

Summative Assessment Directions Part 1 for
Weather Trackers

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Summative Assessment Directions Part 1

Duration: One class period.

Standards Assessed:

S.C.A.1.1.2.2.1 Student knows examples of solids, liquids and gases.

SC.H.2.1.1.2.1. Student knows how to sort organisms, objects and events based on patterns. (The student knows that natural events occur in patterns).

MA.E.2.1.2.2.1 Student knows if an event is more likely, least likely or most likely to occur.

MA.E.1.1.1.2.4 Student uses mathematical language to read and interpret data on a simple concrete pictorial graph or chart.

SC.B.1.1.1.2.1 Student knows that a thermometer measures heat absorbed by an object.

MA.B.1.1.1.2.5 Student demonstrates an understanding of temperatures using a Fahrenheit and Celsius thermometer.

Description of Assessment activity: Using a summative assessment worksheet, students will be asked to:

- a) Sequence the events in the rain cycle in order of what comes first, next and last according to the rain cycle pattern that exists.
- b) Predict if rain is more likely to happen or less likely to happen based on certain cloud formations.
- c) Sequence the seasons in a season pattern.
- d) Read a thermometer.
- e) Interpret a seasonal weather graph.
- f) Identify common weather tools that scientists use to analyze and predict weather. Students will be asked to identify the effect that heat has on a thermometer.
- g) Identify water in different states of matter.

Teacher Directions:

Prior to the assessment:

1. Make student copies of the assessment. Make one copy of the assessment and the answer key for yourself.
2. Locate the large bulletin board cut out of a thermometer using white poster paper and red tape.
3. Prepare a seasonal weather graph. Write Winter, Spring, Summer, and Fall on the board. Pass out large sticky notes to the class and ask five students to draw and color a winter activity, 4 a spring activity, 7 a summer activity and 9 a fall activity. (You

may help students choose an appropriate activity.) Give students ten minutes to complete pictures and attach their pictures under the correct season. (This would be a good activity to do the day before, maybe at the end of the day.)

Day of the Assessment:

1. Have the graph of the seasons displayed.
2. Divide students into small groups to administer the assessment (if desired.)

Directions:

1. Distribute student copies of the summative assessment sheet.
2. Read directions for each questions **ORALLY** with the class. Pause and allow students to write or choose their answers before continuing to the next question. For question number 13 set the large pre-made thermometer to 70 degrees Fahrenheit and ask students to write down the temperature shown on the thermometer. For question 14 set the thermometer to 50 degrees Celsius and have students write down the temperature on their papers. For question 15 set the thermometer to 80 degrees Fahrenheit and have students write the temperature on their papers. Remember, reading ability is **NOT** assessed, only the math and science content.
3. Collect the summative assessment sheet when students have finished. As students are working on their test, call back individually to do a Performance Assessment that will be Part 2 of the Summative Assessment, or you may wish to do this on another day, using an aide.

Scoring: Use the suggested answer key to determine if students have answered correctly. Questions count 5 points each.

Student Summative Assessment Sheet Part I

1. Connect each form of matter with the correct example by drawing a line.
(SCA.1.1.2.2.1)

solid	ice cube
liquid	water vapor
gas	ocean

Fill in each blank with one of these words: **rain, storm, or good weather.**
(SCH.2.1.1.2.1)

2. Cirrus clouds mean that _____ is more likely to happen.
3. Cumulonimbus clouds look like large, dark cotton balls in the sky and mean that _____ is most likely to happen.
4. Stratus clouds look like gray sheets in the sky and usually indicate that a _____ is more likely to happen.
5. Cumulus clouds look like white cotton balls and indicate that _____ is not likely to happen.
6. No clouds in sky indicate that _____ is likely to happen.

Fill in the blank with the correct answer. Choose from the words after each sentence.

7. A _____ measures wind direction.
(**wind vane, thermometer, rain gauge, kite**) (SCH.3.1.1.2.1)
8. A _____ measures the amount of rainfall during a given period.
(**wind vane, thermometer, rain gauge**) (SCH.3.1.1.2.1)
9. _____ on Earth is likely to evaporate if the sun heats it up during the day. (**water, land, clouds**) (MA.E.1.1.1.2.4)

Think about the pattern of the seasons. Fill in the blank with the correct answer. Use these words: **spring, summer, winter fall**. (SCH.2.1.1.2.1)

10. _____ is the season that comes after winter.

11. _____ is the season that comes before winter.

Look at the thermometer I am holding. What temperature is shown on the thermometer? (MA.B.1.1.1.2.5)

12. _____ degrees. 13. _____ degrees 14. _____ degrees

Write True or False in the blank. Remember True means it is correct, and False means it is not correct. (SCB.1.1.1.2.1)

_____ 15. The mercury in a thermometer will rise if it is placed in hot water.

_____ 16. A mercury oral thermometer measures heat if it is placed in your mouth.

Look at our class graph about the seasons and answer the following questions.

17. How many pictures does the season have where we have the most hours of daylight and therefore the weather is warmest? _____ (MA.E.1.1.1.2.4)

18. Look at the weather graph. Which season would most likely have the temperature of 20 degrees Fahrenheit? (MA.E.1.1.1.2.4)

19. Look at the seasonal weather graph. Which season would most likely have the temperature of 90 degrees Fahrenheit? (MA.E.1.1.1.2.4)

20. Think about the pattern of the rain cycle. Label the events 1,2,3,4 in order of what happens. (SCH.2.1.1.2.1)

_____ Water rises in the form of water vapor.

_____ The sun heats water on Earth.

_____ When the cloud gets too heavy with water vapor, it rains.

_____ Water vapor condenses and forms clouds.

Answer Key

1. Solid-ice cube, Liquid-ocean, Gas-water vapor
2. good weather
3. storm
4. rain
5. storm
6. good weather
7. wind
8. rain gauge
9. water
10. Spring
11. Fall
12. 70 degrees
13. 50 degrees
14. 80 degrees
15. true
16. true
17. summer
18. 7
19. summer
20. 2, 1, 4, 3