



Snowman Blowing Smoke Rings

Stem Activities



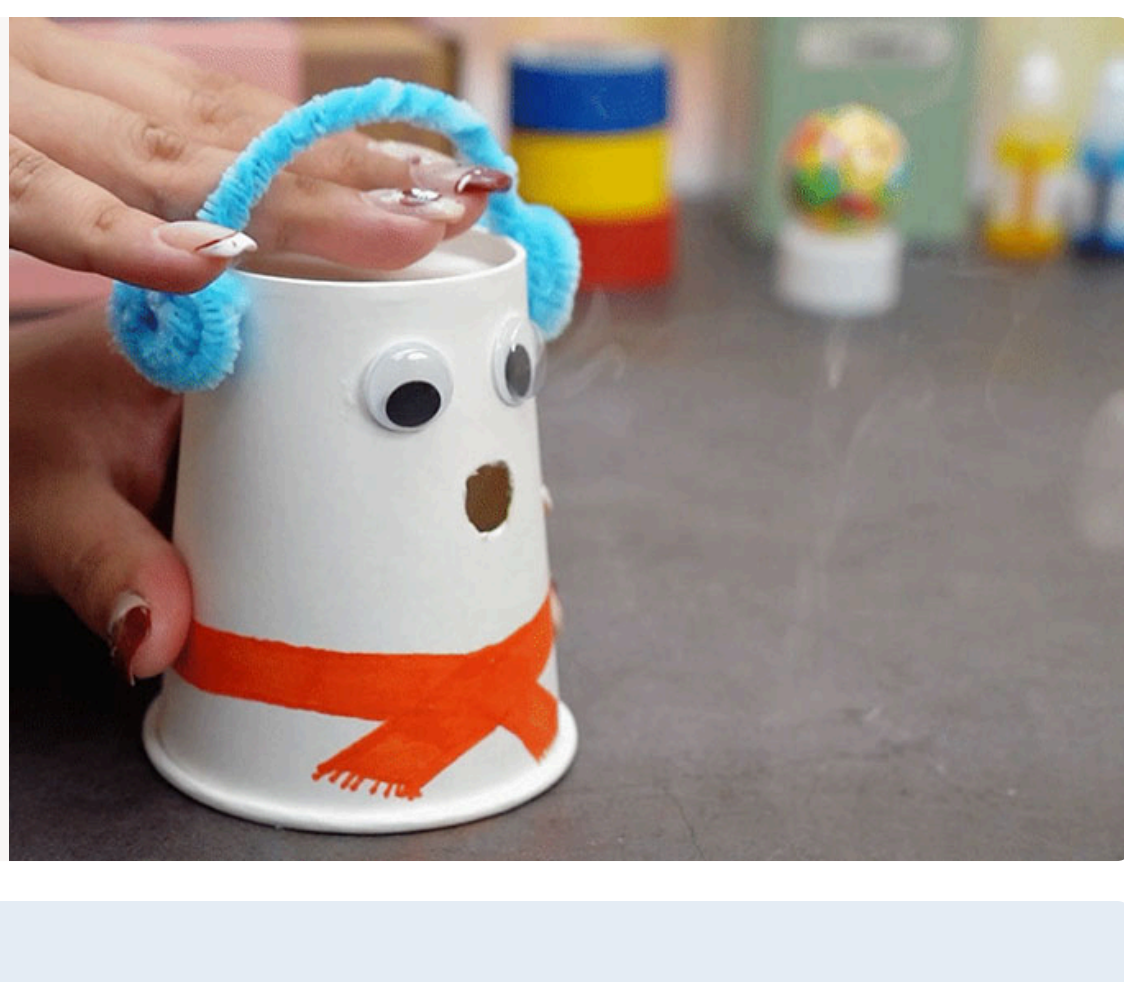
Ages: 9-12



Less than 30 minutes



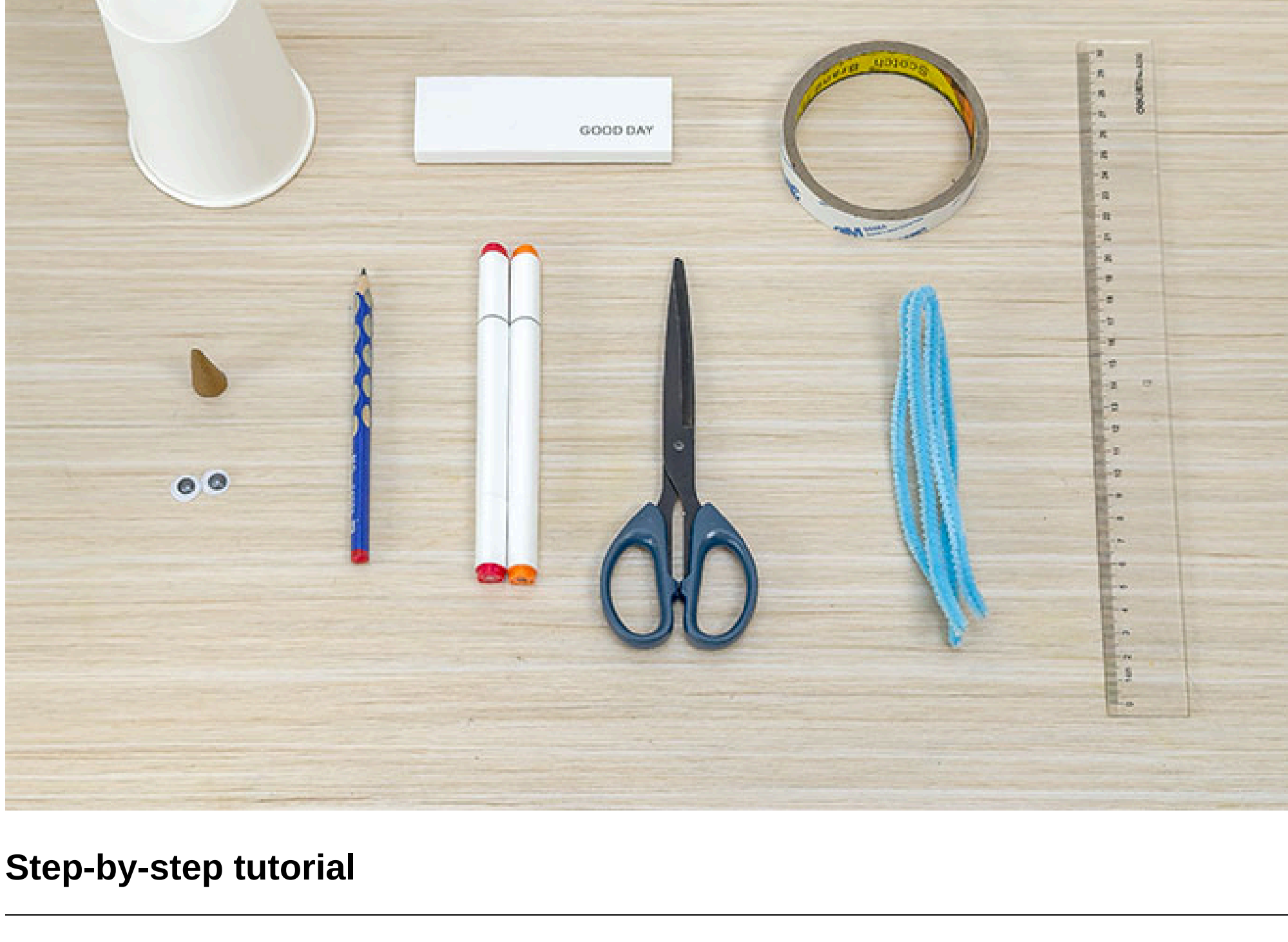
Growup needed



Want to see smoke transform into perfect rings? This simple and entertaining experiment not only brings a touch of magic into your home but also introduces you to the fascinating world of physics.

Materials Needed

Paper cup
Incense stick
Googly eyes
Pencil
Matches
Marker pen
Scissors
Double-sided tape
Pipe cleaners
Ruler



Step-by-step tutorial

Step 1

Place the paper cup upside down and draw a scarf on it using the marker pen.



Step 2

Stick the googly eyes onto the cup.



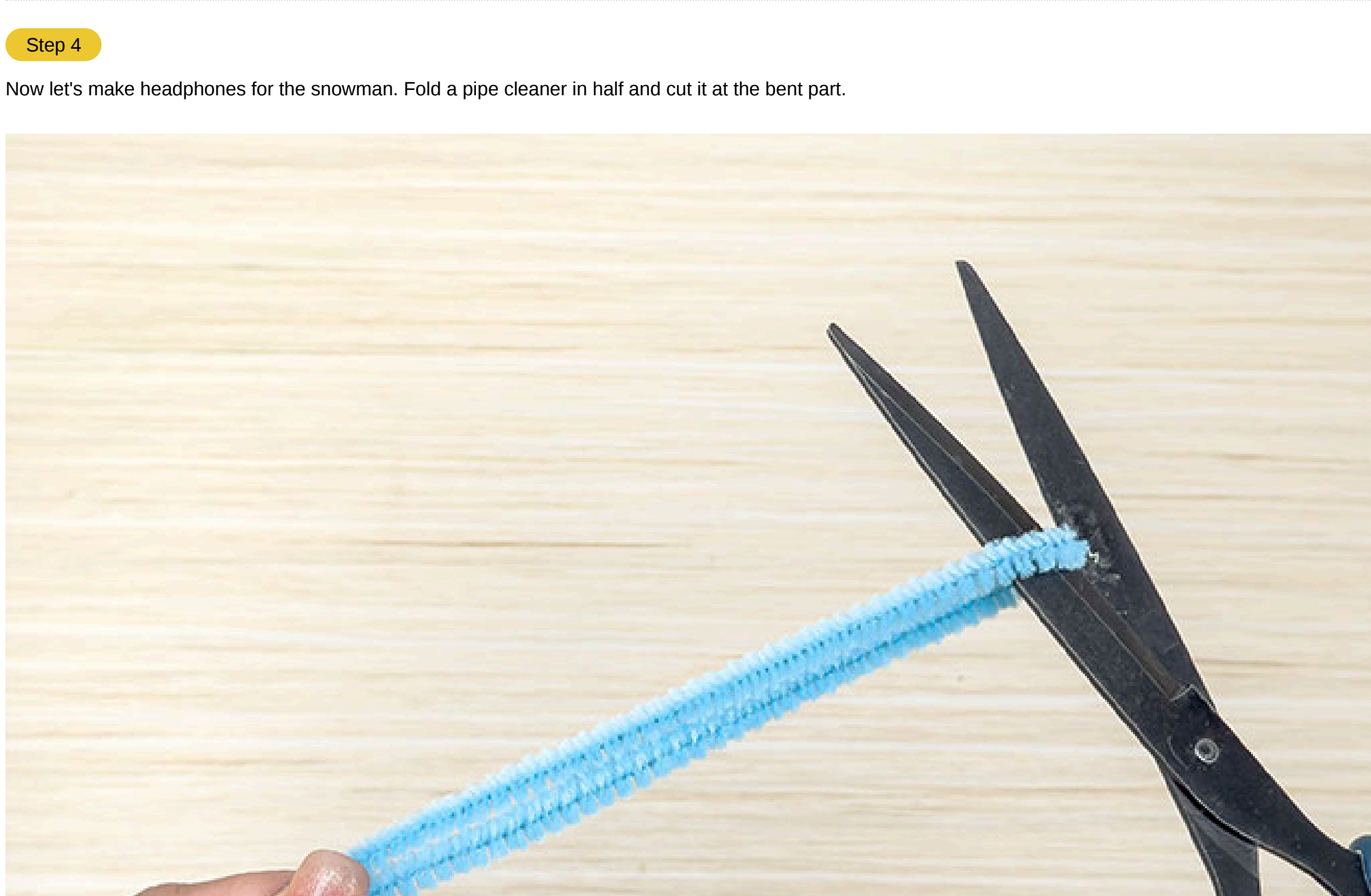
Step 3

Using the pencil, draw a circle between the eyes and scarf for the snowman's mouth. Cut out this circle with scissors.



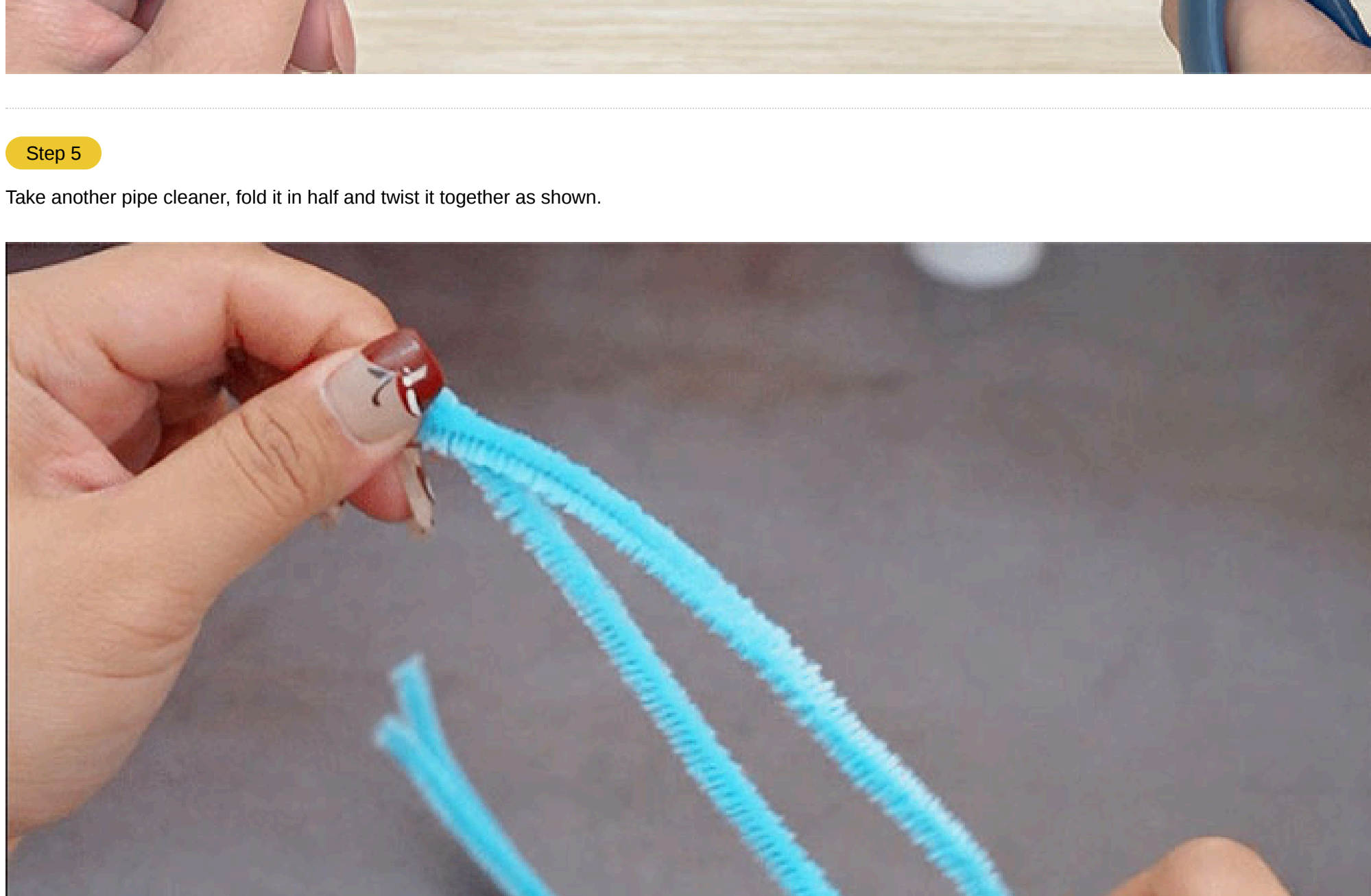
Step 4

Now let's make headphones for the snowman. Fold a pipe cleaner in half and cut it at the bent part.



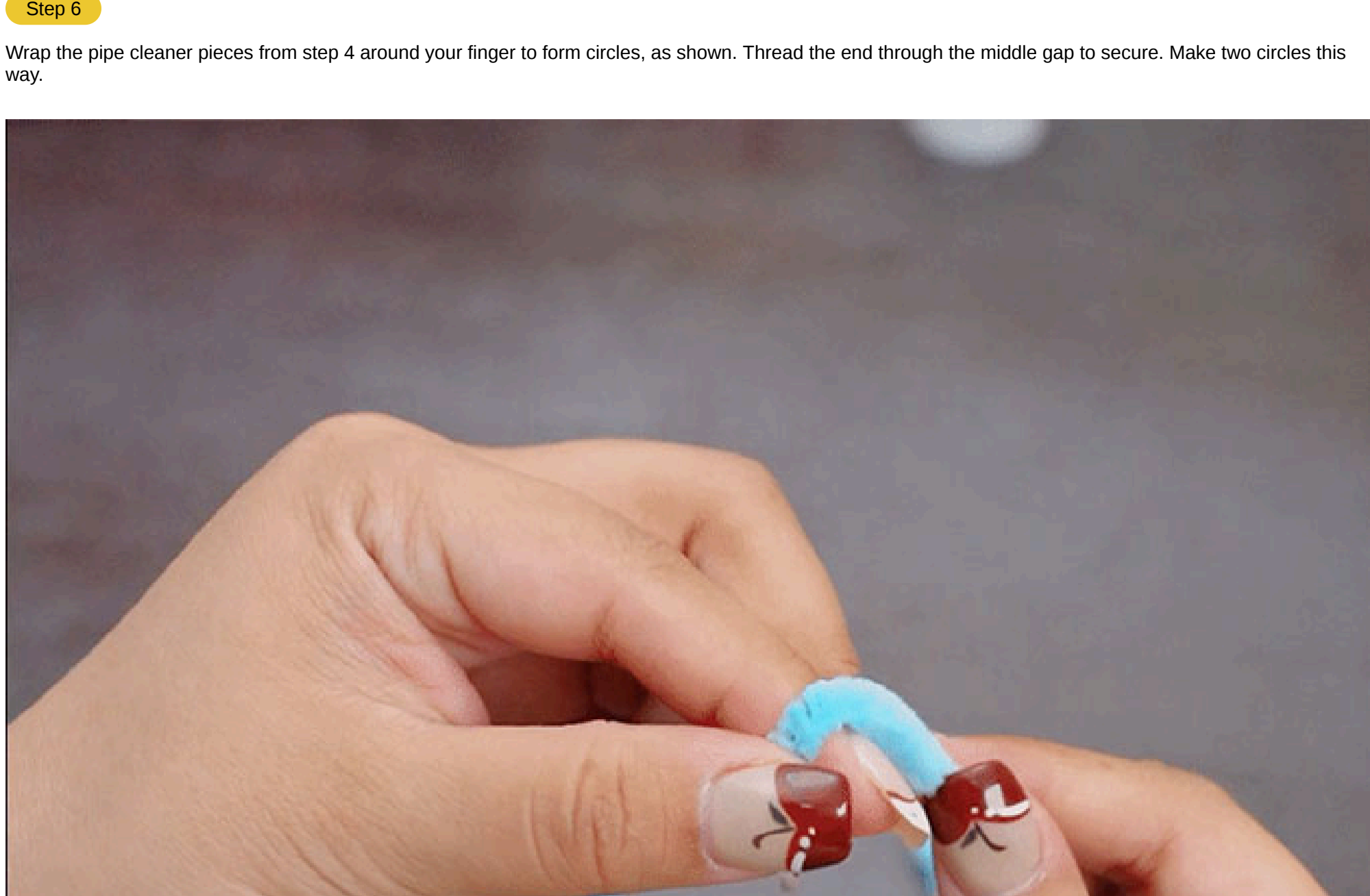
Step 5

Take another pipe cleaner, fold it in half and twist it together as shown.



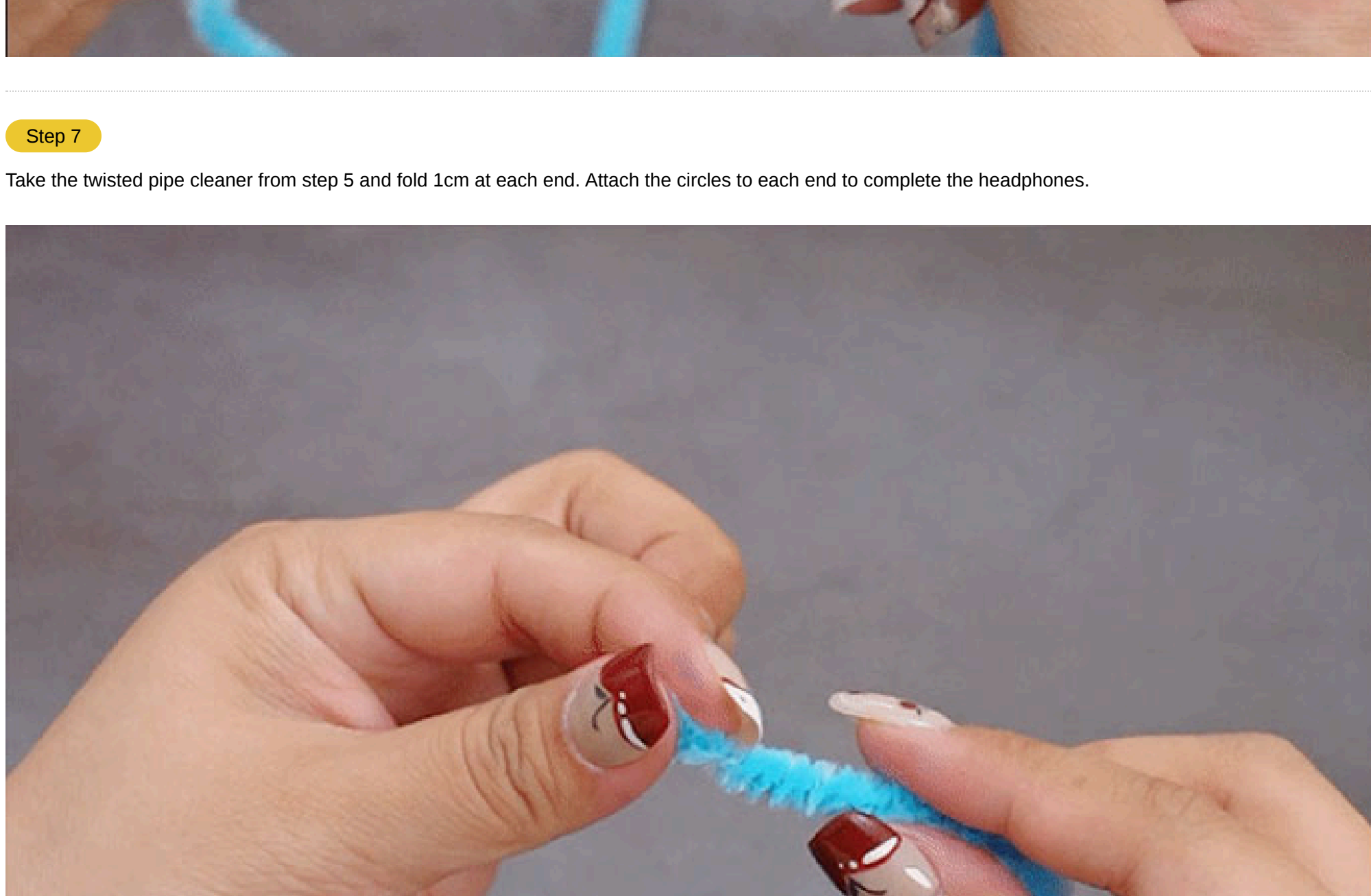
Step 6

Wrap the pipe cleaner pieces from step 4 around your finger to form circles, as shown. Thread the end through the middle gap to secure. Make two circles this way.



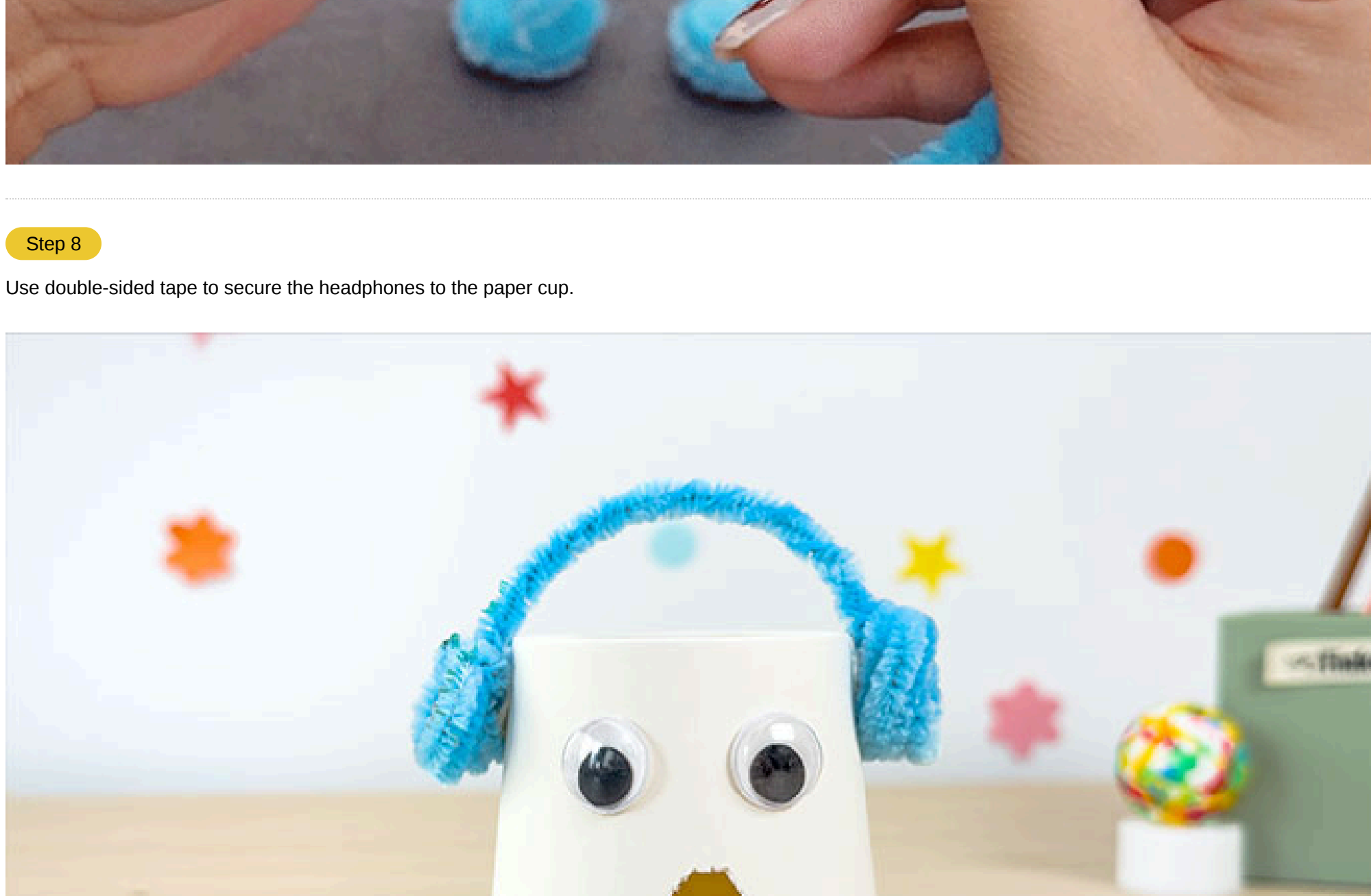
Step 7

Take the twisted pipe cleaner from step 5 and fold 1cm at each end. Attach the circles to each end to complete the headphones.



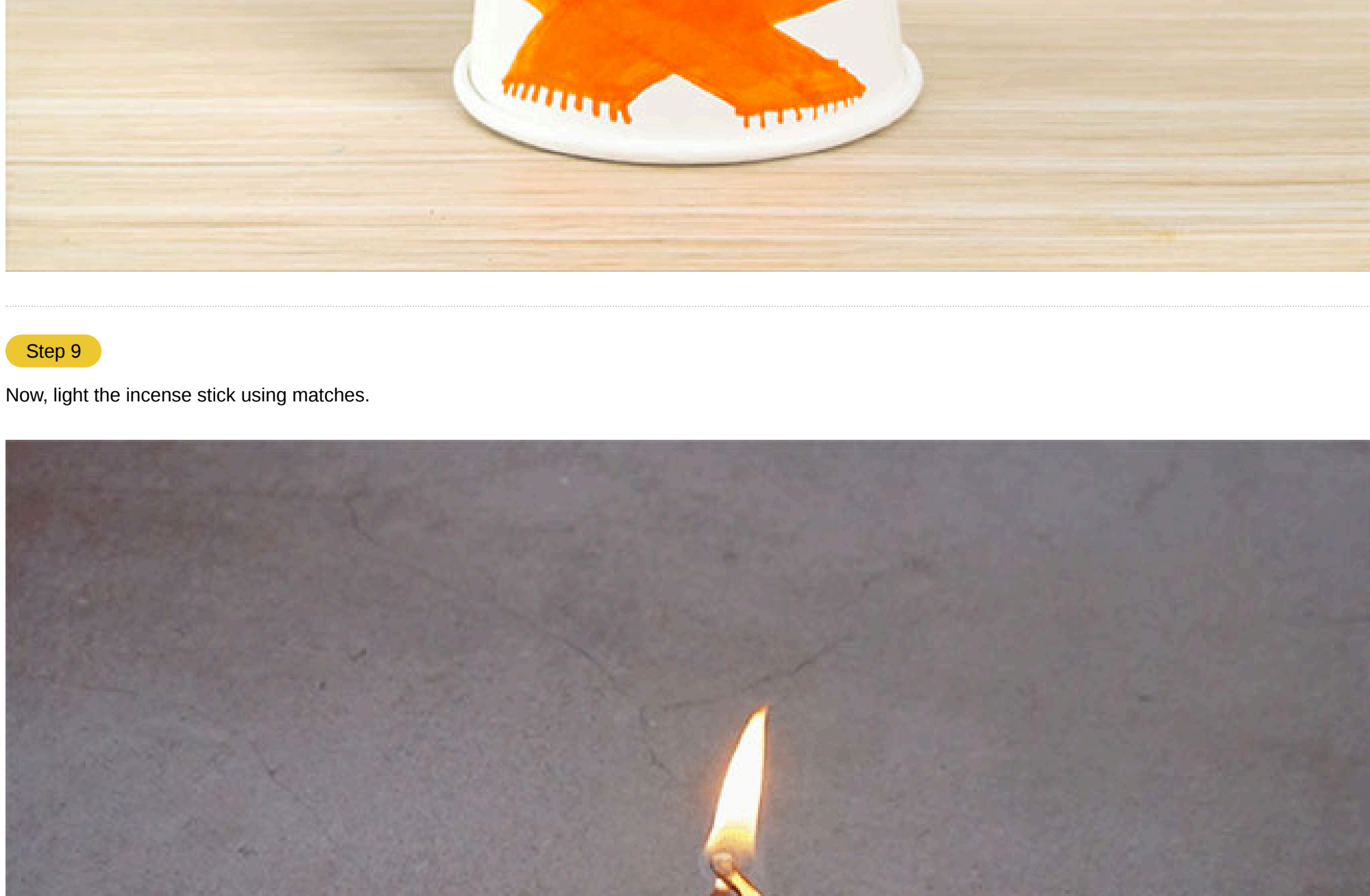
Step 8

Use double-sided tape to secure the headphones to the paper cup.



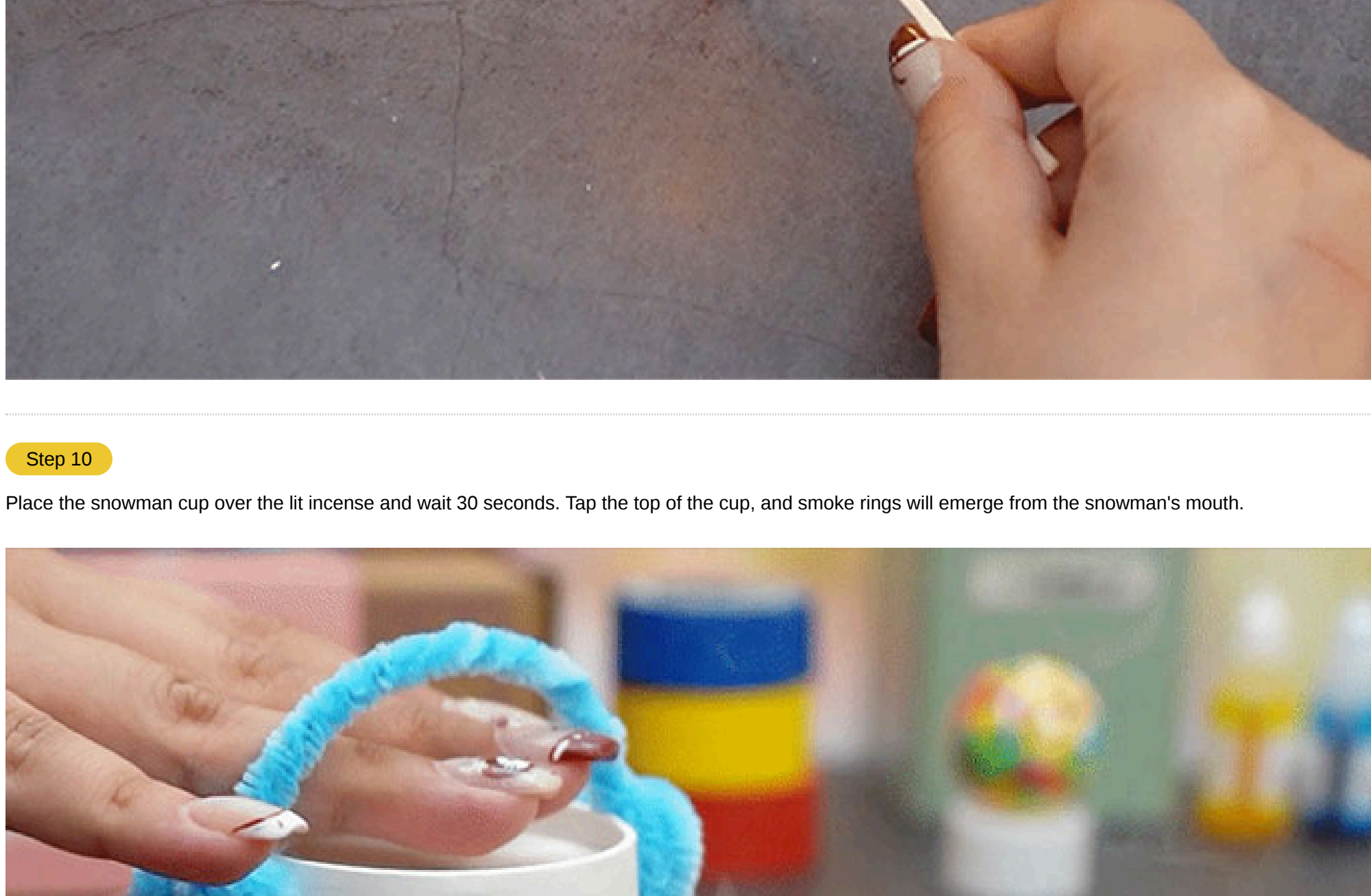
Step 9

Now, light the incense stick using matches.



Step 10

Place the snowman cup over the lit incense and wait 30 seconds. Tap the top of the cup, and smoke rings will emerge from the snowman's mouth.



The Science Behind It:

When you tap the top of the cup, the air inside moves faster, causing a momentary change in air pressure. Since smoke has a lower density and is easily affected by air currents, the airflow guides the smoke to exit through the opening in an orderly fashion, forming clear ring structures.