



Squeeze-bottle rockets

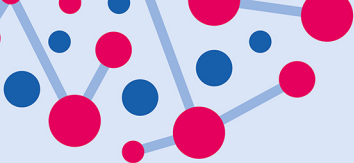
At-home science activity

twigEDUCATION

You will need:

- Plastic drinks bottle
- 2 straws (one must be able to slide easily inside the other)
- Sticky tack
- Paper
- Sticky tape
- Scissors



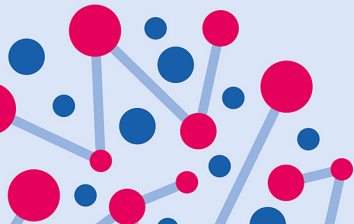


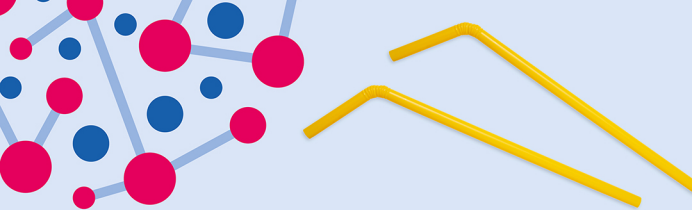
1. Place the thinner straw into the neck of the bottle and fix in place using sticky tack, sealing it well. This will be the rocket launcher.
2. Seal one end of the larger straw with sticky tack. This will be your rocket.
3. To fire your rocket, slide the larger straw over the narrow one, take aim, and squeeze the bottle hard. Note: have an adult supervise this (or, with small children, don't let them do it themselves).

4. Then use paper and sticky tape to attach different shapes to the sides of the straw.

5. Investigate the effect that these different shapes have on the motion of the straw. Do the different shapes affect the movement through the air or the distance traveled by the rocket?

6. Swipe to find out more about how this experiment works!





- When the bottle is squeezed, the air inside it is compressed and the pressure increases.
- This high pressure causes the air inside to move to an area of low pressure outside the bottle.
- As the air travels through the straw, the rocket propels forward.
- Adding different shapes to the bottle can affect its speed and cause the rocket to curve in the air.