

# Build your own Barometer!

Winter is coming! Changes in air pressure help meteorologists predict the weather, just like a barometer does for amateur weatherpersons. High-pressure systems in the atmosphere typically indicate clear and warm sunny days. Low-pressure changes, on the other hand, signal an oncoming storm.

## Materials

- Clear plastic cups
- Water bottle
- Water
- Food coloring
- Sharpie Marker

## Instructions

Let's make our barometer to measure air pressure and predict weather changes!



1. First, pour a few inches of water into a plastic cup.
2. Add a couple of drops of food coloring to make it easier to see.
3. Place a plastic bottle upside down in the cup so it fits snugly, but make sure it's not airtight. The bottle's mouth should be below the waterline, not touching the cup's bottom.
4. Use a marker to mark the water level on the side of the cup.

Now, let's wait a couple of days and see what happens!

When the weather is nice, the air pressure is higher, and you'll notice that the water level in the cup goes down, and the level in the bottle goes up. But if a storm is on the way, the air pressure drops, and the water levels shift the other way.

This change in water level happens because of air pressure pushing on the water as the weather changes!

## Additional Resources

<https://sciencing.com/predict-weather-barometer-5767204.html>