Rubber-Band Car
Build a model car powered by a rubber-band engine.

Your Kit Contains:

<table>
<thead>
<tr>
<th>2 Pre-Drilled Craft Sticks</th>
<th>4 Wheels</th>
<th>1 Rubber Band</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Axles</td>
<td>Sand Paper</td>
<td>Masking Tape</td>
</tr>
<tr>
<td>2 Spacers</td>
<td>1 Nail</td>
<td></td>
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<td>1 Rubber Band</td>
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<td></td>
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</tbody>
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How to Assemble Your Car

Body:
1. Place the two craft sticks together and make sure you can get the holes to line up. Flip the craft sticks end-to-end or bottom-to-top as needed to get all four holes aligned. Make a mark on both sticks so you can line them up the same way in Step 5.

2. Use the sand paper to taper the ends of each spacer so that they fit snugly into the two inner holes in each craft stick.

3. Insert the tapered spacers into the inner two holes of one of the craft sticks. They need to fit snugly, but don’t force them—you might crack the craft stick. If they don’t fit, taper the ends some more with the sand paper.

If the craft stick does crack, repair it by wrapping a piece of masking tape tightly around it. Make sure the tape is clear of all the holes.

4. Loop the rubber band around one of the spacers (it doesn’t matter which one). This spacer will be at the front of the car when you’re finished.
5. Align the second craft stick so the inner two holes line up with the spacers, and press it onto the free ends of the spacers. Again, the spacers need to fit snugly into the holes. Taper the ends some more with the sand paper if you need to.

6. Make sure the two pairs of outer holes are aligned. Slide the axles through them and make sure both axles can turn freely. If the holes are not aligned, make sure the craft sticks are oriented the same way as in Step 1.

7. Cut two pieces of masking tape, each about 15 cm long. Wrap a piece of tape tightly around the car body at each spacer, as shown in the diagram. You might need a partner to help hold everything together while you tape.

**Axles and Wheels:**

8. Slide the axles through the two outer pairs of holes in the craft sticks. The axle that has the hole drilled through it should be at the back of the car, farthest from the spacer that has the rubber band around it.

Make sure the axles turn freely. If they are binding, use the sand paper to smooth the axle or widen the holes.

9. Cut four pieces of tape, each about 4 cm long. Wrap a piece of tape around the ends of both axles.

The tape fattens up the axle ends slightly so that the wheels will fit on snugly.

10. Twist the wheels onto the ends of the axles. The wheels must fit on snugly, or they will fall off when you try to run your car. If they are loose and wobbly, wrap a bit more tape around the ends of the axles. If you can’t get the wheels on the axles, remove some tape.

11. Slide the nail through the hole in the rear axle. Your car is ready to run!

To run your car, pull the rubber band back and slip it over the nail in the rear axle. (Be careful not to snag yourself or the rubber band on the point.) Wind the rear axle backwards until the rubber band is tight. Set your car on the floor (carpeted or rough surfaces work best) and let it go!

To give your car a longer life, glue the spacers into the craft sticks and the wheels onto the axles. A dab of glue on the rear axle will help hold the nail in place, too.