

Weather vs. Climate Review

Week 23 — Friday | Understanding Weather Patterns

Reading Time

This week we learned to tell the difference between **weather** and **climate**, and we practiced tracking weather like real meteorologists. Weather describes the short-term conditions of the air at a specific time and place. It can change from minute to minute, hour to hour, or day to day. Climate describes the typical weather patterns in a place over many years. Climate tells us what weather we can generally expect in a location.

We explored different climate types around the world. **Tropical climates** near the equator stay warm and wet year-round with lots of rain. **Desert climates** are hot and dry with very little rainfall. **Cold climates** near the poles stay very cold, often covered in snow and ice. **Temperate climates**, like much of the United States, have four distinct seasons with warm summers and cold winters. Each climate supports different plants and animals that have adapted to those specific conditions.

We learned about the tools meteorologists use to track weather. A **thermometer** measures temperature, a **rain gauge** measures precipitation, a **barometer** measures air pressure, a **wind vane** shows wind direction, and an **anemometer** measures wind speed. By collecting data over time and looking for patterns, meteorologists can predict future weather and issue warnings about dangerous storms. Understanding weather and climate helps us make important decisions about what to wear, when to plant crops, and how to prepare for severe weather events.

Reading Questions

1. Name the four types of climate discussed this week.

2. How does a wind vane work? What information does it give us?

3. Why do meteorologists collect data over many days instead of just one day?

4. Explain how weather and climate are connected. How does understanding weather patterns help us understand climate?

Vocabulary Grid

Write a definition or draw a picture for each word.

 **Weather**

 **Climate**

 **Meteorologist**

 **Forecast**

 **Precipitation**

 **Temperature**

Climate Types Comparison

Fill in the chart comparing the four major climate types.

Climate	Temperature	Precipitation	Typical Location	Example Plants or Animals
Tropical				
Desert				
Cold (Arctic)				
Temperate				

Weather Tool Matching

Match each weather tool with what it measures.

Weather Tool	What It Measures
Thermometer	
Rain gauge	
Barometer	
Wind vane	
Anemometer	

Draw Weather Symbols

Draw the weather symbol for each condition in the boxes below, then write a short description.

Weather Condition	Symbol (draw)	Description
Sunny		
Cloudy		
Rainy		
Stormy		
Snowy		

Science Journal: Weather and Climate

Think about what you learned this week and how it connects to your life.

Prompt 1: Look at your weekly weather journal from Wednesday. Can you spot any patterns in the weather this week? Describe what you noticed.

Prompt 2: Describe the climate in the place where you live. What kind of weather do you typically experience during each season?

Prompt 3: If you could live in any climate in the world, which one would you choose and why? Think about the weather, plants, and animals that would live there.

True or False — Circle Your Answer

- ☐ 1. Weather describes short-term air conditions.
- ☐ 2. Climate describes long-term weather patterns.
- ☐ 3. A desert climate is wet with lots of rain.
- ☐ 4. A tropical climate is warm and wet year-round.
- ☐ 5. A thermometer measures how much it has rained.
- ☐ 6. A wind vane shows wind direction.
- ☐ 7. A barometer measures wind speed.
- ☐ 8. Meteorologists use data patterns to predict weather.

Fill in the Blanks

Word Bank: weather climate thermometer rain gauge barometer wind vane forecast meteorologist

- 1. What the air is like right now is called _____.
- 2. Weather patterns over many years describe a place's _____.
- 3. A _____ measures how hot or cold the air is.
- 4. A _____ measures how much rain has fallen.
- 5. A _____ measures air pressure.
- 6. A _____ shows which direction the wind is blowing from.
- 7. A weather _____ predicts what the weather will be like tomorrow.
- 8. A scientist who studies weather is called a _____.

★ Week 23 Checklist

Check off each concept you feel confident about.

Concept	I Understand This
I can explain the difference between weather and climate.	
I can name and describe four types of climate.	
I can identify the purpose of five weather tools.	
I can record daily weather observations in a chart.	
I can find patterns in weather data over a week.	
I understand how weather patterns help predict future weather.	