science Behind It



The balloon and straw shoot forward because of the air released. This shows the Third Law of Newton's Laws of Motion. It states that for every action, there is an equal and opposite reaction. The air shooting out of the balloon exerts a force on the balloon and the straw forcing them to move in the opposite direction with a force equal to that of the air. Real rocket ships use this law to launch into space just on a much bigger scale.