

• Tinker Camp Day 2 •

Barometer Experiment

You'll need

tall cup
short cup
water
liquid colors
(like food coloring)
straw
tape
short ruler
modeling clay (or gum)
paper clip
printable
observation sheet
pencil
strip of paper (optional)

Get ready

Make a barometer using the instructions from your Tinker Zine, or follow the steps below.

Step 1

Fill the tall and short cups with water and add a bit of food coloring.

Step 2

Tape the straw to the ruler.

Step 3

Stick the straw and ruler in the tall cup. Put the clay over the top of the straw to seal it.

Step 4

Transfer the straw and ruler to the short cup. The water should stay in the straw.

Step 5

Clip the paper clip to the ruler. Line up the top of the clip with the water in the straw.

Step 6

Check the water level in the straw a few times during the day. Do you notice it changing from the level marked with the paper clip?

What's going on?

You probably noticed that the barometer level rose whenever the weather was getting sunnier or calmer. That's because rising air pressure is a sign of pleasant weather to come.

But drops in air pressure means a storm's a-brewin'. That's why your barometer level dropped whenever the weather was getting cloudy or rainy.

Try this!

If you want to match up the motion of your barometer to the actual air pressure, search for a weather report near you! You can record the pressure — called the barometric pressure — on your worksheet.

Once you've figured out a connection between the weather outside and your barometer level, make it official! Tape a strip of paper to the barometer ruler, and draw weather icons. Use a sun to mark the approximate barometer level for a sunny day, a storm cloud to mark the level for a stormy day, and so on.