Garden Weather Watch

Use changing weather data to make a forecast.

E.4.9B.1 "Analyze and interpret data (e.g., temperature, precipitation, wind speed/direction, relative humidity, or cloud types) to predict changes in weather over time."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline two changes in the table that could help you predict the weather at 4 p.m. Circle the latest reading for each change.

Will the Plant Sale Stay Outside?

1. At the school garden, a class checks the weather before an outdoor plant sale. They record the air temperature, clouds, wind direction, and rain four times on Tuesday. Each row in the table is one visit. Read the rows in time order, since a single reading cannot show whether conditions are changing.

TUESDAY WEATHER AT THE SCHOOL GARDEN

Time	Temperature	Clouds	Wind from	Rain
8 a.m.	58°F	Few	West	None
10 a.m.	61°F	More	West	None
Noon	60°F	Thick gray	South	None
2 p.m.	57°F	Thick gray	South	Light

2. Weather clues work better together than alone. For example, on a different day, a steady drop in wind speed and a break in the clouds might suggest calmer weather ahead. One clue can be misleading. A cloudy sky can clear, and a windy morning can become a quiet afternoon.

3. At 4 p.m., the class must decide whether to keep the plant sale outside. They cannot know the weather for certain, but they can make a prediction from the latest changes. A useful forecast names what may happen and points to observations that support it. The table gives them a trail of clues.

2 ANSWER WITH EVIDENCE

Use the passage

1. If the recent temperature change continues, what might the temperature be like at 4 p.m.? Use two readings as evidence.

2. What clouds are likely at 4 p.m.? Use two readings as evidence.

3. Which direction will the wind most likely come from at 4 p.m.? Explain using the two most recent readings.

4. Should the class plan for possible rain at 4 p.m.? Explain using the cloud and rain readings.

3 YOUR TURN

Your own words

On another day, the weather is 48°F with light rain at 8 a.m., 53°F with light rain at noon, and 58°F with light rain at 2 p.m. In two sentences, predict the temperature and rain at 4 p.m., and explain the readings that support your prediction.

ANSWER KEY

Garden Weather Watch

GRADE 4 · E.4.9B.1

PART 1 · READ AND MARK

Underline two changes in the table that could help you predict the weather at 4 p.m. Circle the latest reading for each change. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	If the recent temperature change continues, what might the temperature be like at 4 p.m.? Use two readings as evidence.	**It might be below 57°F. The temperature fell from 60°F at noon to 57°F at 2 p.m.**
2	What clouds are likely at 4 p.m.? Use two readings as evidence.	**Thick gray clouds are likely because they were recorded at both noon and 2 p.m.**
3	Which direction will the wind most likely come from at 4 p.m.? Explain using the two most recent readings.	**The wind will most likely come from the south. It came from the south at noon and 2 p.m.**
4	Should the class plan for possible rain at 4 p.m.? Explain using the cloud and rain readings.	**Yes. Thick gray clouds were recorded at noon and 2 p.m., and light rain began by 2 p.m.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

At 4 p.m., the temperature may be above 58°F because it rose from 48°F to 53°F to 58°F. Light rain may continue because every reading showed light rain.

Accept other reasonable forecasts when students cite matching readings and describe the outcome as possible, not certain. For Part 1, accept any two marked changes with their latest readings circled.