

# How to Make a Paper Robot







This paper robot is made by attaching two origami boxes to a toothpick spine. The boxes are wrapped in additional paper to cover the open back, and to add extra strength. Arms, legs, and facial features are added at the end.

## GATHER SUPPLIES

Multi-colored papers, clear tape, glue, scissors, ruler, toothpicks, pen

## CUT PAPER PIECES

-  Head  $3\frac{3}{4} \times 3\frac{3}{4}$  inches
-  Head wraps (x2):  $3\frac{3}{4} \times 1\frac{1}{4}$  inches
-  Body:  $3 \times 3$  inches
-  Body wraps (x2)  $3\frac{1}{4} \times 1$  inches
- Limbs (x4):  $2\frac{1}{2} \times \frac{3}{4}$  inches

## FOLD PAPER BOXES

Fold paper diagonally and unfold.

Repeat on the other side, so paper is creased in an X shape.

Fold corners into the center. (Yes, you are halfway to making a fortune teller.) Unfold. The paper is now creased corner-to-corner with two diagonals. Four edge-to-edge diagonal creases make a square in the middle.

Fold the corners in again, this time only as far as the creased edges of the middle square.

Fold in again, this time along the creased edges themselves.

Flip the paper. Fold on opposite edges into the center. Unfold. Fold the other two edges into the center.

Fold one of the top flaps over the other.

On the side the flap came from, fold in the two thickly layered corners. Return the flap.

Now fold over the other flap. Fold in the two corners on this side and return the flap. The whole thing should be shaped like a diamond at this point. Open it along the center where the flaps come together and shape into a box.

## ASSEMBLE ROBOT

Poke neck holes. Use a pen to poke a hole in the crease between the side and the top/bottom of the boxes. This should be through the single layer of paper that makes up the top/bottom, right in the center.

Tuck in the first body wrap. Take one of the body wraps and insert into side of the box, between the paper layers. This should be done of the same side as the neck hole. Fold it over the side so that the colored side shows. NOTE: this body wrap isn't necessary, but the robots that had it were a

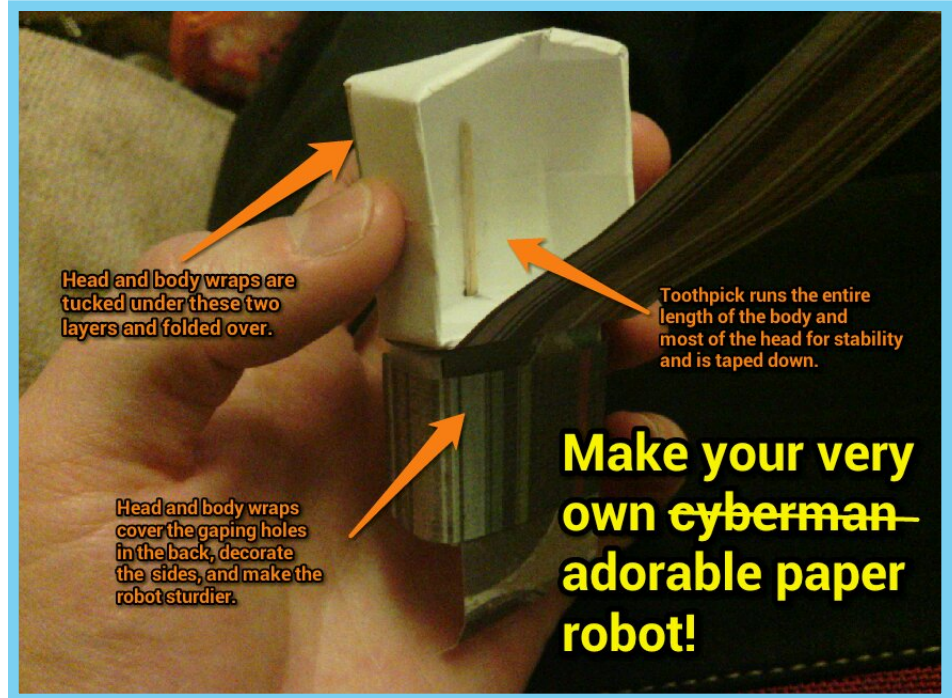
little sturdier.

Repeat on head wrap.

Give the robot a spine. Insert toothpick into body box neck hole, so that it is on the inside of the box, spanning top to bottom. Tape down.

Attach head and body.

Put a dab of glue on the side of the body to glue down the wrap. Repeat with head.



Put a dab of glue on the body wrap.

Insert toothpick / body into neck hole on head. Press together. Tape down toothpick in head. Let this dry. Begin next robot.

When it is dry, fold head and body wraps over the gaping holes at the back of the robot's head and body.

Insert wraps between layers on the opposite sides. Use a toothpick to put a bit of glue between the wraps and the box sides. You may want to let it dry again. NOTE: Sometimes, I'm not sure why, the wrap will be a bit too long. Trim it, fold it, or press it into the box if that happens.

Fold arms and legs in thirds, like a letter, or roll and squash flat. Stick between box layers and glue.

### DRAW A FACE

Is it a happy robot that's had a successful upgrade or a grumpy one that needs a new operating system? If you're stuck on what kind of face to draw, try one of the ones at right.

### NOTES

I wrote my own instructions on folding the boxes so as to include something directly in this guide.

However, I learned how to fold them online at <http://www.origami-instructions.com/easy-origami-box.html>, which has great photos.

