

Weather and Climate

Grade 3 • SCIENCE • Students distinguish daily weather from climate patterns and interpret simple temperature and rainfall measurements. • Standards: 3-ESS2-1, 3-ESS2-2

Read each question carefully and use the information given to answer. Remember that weather is what happens day by day, and climate is the usual pattern over a long time.

1. A thermometer shows 75°F on Monday afternoon. Is this measuring weather or climate?
2. A rain gauge collected 2 inches of rain during yesterday's storm. How much rain fell yesterday?
3. In summer, the town of Greenville usually has temperatures around 85°F. Is this describing weather or climate?
4. A thermometer reads 32°F on Tuesday morning. Another thermometer reads 68°F on Tuesday afternoon. How much did the temperature rise?
5. Over three days, a rain gauge measured 1 inch on Friday, 0 inches on Saturday, and 3 inches on Sunday. What was the total rainfall for the three days?
6. Pine Valley gets about 40 inches of rain every year, and most of it falls in spring. Oaktown gets about 10 inches of rain every year. Which town has a wetter climate?
7. A weather record shows temperatures for one week in January: Monday 28°F, Tuesday 30°F, Wednesday 26°F, Thursday 32°F, Friday 29°F. What was the warmest temperature that week?
8. Rivertown recorded these rainfall amounts in March: Week 1 had 2 inches, Week 2 had 1 inch, Week 3 had 0 inches, and Week 4 had 5 inches. What was the total rainfall for March?
9. Desert Springs has hot, dry summers with temperatures often above 95°F and less than 1 inch of rain all summer. Lakeside has cool, rainy summers with temperatures around 70°F and about 15 inches of rain all summer. Which place would you expect

to have more plants growing in summer?

10. A scientist recorded the high temperature each day for five days: 44°F, 50°F, 48°F, 52°F, and 46°F. If the pattern shows the usual temperatures for October in that city, is the scientist collecting weather data or describing climate?

Answer Key — Weather and Climate

For the teacher / parent. Do not distribute with the worksheet.

1. weather (*A single day's temperature is weather, not climate.*)
2. 2 inches
3. climate (*The usual pattern over a season describes climate.*)
4. 36°F ($68 - 32 = 36$)
5. 4 inches ($1 + 0 + 3 = 4$)
6. Pine Valley (*Pine Valley receives more rainfall over the year, so it has a wetter climate.*)
7. 32°F
8. 8 inches ($2 + 1 + 0 + 5 = 8$)
9. Lakeside (*Lakeside has more rain and cooler temperatures, so more plants can grow there.*)
10. weather data (*Recording daily temperatures over five days is weather data; climate would require observations over many years.*)