

Weather Patterns

Science Grade-Level Expectations

This instructional task addresses content related to the following science grade-level expectations:

- SI-E-A4 Measure and record length and temperature in both metric system and U.S. system units (GLE 5)
- ESS-E-A4 Identify the patterns in information recorded on a weather calendar. (GLE 31)
- PS-E-C3 Identify objects that give off heat, such as people, animals, and the Sun (GLE 20)

Contents

Teachers may choose to use or modify the tasks as part of an instructional lesson or as a formative or summative assessment.

	Objectives
Task	<ul style="list-style-type: none"> - Read and interpret data - Compare temperatures using pictorial thermometers - Analyze weather patterns - Determine influences on temperatures
Sample Exemplar Student Response	

Task – Part A

October Weather Calendar

Monday	Tuesday	Wednesday	Thursday	Friday
October 1  85°	October 2  90°	October 3  83°	October 4  75°	October 5  70°
October 8  69°	October 9  65°	October 10  58°	October 11  66°	October 12  75°
October 15  75°	October 16  68°	October 17  65°	October 18  63°	October 19  60°

Use the **October Weather Calendar** to complete.

1. What was the hottest day? _____

Temperature	Type of Weather

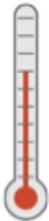
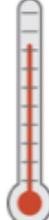
3. What was the coldest day? _____

Temperature	Type of Weather

4. How did the sun, clouds, and rain affect the temperature in October?

Task – Part B

The temperature at breakfast, lunch, and dinner for four days is shown in the chart.

	Breakfast	Lunch	Dinner
Monday			
Tuesday			
Wednesday			
Thursday			

1. When are the temperatures usually cooler?

breakfast

lunch

dinner

2. When are the temperatures usually warmer?

breakfast

lunch

dinner

4. Why is it usually cooler in the morning than in the afternoon?

Sample Exemplar Student Response:

Part A

1. What was the hottest day? Tuesday, October 2

Temperature	Type of Weather
90°	sunny

3. What was the coldest day? Wednesday, October 10

Temperature	Type of Weather
58°	rainy

4. How did the sun, clouds, and rain affect the temperature in October?

The days that were sunny were the hottest. The days that were rainy were the coldest. The days that were cloudy weren't as hot as the sunny days or as cold as the rainy days.

Part B

1. When are the temperatures usually cooler?

breakfast

lunch

dinner

2. When are the temperatures usually warmer?

breakfast

lunch

dinner

4. Why is it usually cooler in the morning than in the afternoon?

It is cooler in the morning because the sun has not been out all night to heat the air. It is warmest around lunch because the sun has been out for a long time. It cools off a little close to dinner because the sun is beginning to set so the air is starting to cool off again.