MAKE

Tissue Box Automaton

Make your own simple automaton from materials you have at home!

What you'll need

empty tissue box

pencil

straw (cut into 1-inch pieces)

scissors

cereal box

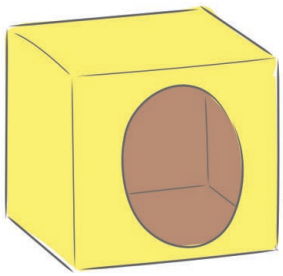
skewers or chopsticks

ruler

craft knife

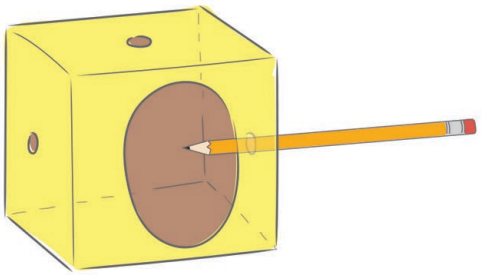
tape or glue

assorted art supplies



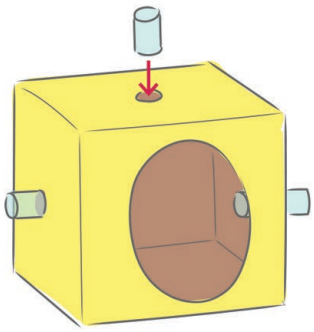
Step 1

Remove any plastic from the **tissue box** hole. Then lay the box so the hole faces you.



Step 2

Use a **ruler** to find the center of the top, left, and right sides. Use a sharp **pencil** to poke a small hole through the centers.

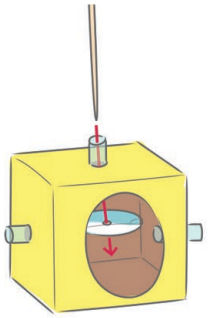


Step 3

Poke the cut **straws** into the holes. They should stick straight out. Tape or glue them in place if they slide.

Step 4

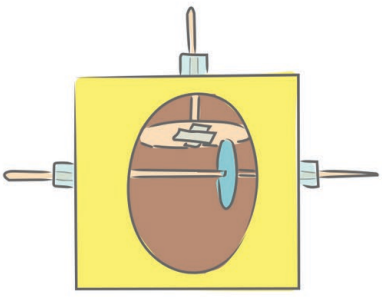
Unfold the **cereal box**. Trace and cut a large circle and a small circle (see the template page). Poke small holes in the centers.



Step 5

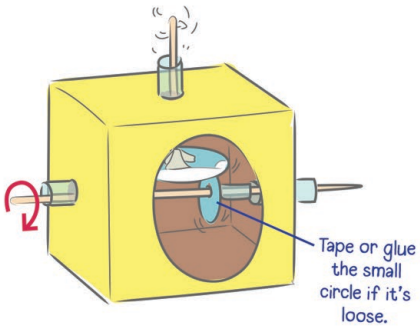
Poke a **skewer** through the top straw. Inside the tissue box, slide the large circle onto the end of the skewer. Tape or glue it on if it's loose.

tip! Flip the circle shiny-side up if you want the automaton to spin.



Step 6

Poke another skewer through one of the side straws. Slide on the small circle, then poke the skewer through the other straw.



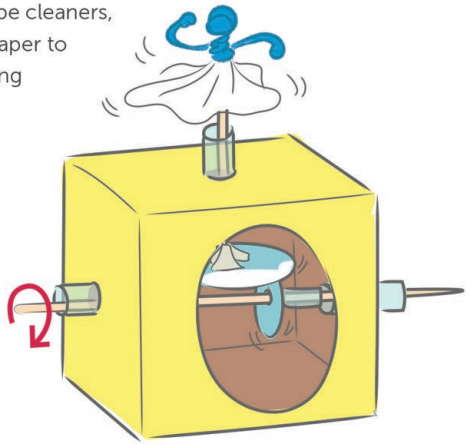
Step 7

Line up the small circle so it touches the bottom of the large circle. Then turn the sideways skewer. The vertical skewer should spin!

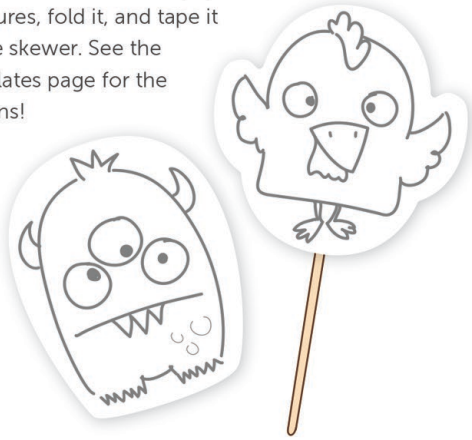
tip! Adjust the spin by sliding the small circle to a new spot under the large circle.

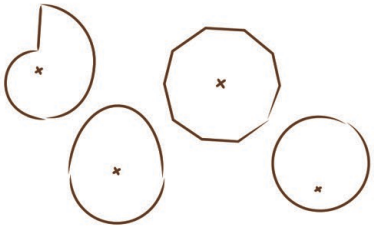
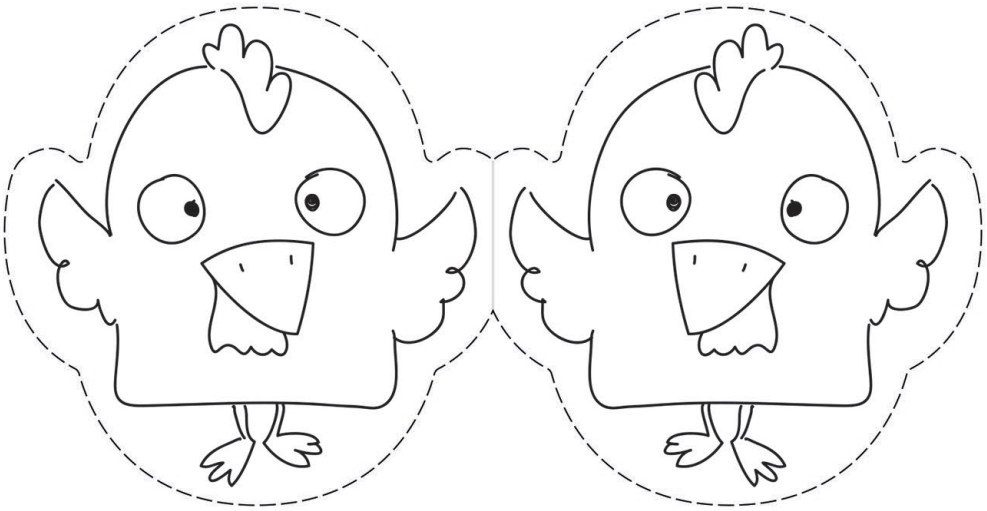
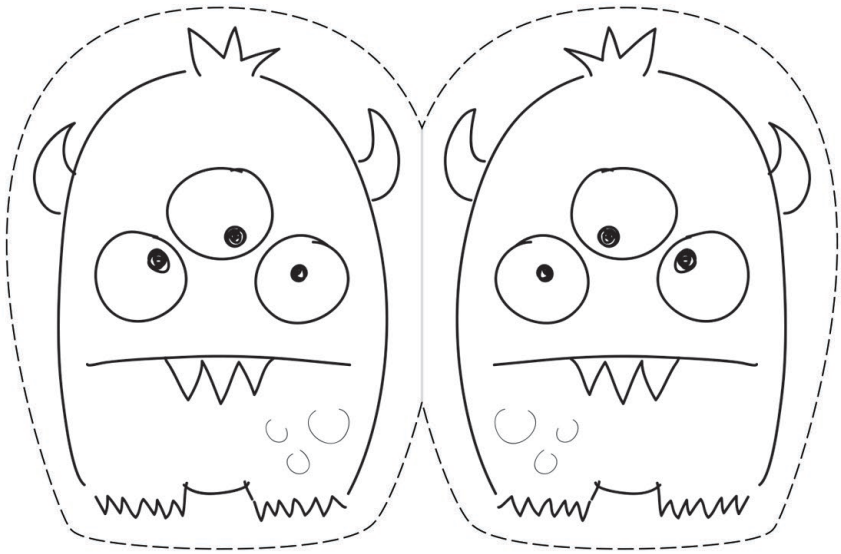
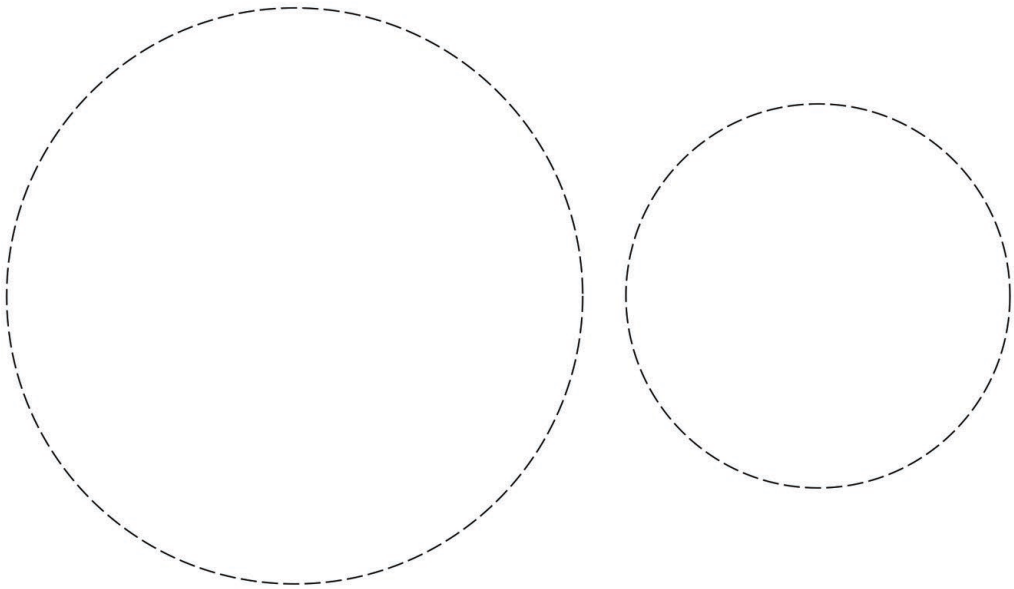
Bring it to life!

Add art to this basic mechanism to make a moving automaton! Try using pipe cleaners, straws, or paper to make dancing figures.



Or cut out one of these paper creatures, fold it, and tape it to the skewer. See the templates page for the designs!



Change of cams

Try replacing the small circle with a different shape of cam. What if you move the hole off-center? What if you use an oval instead of a circle? Check out our **Cardboard Cams** printable for more inspiration!