



KS3

Elastic Band Powered Racer

Using recycled materials, you can make this elastic band powered racers. Harnessing the kinetic power from an elastic band to propel it along the ground.

You will need:

- Craft sticks (large and small)
- Rubber bands
- Plastic bottle tops
- Wooden skewers
- Straws
- Hot glue gun
- Scissors
- Heavy screws or bolts



Place two large craft stick side by side and carefully hot glue two small craft stick about 2cm from each end.

As shown, Cut two small sections of a straws and glue horizontally them to the two longer craft stick ends.

Now cut another longer straw and glue horizontally to the opposite end of the smaller straws.





Use the sharp end of a skewer to make a hole through the centre of each bottle top.



Thread the skewers through the straws and place the caps onto the ends. Secure with hot glue.

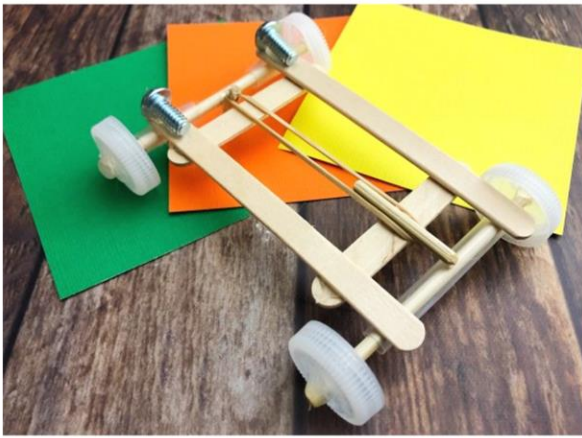
Cut a 3cm and 1.5cm skewer, glue the 3cm piece to the miniature craft stick on the front of the car (the end with the long straw) as shown.

Glue the 1.5cm piece on the back skewer of the car.

Glue a heavy bolt or weight on each long craft stick on the back of the car.

This is to make sure that the wheels remain on the surface.

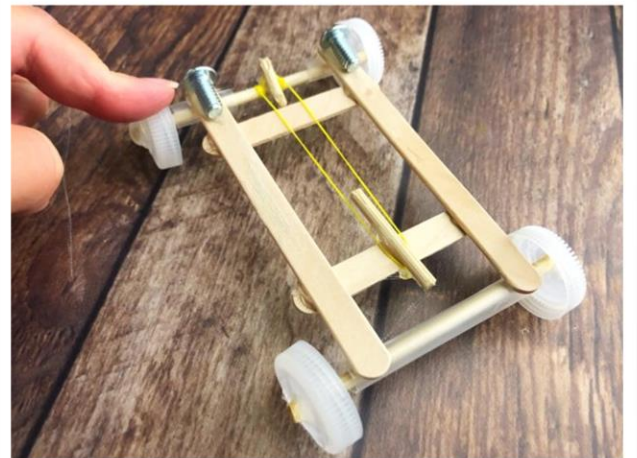




Wrap a rubber band under the front of the 3cm skewer and carefully dab a little hot glue on to hold in place.

Pull the rubber band and wrap the other end to the back underneath side of the 1.5cm skewer and secure with glue.

Carefully pull the car back, wrapping the rubber band around the back skewer, once tightly wound, let go and watch your racer go!



How far does your racer travel?

Try it on a different surface. Which surface is the best?

Could you find or make some different sized wheels? Does it improve your racer?