

JR-ENGINEERS

RUBBER BAND CAR

This rubber band powered car is an awesome engineering activity for your next STEM project time.

INSTRUCTIONS:

STEP 1: Place two craft sticks side by side and carefully hot glue one miniature craft stick about 1" from each end.

STEP 2: Cut two 1/2" straws and glue horizontally to the two longer craft stick ends (facing the same way as the miniature craft sticks).

STEP 3: Cut a straw piece about 2.6" long and glue horizontally to the opposite end of the straws.

STEP 4: Use the pointy end of a skewer to poke a hole through the center of each bottle cap.

STEP 5: Cut two 3.6" skewers and place one through the straws. Place the caps onto the ends of the skewers and hot glue to secure.

STEP 6: Cut a 1" and 1/2" skewer, glue the 1" piece to the miniature craft stick on the front of the car (the end with the long straw) like pictured. Glue the 1/2" on the back skewer of the car.

STEP 7: Glue a heavy bolt on each long craft stick on the back of the car.

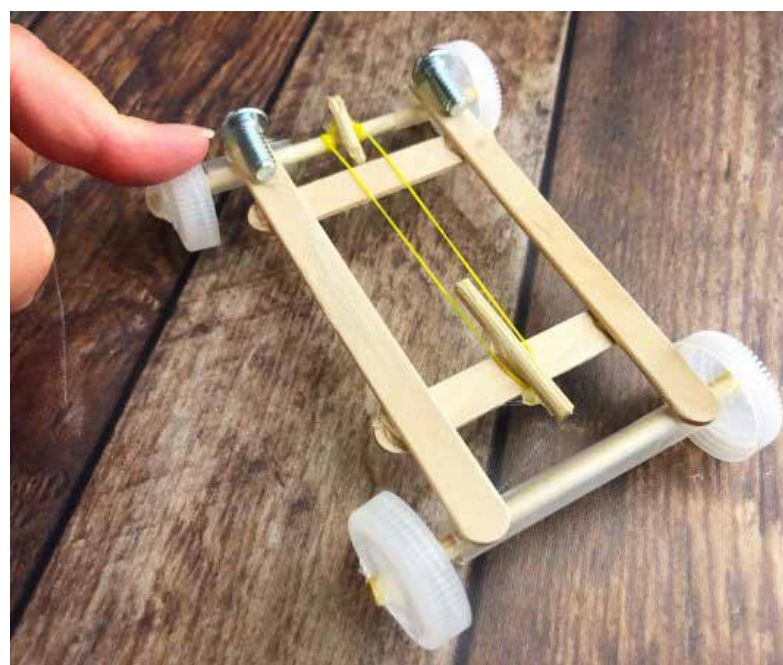
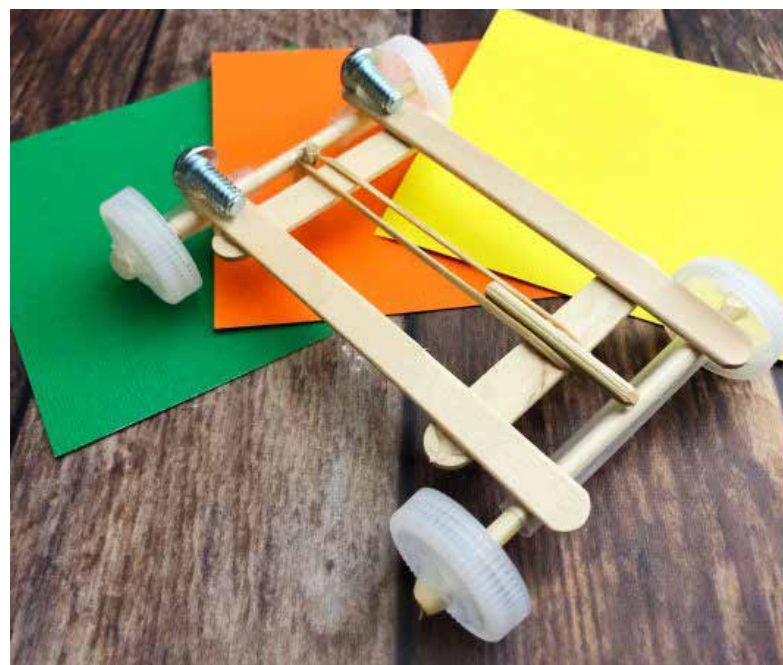
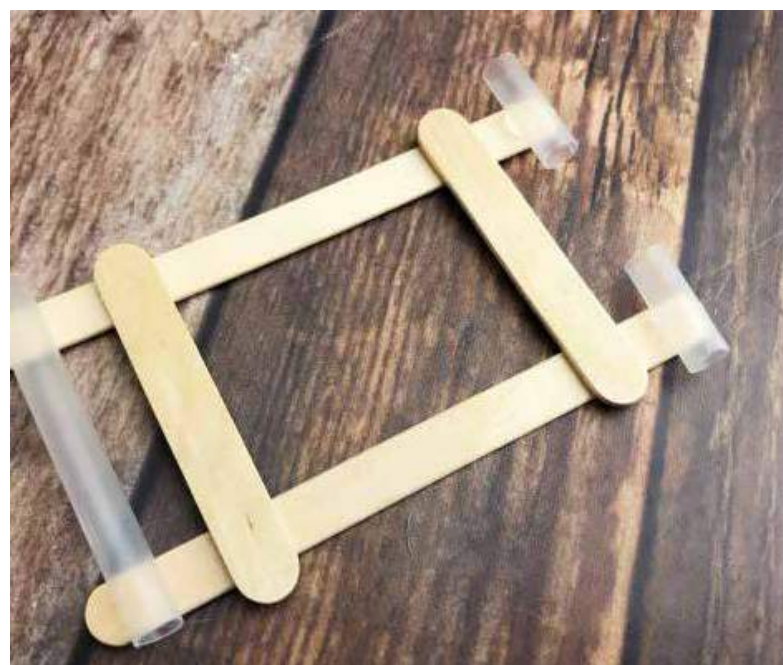
STEP 8: Wrap a rubber band under the front of the 1" skewer and carefully dab a little hot glue on to hold in place.

Pull the rubber band and wrap the other end to the back underneath side of the 1/2" skewer and secure with glue.

STEP 9: Carefully pull the car back, wrapping the rubber band around the back skewer, once tightly wound, let go and watch your car go!

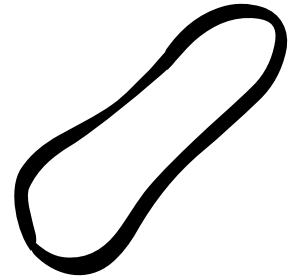
SUPPLIES

Craft Popsicle sticks
Mini craft sticks
Rubber bands
Heavy screws or bolts
Large bottle caps
Wooden skewers
Straws
Hot glue gun
Scissors

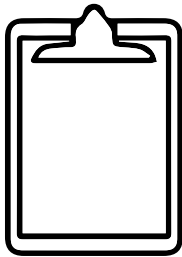


Rubber Band Car Observations

Use this worksheet to process and evaluate your work.



Did your rubber band car work? Did it need any adjustments?



RECORD

Test and measure how far your car will drive!

TRIAL 1

DISTANCE IN INCHES

TRIAL 2

DISTANCE IN INCHES

TRIAL 3

DISTANCE IN INCHES

If your car didn't work, what can you try next time?

Test out different sized wheels, change the thickness of the rubber band, play around with the straws!