

Balloon Powers Racer

Using recycled materials, you can make this balloon powered racers.
Harnessing the power of wind to propel it along the ground.

1. You will need:

- Plastic bottle
- 4 x Plastic bottle caps
- 3 x straws
- 2 x Wooden skewers
- Balloon
- Rubber band
- Tape
- Scissors



- ### 2. Cut two straws so they are slightly longer than the width of the bottle. Tape the straws to the bottle making sure they are parallel.



3. Cut the skewers so they are slightly longer than the straws.
4. Make small holes in the centre of all four bottle caps and Push a skewer through one of the holes.
5. Thread the skewer through one of the straws, pointy end first.
6. Push a bottle cap onto the other end of the skewer. This makes an axle with two wheels.
7. Repeat to make a second axle.



8. Test to make sure the racer rolls smoothly. If it gets stuck the axles may not be parallel so adjust them as necessary.

9. Next, place the balloon around the end of the third straw and wrap a rubber band around the neck of the balloon.



10. Cut a small hole, big enough for the straw, in the top of the racer.

11. Push the straw through the small hole and out of the mouth of the bottle.

12. Tape the straw so it points backwards, not down.



13. Now you are ready to race. Blow up your balloon. Cover the end of the straw with your fingertip to keep the air in the balloon until you put it down. Place the racer down and release!

How far did it travel?

Try in on different surfaces to see which works best.

Race against your friends. Who will win?