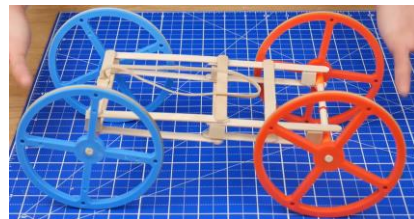




Build a rubber band powered car

Materials

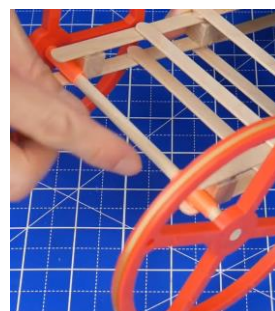
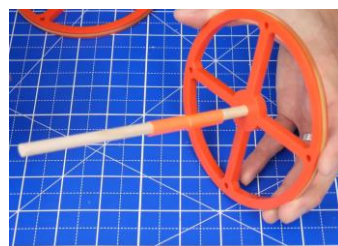
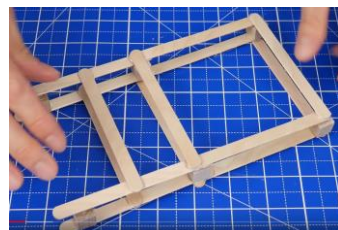
- hot glue gun
- tape
- scissors
- Frame: Cardboard, ice cream sticks, small craft cubes
- Axels: wooden dowel, straws, zip tie
- Wheels: jar lids, corrugated cardboard wheels or plastic wheels
- Rubber bands – for power



Original Source: [STEM Inventions](#)

Instructions

1. Build a rectangular frame using ice cream sticks or cardboard.
The frame needs to be long enough to accommodate your wheels and strong enough to stretch the rubber band. Using hot glue to stick the sticks or pieces together, rather than tape will ensure the cars body is strong.
2. If you are using corrugated cardboard for the wheels, cut out 4 circles.
3. Drill or cut a hole in the center of each wheel.
4. Wrap or stick a rubber band around the circumference of the wheels. This is for extra grip.
5. Cut the dowel into lengths a little longer than the frame is wide. Attach one wheel to the end of each dowel to form the axles. If the wheels are too loose, then wrap some masking tape around the axle and try again. Use hot glue if they slip a little.
6. Put two short straw pieces on one axle (rear) and a longer straw (shorter than the axle) on the other (front), then attach the second wheel to both. The straws allow the wheel to be attached to the frame while allowing the wheel to spin.
7. Using the hot glue stick the rear axle to the 'back' of the frame using the two short straw pieces. The axle should be exposed in the middle to let the elastic band wrap around it. Make sure it is attached well to the frame so it won't snap off once the rubber band is stretched out.





Build a rubber band powered car

8. Tape the straw to the front of the frame, around the front axle. It doesn't need to be attached as securely and may need to be adjusted so the car drives straight.
9. Secure the rubber band around the top ice cream stick at the front of the car. Do not loop around the axle as this will pinch the frame once it's pulled tight and stop the wheels from turning.
10. Secure a cable tie around the center of the rear axle tight and cut the excess off. This will allow the rubber band to latch on to the cable tie and wrap around the rear axle.
11. To wind the car up, hook the rubber band to the cable tie and roll the rear wheels so that the rubber band wraps around the back axle. When the rubber band is tight, let go and watch your car zoom away.

The car is done! Have fun decorating and racing your cars.

