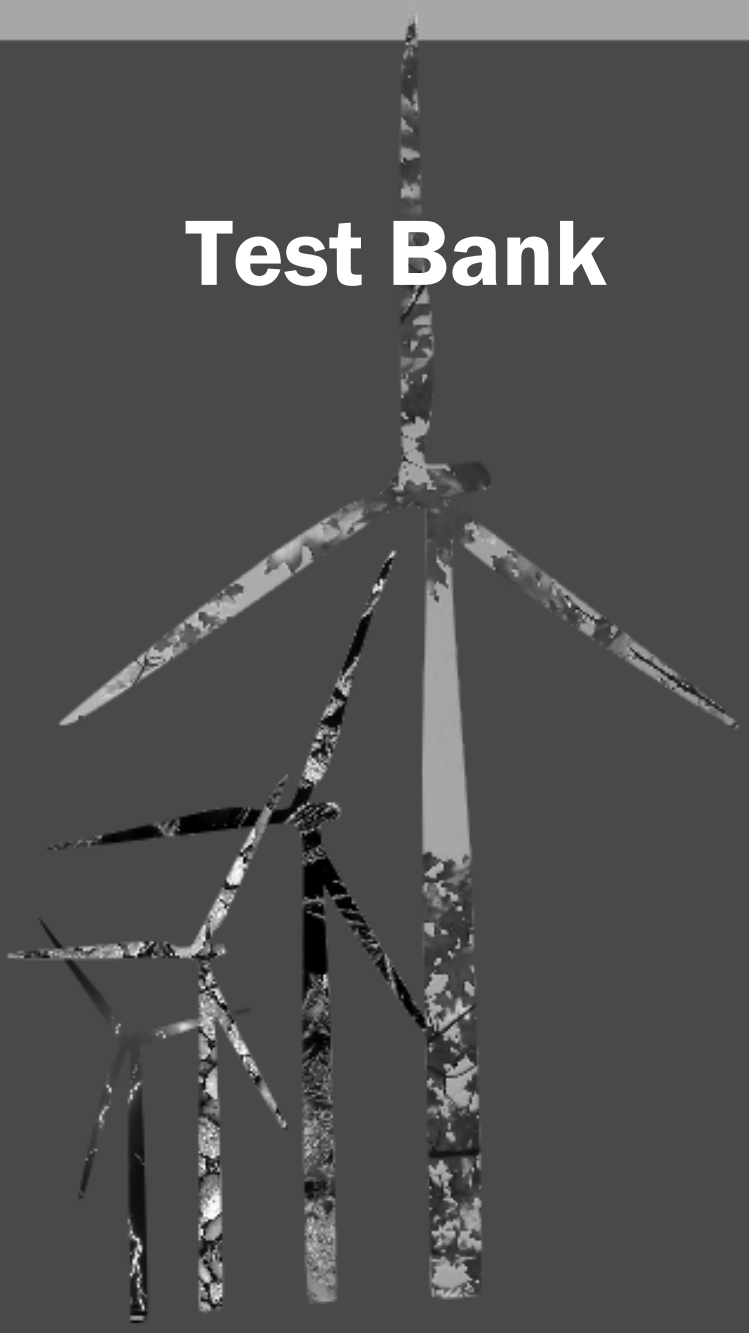
SCIENCE

6th Grade

Test Bank



CHRISTIAN SCHOOLS INTERNATIONAL

Unit 7: Investigating Weather

Multiple Choice

Circle the letter of the correct answer.

1. Which statement best describes the atmosphere?
   a. A layer of oxygen surrounding the Earth about 160 km (100 miles) high.
   b. A layer of gases surrounding the Earth about 160 km (100 miles) high.
   c. A layer of oxygen surrounding the Earth about 1,600 km (1,000 miles) high.
   d. A layer of gases surrounding the Earth about 1,600 km (1,000 miles) high.

2. Liquid water changing into water vapor is an example of
   a. condensation.
   b. evaporation.
   c. precipitation.
   d. thermalization.

3. Water vapor changing into liquid water is an example of
   a. condensation.
   b. evaporation.
   c. precipitation.
   d. thermalization.

4. Rain and snow are examples of
   a. condensation.
   b. evaporation.
   c. precipitation.
   d. thermalization.

5. Which statement best defines the term *weather*?
   a. The movement of the Earth's gases from areas of high pressure to low pressure.
   b. The air temperature, air pressure, and humidity of a large region.
   c. A pattern of temperature, precipitation, and other factors formed over many years.
   d. The condition of the atmosphere at a particular time and place.

6. Which statement best describes the term *climate*?
   a. The movement of the Earth's gases from areas of high pressure to low pressure.
   b. The air temperature, air pressure, and humidity of a large region.
   c. The weather pattern of a region over many years.
   d. The condition of the atmosphere at a particular time and place.

7. Relative humidity is
    a. the amount of moisture in the air.
    b. the amount of moisture in Earth's atmosphere.
    c. the amount of moisture in the air at a certain temperature.
    d. the ratio of the amount of water in the air to the amount of water that the air can hold at that temperature.

8. Which of the following conditions has the most water vapor in the air?
    a. 0% relative humidity at 50 °C.
    b. 10% relative humidity at 0 °C.
    c. 10% relative humidity at 20 °C.
    d. 15% relative humidity at 5 °C.

9. Which weather instrument would be most important if there were tornados in the area?
    a. Barometer.
    b. Anemometer.
    c. Thermometer.
    d. Hygrometer.

10. Convection is
    a. the flow of fluid (such as air) from one place to another because of differences in precipitation.
    b. the flow of fluid (such as air) from one place to another because of a difference in temperatures.
    c. the flow of fluid (such as air) from one place to another because of a difference in humidity.
    d. the flow of fluid (such as air) from one place to another because of a difference in wind speed.

11. Lines that connect points of equal pressure on a weather map are
    a. isotherms.
    b. isopressures.
    c. isobars.
    d. isofronts.

12. Lines that connect points of equal temperature on a weather map are called
    a. isotherms.
    b. isocubes.
    c. isobars.
    d. isofronts.

13. A front is
    a. a boundary between two air masses.
    b. a large mass of air that has the same properties throughout.
    c. a large mass of air formed over the boundary between land and water.
    d. a large mass of air formed over water.

14. What type of weather does a high pressure system usually bring?
    a. Stormy, rainy weather.
    b. A mix of sun and clouds.
    c. Calm, clear weather.
    d. None of the above.

15. What type of weather does a low pressure system usually bring?
    a. Stormy, rainy weather.
    b. A mix of sun and clouds.
    c. Calm, clear weather.
    d. None of the above.

Matching Set A

For each statement, choose the weather instrument from Answer Box A that would be best to use. Answers may be used once, more than once, or not at all.

_____1. Measures air temperature.

_____2. Measures relative humidity.

_____3. Measures one form of precipitation.

_____4. May use percentages as a unit.

_____5. Measures wind speed.

_____6. Measures wind direction.

_____7. Uses millibars, hectopascals, or millimeters of mercury as units.

_____8. Can use either the Fahrenheit or Celsius degrees as units.

_____9. Uses kilometers per hour or miles per hour as units.

_____10. A quick drop in the measurement by this instrument can mean rain or storms.

Answer Box A

A. Anemometer
B. Barometer
C. Hygrometer
D. Rain gauge
E. Thermometer
F. Wind speed radar
G. Wind vane

Matching Set B

For each statement, choose the climate type from Answer Box B that best matches the statement. Answers may be used once, more than once, or not at all.

_____1. The climate that you live in.

_____2. A climate that has four distinct seasons.

_____3. A climate that has two seasons—a rainy season and a dry season.

_____4. The climate farthest to the south.

_____5. A climate in which temperatures are always cold.

_____6. A climate in which temperatures are always warm.

Answer Box B

A. Middle climate
B. Polar climate
C. Temperate climate
D. Tropical climate

Short Answers

1. Identify four ways that living things depend on the atmosphere.

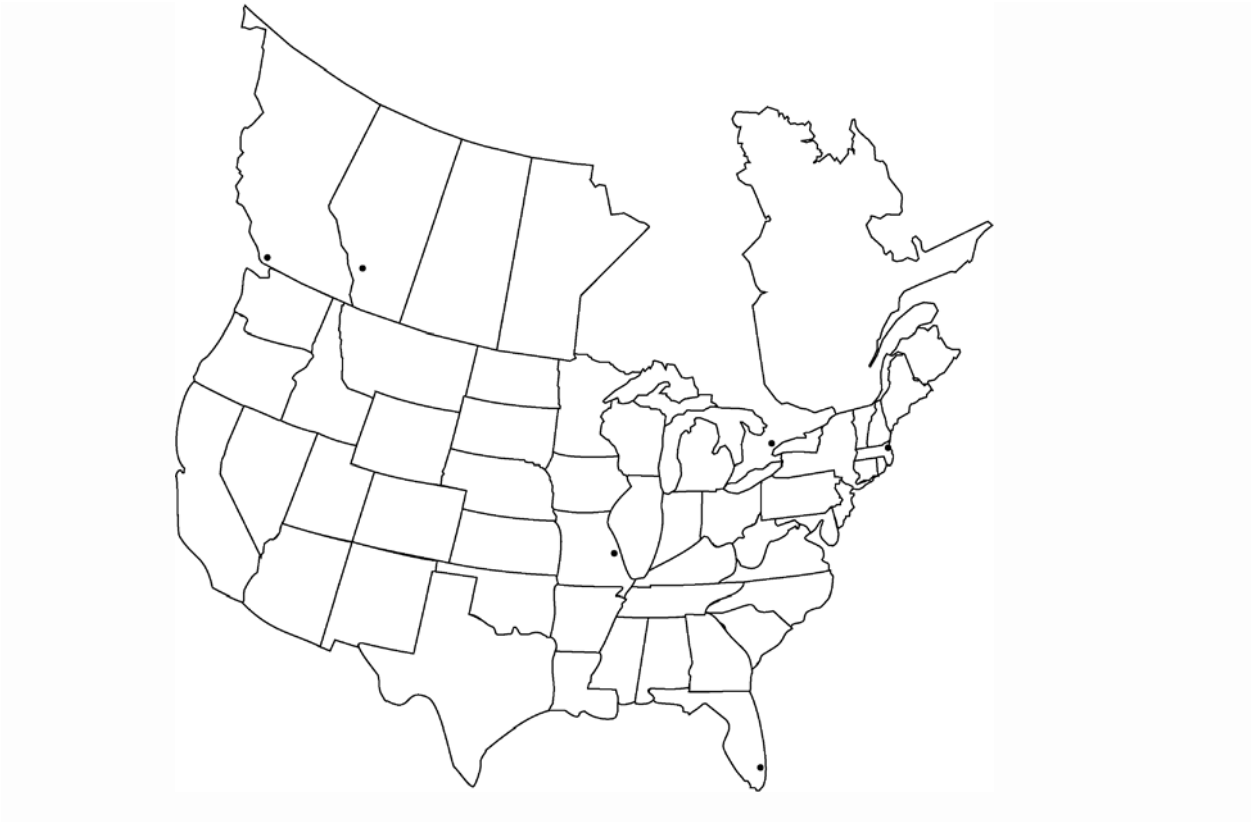
2. Imagine that you are a water molecule trapped deep in the soil. Describe the path that you could take around the world and return to the soil. Use the appropriate terms in your discussion.

3. Name six weather factors.

4. How would the clothing of desert people and people living at the poles differ? How would they be the same?

Map

Read about each weather condition. Then put a symbol for that condition in the correct place on the map.



- √ A high pressure system is creating clear skies in St. Louis.
- √ It is 5 °C and raining in Ontario.
- √ A low pressure system over Calgary is creating snow.
- √ Thunderstorms are gathering over Boston.
- √ It is clear, windy, and 13 °C in Ft. Lauderdale.
- √ It is cloudy with a moderate drizzle in Vancouver.

Answer key

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Circle the letter of the correct answer.

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C. Hygrometer
D. Rain gauge
E. Thermometer
F. Wind speed radar
G. Wind vane

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__C__ 2. Measures relative humidity.
__D__ 3. Measures one form of precipitation.
__C__ 4. May use percentages as a unit.
__A__ 5. Measures wind speed.
__G__ 6. Measures wind direction.
__B__ 7. Uses millibars, hectopascals, or millimeters of mercury as units.
__E__ 8. Can use either the Fahrenheit or Celsius degrees as units.
__A__ 9. Uses kilometers per hour or miles per hour as units.
__B__ 10. A quick drop in the measurement by this instrument can mean rain or storms.

Matching Set B

For each statement, choose the climate type from Answer Box B that best matches the statement. Answers may be used once, more than once, or not at all.

C 1. The climate that you live in.

C 2. A climate that has four distinct seasons.

D 3. A climate that has two seasons—a rainy season and a dry season.

B 4. The climate farthest to the south.

B 5. A climate in which temperatures are always cold.

D 6. A climate in which temperatures are always warm.

Answer Box B

A. Middle climate
B. Polar climate
C. Temperate climate
D. Tropical climate

Short Answers

1. Identify four ways that living things depend on the atmosphere.

   Most creatures need oxygen to break down food into energy. Atmospheric nitrogen supplies the primary ingredient for making proteins. Carbon dioxide is necessary for photosynthesis. Carbon dioxide traps heat, warming the Earth. The atmosphere protects creatures from harmful solar radiation.

2. Imagine that you are a water molecule trapped deep in the soil. Describe the path that you could take around the world and return to the soil. Use the appropriate terms in your discussion.

   The water molecule could flow to a stream, river, and eventually the ocean, where it could evaporate into the air. The evaporated molecule could become part of a cloud, which would transport it around the Earth. Eventually, the molecule could become part of a raindrop or snowflake and fall back to Earth as precipitation and seep back into the soil.

3. Name six weather factors.

   Air temperature, air pressure, relative humidity, wind speed, wind direction, precipitation amounts, and cloud cover.

4. How would the clothing of desert people and people living at the poles differ? How would they be the same?

   Desert clothing is made of lightweight fabrics and fits loosely to allow air circulation. Polar clothing is made of animal furs and hides, and it fits tightly to prevent air from getting next to the skin. Both types of clothing cover all exposed skin.

Map

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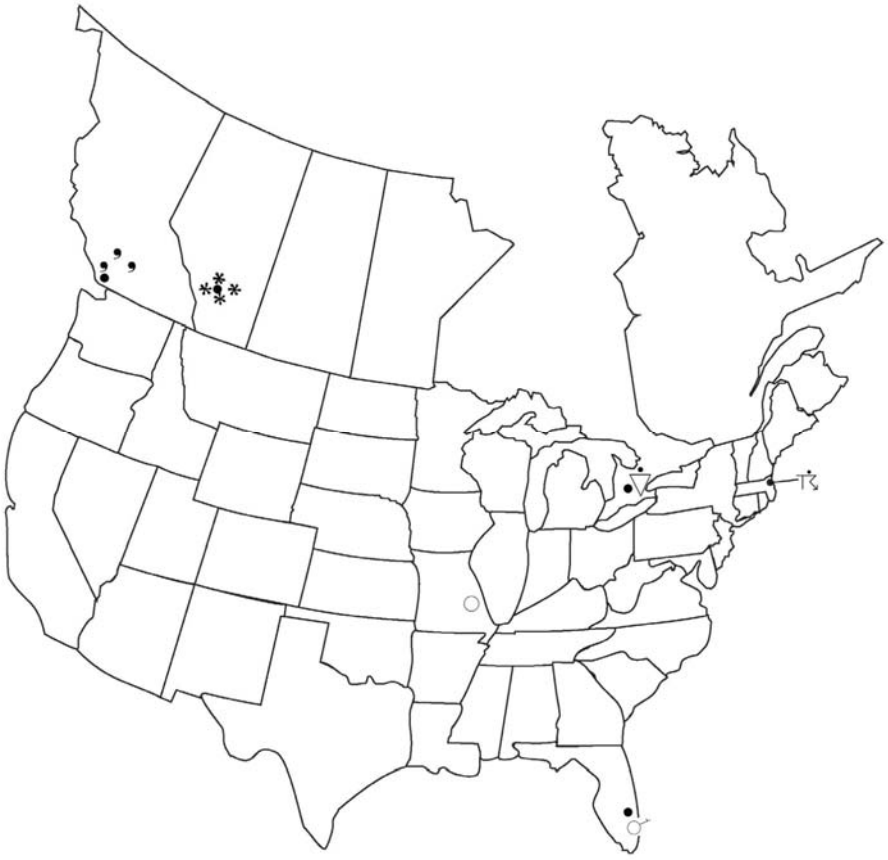

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