

Weather vs. Climate

Week 23 — Monday | Understanding Weather Patterns

Reading Time

Have you ever heard someone say, "What a nice weather today!" or "It is getting cold this season"? People talk about weather and climate every single day, but do you know the difference between the two? Understanding **weather** and **climate** helps us know what to wear, when to plant a garden, and how our planet works.

Weather is what the air is like in a specific place at a specific time. Weather can change from hour to hour, day to day, or even minute to minute. One day might be sunny and warm, while the next day brings rain and cold winds. Weather is short-term and always changing. When you look out the window and see clouds, you are observing the weather right now. When a weather app tells you to bring an umbrella, it is predicting the weather for today or tomorrow.

Climate is what the weather is like in a place over a long period of time, usually many years or decades. Climate tells us about the typical patterns of weather in a location. For example, deserts have a **dry climate** because it rarely rains there. The Arctic has a **cold climate** because temperatures stay below freezing most of the year. Tropical areas near the equator have a **warm, wet climate** with lots of rain throughout the year. Climate does not change quickly — it takes many years for climate to shift.

Think of it this way: weather is like your outfit on a single day, while climate is like the clothes you keep in your closet for the whole season. You might wear a jacket on a cool spring morning (weather), but your winter wardrobe (climate) tells us that winter is generally a cold season in your area. Scientists who study weather are called **meteorologists**. They use special tools like thermometers, rain gauges, and weather balloons to track weather patterns and make forecasts.

Reading Questions

1. What is the main difference between weather and climate?

2. Name three things that describe weather.

3. How long does it take for climate to change?

4. Explain why a desert is described as having a "dry climate" rather than "dry weather."

Vocabulary Grid

Write a definition or draw a picture for each word.

 **Weather**

 **Climate**

 **Meteorologist**

 **Forecast**

 **Precipitation**

 **Temperature**

Weather or Climate?

Read each statement. Write W for weather or C for climate.

Statement	W or C?
It is raining heavily right now.	
Florida is warm and humid most of the year.	
The temperature dropped five degrees this afternoon.	
Antarctica is extremely cold and covered in ice.	
We had snow on Tuesday but not on Monday.	
Deserts receive very little rain each year.	
The wind is blowing hard this morning.	
Tropical areas stay warm all year long.	

Weather and Climate Comparison Chart

Fill in the chart comparing weather and climate.

Feature	Weather	Climate
How long it covers		
How often it changes		
What it tells us about		
Example from your life		

World Climate Sort

Match each place with its climate type: Tropical (hot and wet), Desert (hot and dry), Cold (very cold year-round), or Temperate (warm summers, cold winters).

Place	Climate Type
Amazon rainforest in South America	
Sahara Desert in Africa	
The Arctic region at the North Pole	
New York City in the United States	
A small village in Australia	

✓ True or False — Circle Your Answer

- ☐ 1. Weather describes what the air is like at a specific time.
- ☐ 2. Climate changes from day to day.
- ☐ 3. Meteorologists are scientists who study weather.
- ☐ 4. A forecast is a guess about the weather far in the future.
- ☐ 5. Climate describes weather patterns over many years.
- ☐ 6. The Arctic has a warm, wet climate.
- ☐ 7. A thermometer measures temperature.
- ☐ 8. Weather can change within a single hour.

Fill in the Blanks

Word Bank: weather climate meteorologist forecast temperature precipitation tropical desert

- 1. _____ is the condition of the air at a particular moment.
- 2. _____ describes what weather is like over many years in a place.
- 3. A scientist who studies weather is called a _____.
- 4. A _____ tells you what the weather will be like tomorrow.
- 5. A thermometer measures _____.
- 6. Rain, snow, sleet, and hail are all types of _____.
- 7. A _____ climate is hot and wet with lots of rain.
- 8. A _____ climate is hot and very dry with little rain.

Observe Today's Weather

Look outside or check a weather app. Record today's weather below.

Weather Detail	Your Observation
Temperature	
Cloudy, sunny, or rainy?	
Wind (calm, breezy, windy?)	
What did you wear today?	
Does your outfit match today's weather?	

Think About It

Why is it important to know the difference between weather and climate? How does each one help us in our everyday lives?
