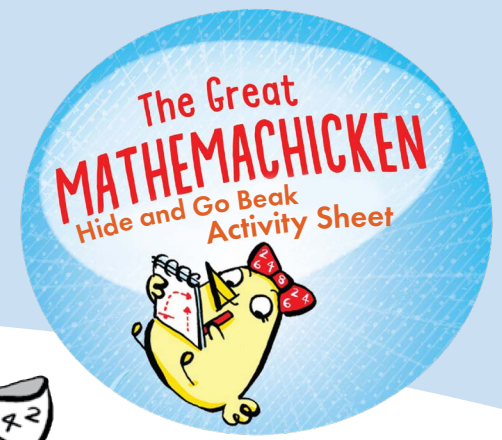


Make a Wacky Wild Wheel and Axle Clothespin Car!

You can make your own simple machine toy with things you find around the house.

Ask and adult for help!



Here's what you will need:

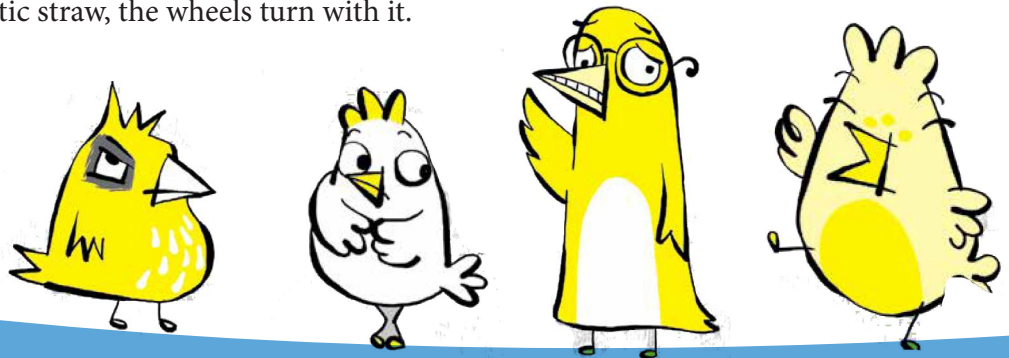
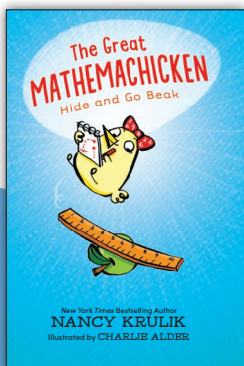
- 1 wooden clothespin
- Tempera paint
- paintbrushes
- 2 metal twist ties
- 4 matching buttons
- 1 plastic drinking straw
- ruler
- white craft glue



Here's what you do:

1. Paint your clothespin any way you'd like and set it aside to dry.
2. Cut two pieces from your plastic straw, making sure each piece is 1 ½ inches long. Use your ruler to measure each piece.
3. Insert a twist tie into the hole of one button
4. Thread the end of the twist tie through a second hole to the back side of the button.
5. Twist the two pieces at the back of the button. Make sure they are twisted tightly.
6. Cut two 1 ½ inch pieces of plastic straw. Use your ruler to measure the pieces.
7. Slide one of the pieces of plastic straw over the open end of the twist tie.
8. Thread the open end of the twist tie through a hole in a second button. Then thread it back through another hole in the button and twist at the back just as you did in steps 4 and 5.
9. Repeat steps 3-8 so you have two sets of button wheels.
10. Open the clothespin (make sure the paint has dried!) and carefully place one straw in the hole of the clothespin opening. Be careful not to crush the straw -- the twist tie has to be able to turn inside the straw.
11. Place a dab of your glue on the rear of the clothespin right near the spring.
12. Place the second set of wheels into the clothespin so the straw sets on the glue. Allow the glue to dry.
13. Your car is ready to go. All you need is a force to start your wheel and axle simple machines. So, give the car a push and watch those wheels turn!

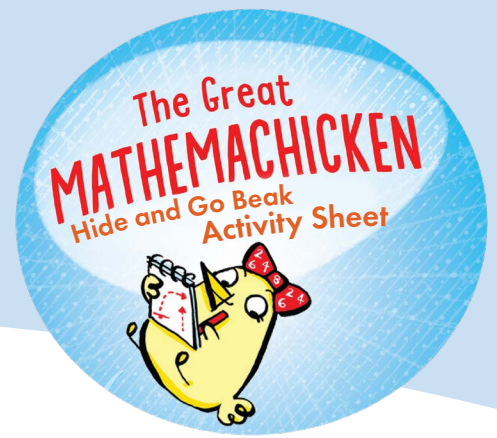
Here's the science: A wheel and axle is a simple machine that makes work easier. In your clothespin car, the buttons are the wheels, and the twist tie is the axle. The twist tie holds the button wheels in place. When the twist tie turns inside the plastic straw, the wheels turn with it.



An Egg-stra Special Whirly-Swirly Wheel-and-Axle Toy

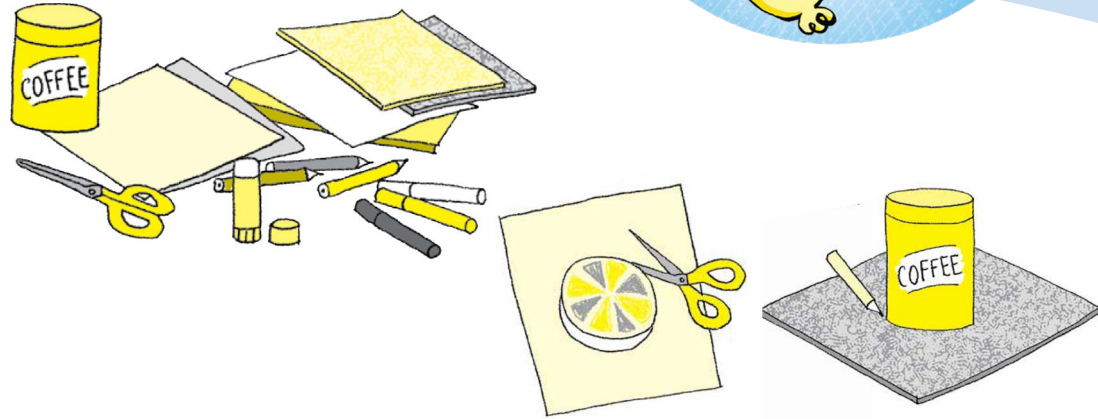
Make your own simple machine!

Ask and adult for help!



Here's what you will need:

- An empty coffee can
- Construction paper
- Colored paper
- Cardboard
- Markers or colored pencils
- Scissors
- Glue stick
- 30 inches of string



Here's what you do:

1. Place coffee can in the middle of a piece of construction paper and trace around it. Repeat this step on a second piece of construction paper.
2. Use your markers or colored pencils to draw designs inside each of the circles.
3. Ask your grown-up to help you cut out the circles.
4. Place coffee can in the middle of a piece of cardboard and trace around it.
5. Ask your grown-up to cut out the cardboard circle.
6. Glue one paper circle to each side of the cardboard circle. Make sure the colorful sides of the paper circles are facing up.
7. Ask your grown-up to poke two holes in the center of the disc. The holes should be about $\frac{1}{2}$ inch apart.
8. Thread the ends of the string through the holes in your disc.
9. Tie the ends of the string together.
10. Move the disc to the center of the string.
11. Hold the ends of the string and flip the disc over and over like a jump rope. This will wind the string.
12. Once the string is wound tightly, pull hard on the ends. The pull is the force you need to make your circle whirl.

