



Daily Weather Observation Chart

Week 23 — Wednesday | Tracking Weather Like a Scientist



Reading Time

Meteorologists, the scientists who study weather, use special instruments every single day to collect weather data. By recording weather information over time, they can spot patterns, make forecasts, and warn people about dangerous storms. Today you are going to be a weather scientist yourself!

A **thermometer** measures how hot or cold the air is. Temperature is measured in degrees. In the United States, we use degrees Fahrenheit, where water freezes at 32 degrees and boils at 212 degrees. A **rain gauge** measures how much rain has fallen, usually in inches or millimeters. A **barometer** measures air pressure, which helps predict whether the weather will stay the same or change soon. High air pressure usually means clear skies, while low air pressure often brings clouds and storms.

A **wind vane** shows which direction the wind is coming from. Winds are named after the direction they blow from. A north wind comes from the north. A **anemometer** measures wind speed. Together, all these tools give meteorologists a complete picture of current weather conditions. By comparing today's data with yesterday's and last week's, they can see if weather patterns are changing and make predictions about what is coming next.



Reading Questions

1. What tool do meteorologists use to measure temperature?

2. What does a rain gauge measure?

3. What does high air pressure usually mean for the weather?

4. Why do meteorologists collect weather data over many days instead of just one day? How does tracking patterns help them?



Vocabulary Grid

Write a definition or draw a picture for each word.



Thermometer



Rain Gauge



Wind Vane



Barometer



Wind Speed



Air Pressure

Your Weekly Weather Journal

Instructions: Each day this week, look outside and record your weather observations in the chart below. Draw a picture of the sky, check the temperature, and note the wind conditions. By the end of the week, you will have a complete weather record!

Day	Date	Sky (draw)	Temperature	Wind (calm/ breezy/windy)	Precipitation (none/rain/snow)
Monday					
Tuesday					
Wednesday					
Thursday					
Friday					

Make Your Own Weather Instruments

Activity: You can build simple weather tools at home!

Homemade Thermometer: Fill a clear bottle with colored water. Poke a straw through a hole in the bottle cap. The water level in the straw will rise and fall with temperature changes.

Homemade Wind Vane: Cut an arrow shape from cardstock. Tape it to a pencil so it can spin. The arrow will point in the direction the wind is coming from.

Homemade Rain Gauge: Use a clear cup and mark measurements on the side. Place it outside to collect rain, then measure how much fell.

Which instrument did you make? Draw a picture of your homemade tool.

Describe how your instrument works.

✓ True or False — Circle Your Answer

- ☐ 1. A thermometer measures how hot or cold the air is.
- ☐ 2. A rain gauge measures wind speed.
- ☐ 3. A barometer measures air pressure.
- ☐ 4. High air pressure usually brings storms.
- ☐ 5. A wind vane shows which direction the wind is blowing from.
- ☐ 6. Meteorologists collect weather data over time to find patterns.
- ☐ 7. An anemometer measures the amount of rainfall.
- ☐ 8. Water freezes at 32 degrees Fahrenheit.

Fill in the Blanks

Word Bank: thermometer rain gauge barometer wind vane anemometer meteorologist temperature forecast

- 1. A _____ measures how hot or cold the air is.
- 2. A _____ measures how much rain has fallen.
- 3. A _____ measures air pressure to predict weather changes.
- 4. A _____ shows the direction the wind is coming from.
- 5. An _____ measures how fast the wind is blowing.
- 6. A _____ is a scientist who studies weather.
- 7. Hot and cold are descriptions of _____.
- 8. A _____ is a prediction of what the weather will be like.

Weather Pattern Analysis

Look at this week's weather data. Answer the questions.

Day	High Temp	Sky	Wind	Precipitation
Monday	72°F	Sunny	Light breeze	None
Tuesday	68°F	Cloudy	Moderate wind	None
Wednesday	61°F	Overcast	Windy	Rain
Thursday	58°F	Stormy	Strong wind	Heavy rain
Friday	64°F	Partly cloudy	Light breeze	None

1. What was the highest temperature during the week? On which day?

2. On which days did precipitation occur?

3. What pattern do you notice about temperature and clouds this week?

4. Do you think next week's weather will be more like the beginning or the middle of this week? Explain your reasoning.
