

**Fourth Grade Science
Benchmark 4.1**

1. An observation is:
 - a. an inference
 - b. interpretations
 - c. what is seen
 - d. a conclusion

2. A conclusion based on events that have already occurred.
 - a. an inference
 - b. interpretations
 - c. scientific prediction
 - d. a conclusion

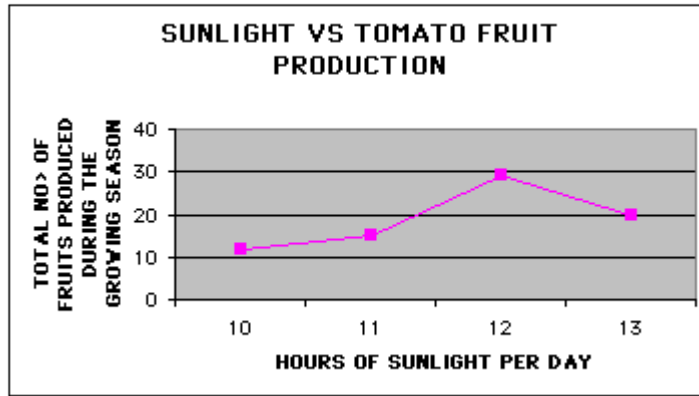
3. A forecast about what might happen in an experiment is a _____.
 - a. an inference
 - b. interpretations
 - c. scientific prediction
 - d. a conclusion

4. The amount of liquid can be measured with a _____.
 - a. graduated cylinder
 - b. balance
 - c. meter stick
 - d. thermometer

5. Mass can be measured with a _____.
 - a. graph
 - b. beaker
 - c. thermometer
 - d. balance

6. Weight can be measured with a _____.
 - a. scale
 - b. meter stick
 - c. balance
 - d. beaker

7.



How many tomatoes do you think will be produced during the growing season if the plants received 14 hours of sunlight a day?

Explain how you came up with your answer.

8. A prediction about the outcome of an experiment is a(n) _____.
a. variable
b. experiment
c. hypothesis
d. factor
9. A fair test driven by a hypothesis is a(n) _____.
a. variable
b. experiment
c. hypothesis
d. factor

**Fourth Grade
Benchmark 4.2**

1. This describes how fast an object is moving.
 - a. Friction
 - b. Force
 - c. Energy
 - d. Speed

2. The two states of matter are _____ and _____ . (circle two)
 - a. Kinetic
 - b. Speed
 - c. Force
 - d. Potential

3. The energy of motion is called _____ energy.
 - a. Kinetic
 - b. Speed
 - c. Force
 - d. Potential

4. Energy which is stored is called _____ energy.
 - a. Kinetic
 - b. Speed
 - c. Force
 - d. Potential

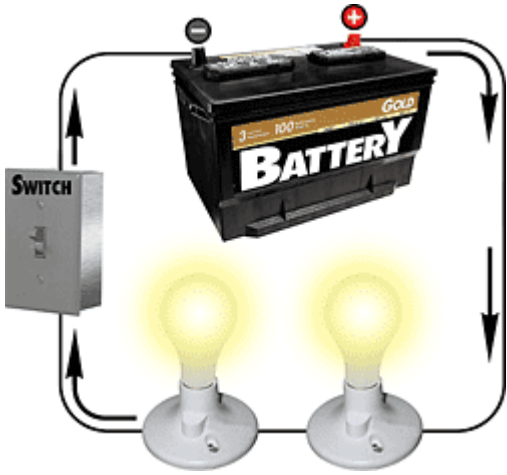
5. Any push or pull that causes an object to move, stop or change speed.
 - a. Kinetic
 - b. Speed
 - c. Force
 - d. Potential

6. What causes a greater change in motion?
 - a. greater mass
 - b. greater force
 - c. less mass
 - d. less force

7. What causes a lower effect of the force on an object?
- a. greater mass
 - b. greater force
 - c. less mass
 - d. less force
8. Friction causes_____.
- a. Heat
 - b. Cold
 - c. Diamonds
 - d. Force
9. The resistance to motion is called _____.
- a. Heat
 - b. Cold
 - c. Diamonds
 - d. Force
10. Unless acted on by a _____, objects in motion tend to stay in motion and objects at rest tend to stay at rest.
- a. Heat
 - b. Cold
 - c. Diamonds
 - d. Force

Fourth Grade
Benchmark 4.3

1. Label each as an **open circuit** or a **closed circuit**.

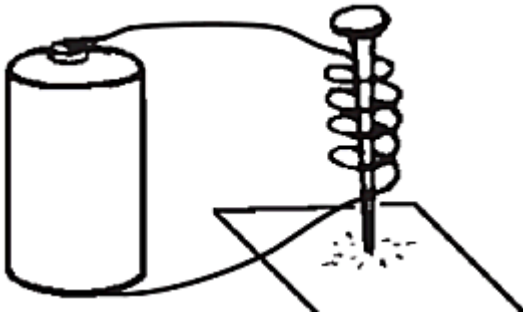


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2. Rubbing a balloon in your hair will create _____
- a. lightning
 - b. electricity
 - c. an open circuit
 - d. static electricity
3. The discharge of static electricity in the atmosphere is called _____.
- a. lightning
 - b. electricity
 - c. an open circuit
 - d. static electricity
4. Electrical energy can be transformed in to what three types of energy?
- a. _____
 - b. _____
 - c. _____

5. Draw the electrical field on the magnet as it would appear, if iron filings were sprinkled near it.



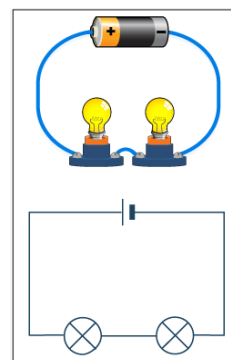
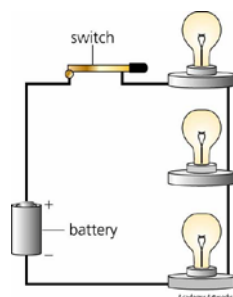
6.



This is an example of an _____.

7. A continuous flow of negative charges creates a(n) _____.
- a. electron
 - b. electric current
 - c. proton
 - d. insulator
8. A negative charge is a(n) _____.
- a. electron
 - b. electric current
 - c. proton
 - d. insulator
9. A(n) _____ is a positive charge.
- a. electron
 - b. electric current
 - c. proton
 - d. circuit

10. The pathway taken by an electric current is a(n) _____.
- electron
 - electric current
 - proton
 - circuit
11. Materials that allow electricity to move through them are called _____.
- plastics
 - conductors
 - insulators
 - pennies
12. Materials that do not conduct electricity well are called _____.
- plastics
 - conductors
 - insulators
 - pennies
13. An example of a conductor is a _____.
- piece of wire
 - piece of wood
 - piece of plastic
 - Styrofoam
14. An example of an insulator is _____.
- piece of wire
 - a penny
 - piece of plastic
 - water
15. Label each circuit as a series circuit or a parallel circuit.



16. Who proved that lightning is actually electricity?
 - a. Thomas Edison
 - b. Michael Faraday
 - c. Benjamin Franklin

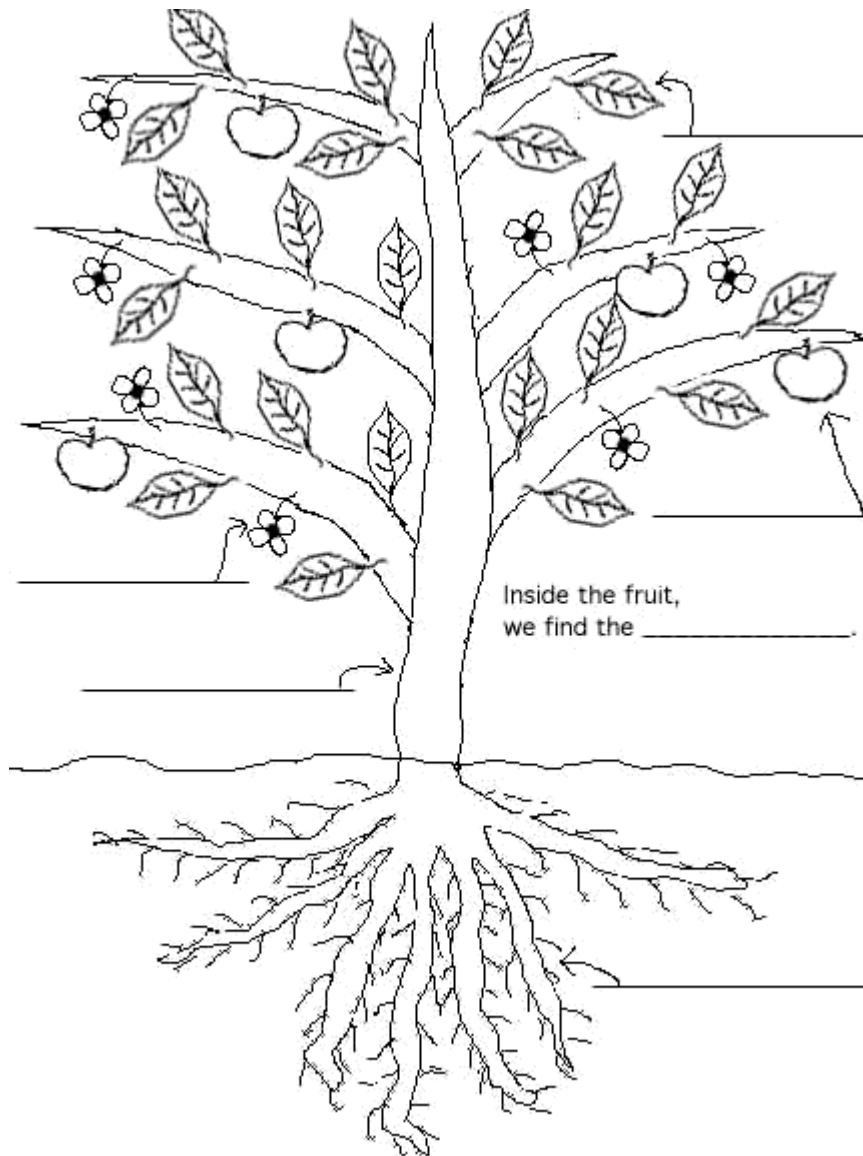
17. Who perfected the electric light?
 - a. Thomas Edison
 - b. Michael Faraday
 - c. Benjamin Franklin

18. Who invented the first basic electric motor?
 - a. Thomas Edison
 - b. Michael Faraday
 - c. Benjamin Franklin

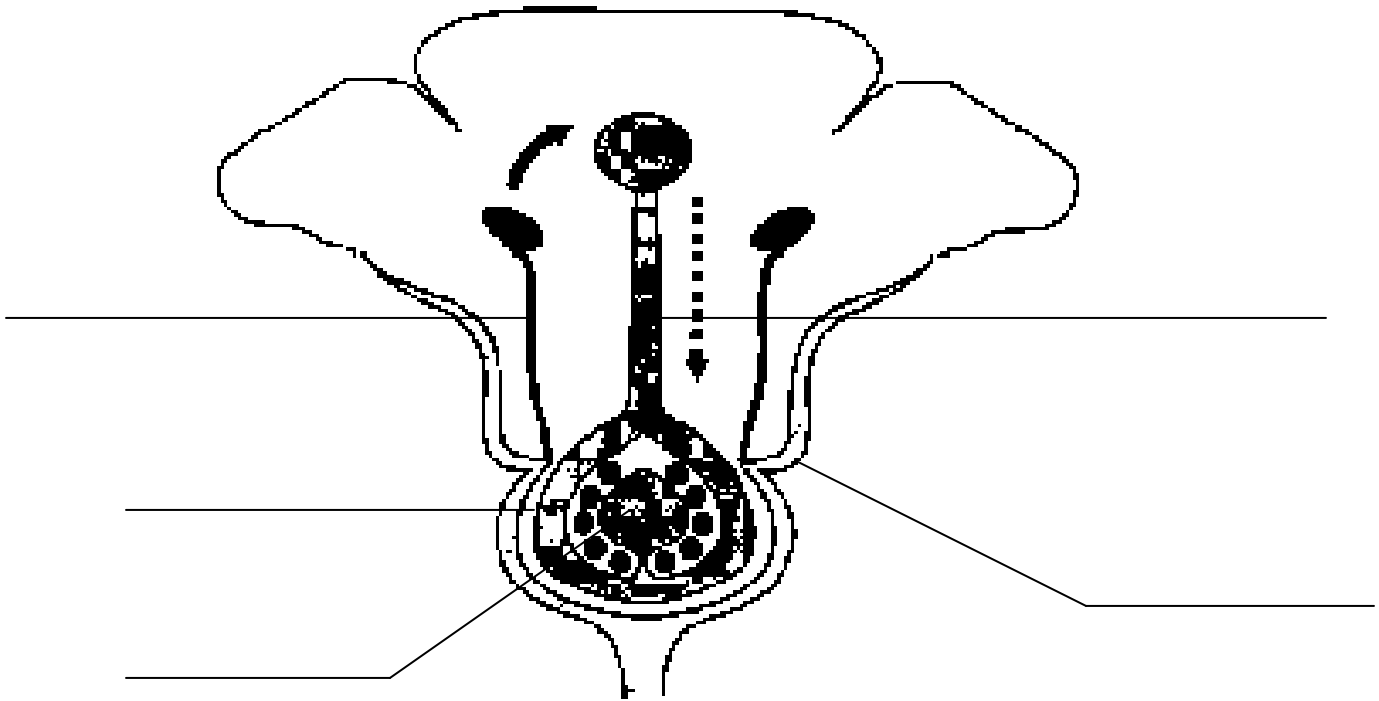
**Fourth Grade
Benchmark 4.4**

1. Most plants reproduce with seeds, name two types of plants that reproduce with spores.
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2. Label the parts of a plant. Tell their function beside each label.



roots	stem	leaves	flower	fruit	seeds
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3. Label the parts of the plant using the words in the word box.

Stamen	pistil	sepal	ovary	ovule
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Describe the function of each part of a flower.

4. stamen _____

5. Pistil _____

6. sepal _____

7. ovary _____

8. Ovule _____

9. Use the following words to describe the process of photosynthesis.

Sunlight, chlorophyll, water, carbon dioxide, oxygen, sugar

10. Explain why plants go dormant.

**Fourth Grade
Benchmark 4.6**

Name _____

Circle the correct answer.

1. A _____ is the person who gathers data by using a variety of instruments.
 - a. Anemometer
 - b. Temperature
 - c. Meteorologist
 - d. Weather Man

2. _____ is due to the weight of the air and is determined by several factors including the temperature of the air.
 - a. Temperature
 - b. Anemometer
 - c. Atmosphere
 - d. Air Pressure

3. _____ is the measure of the amount of heat in a place.
 - a. Temperature
 - b. Thermometer
 - c. Anemometer
 - d. Barometer

4. The amount of precipitation is measured by a(n) _____.
 - a. Thermometer
 - b. Anemometer
 - c. Temperature
 - d. Rain Gauge

5. To measure wind speed, you would use a(n) _____.
 - a. Thermometer
 - b. Anemometer
 - c. Temperature
 - d. Rain Gauge

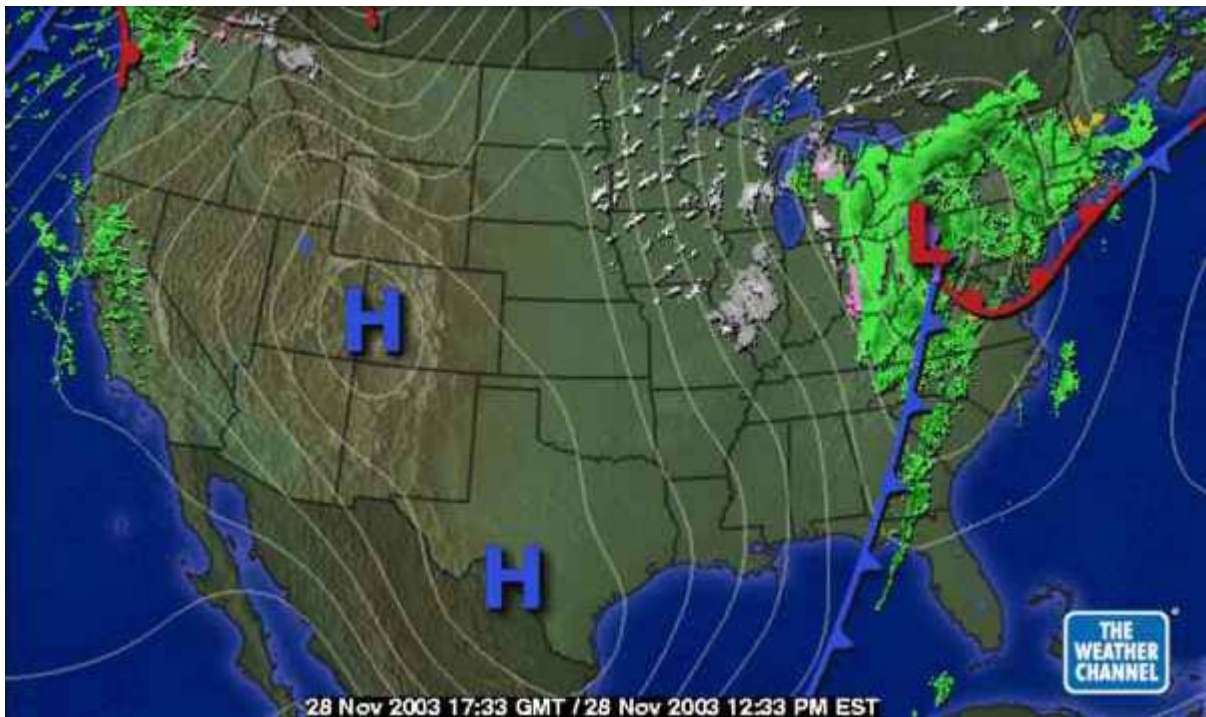
6. To measure the temperature of the air, you would use a(n)

- _____.
- a. Thermometer
 - b. Anemometer
 - c. Temperature
 - d. Barometer

7. A _____ measures air pressure.

- a. Thermometer
- b. Anemometer
- c. Temperature
- d. Barometer

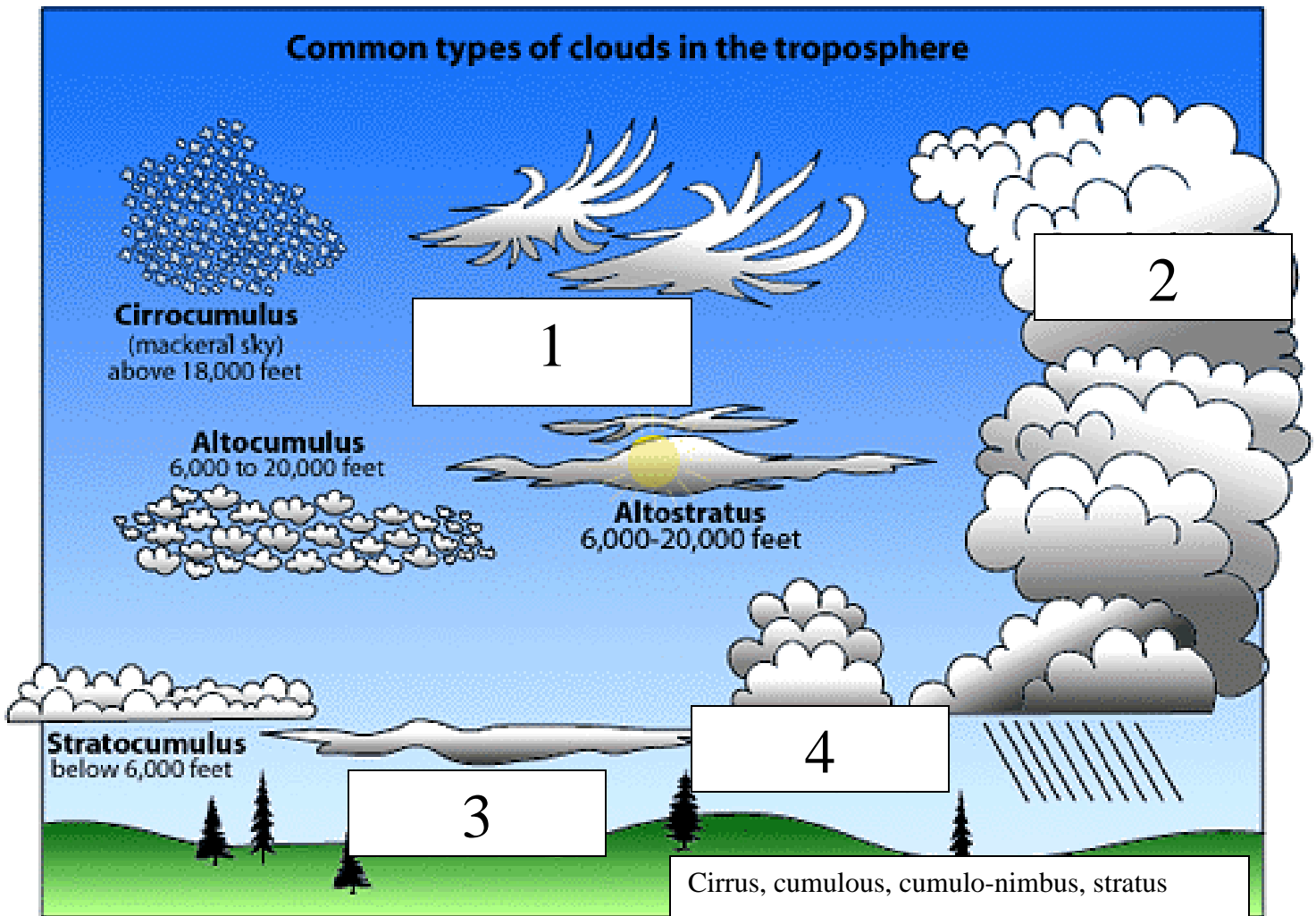
8. What causes different types of precipitation?



9. What kind of weather will happen with a high pressure mass?

10. What kind of weather will happen with a low pressure mass?

11. The boundary between air masses of different temperature and humidity is called a _____.



Label each type of cloud, write a description, and tell what type of weather each is associated with.

1. type _____ description _____

type of weather _____

2. type _____ description _____

type of weather _____

3. type _____ description _____

type of weather _____

4. type _____ description _____

type of weather _____

**Grade Four
Benchmark 4.7**

1. The earth _____ around the sun.
 - a. rotates
 - b. revolves

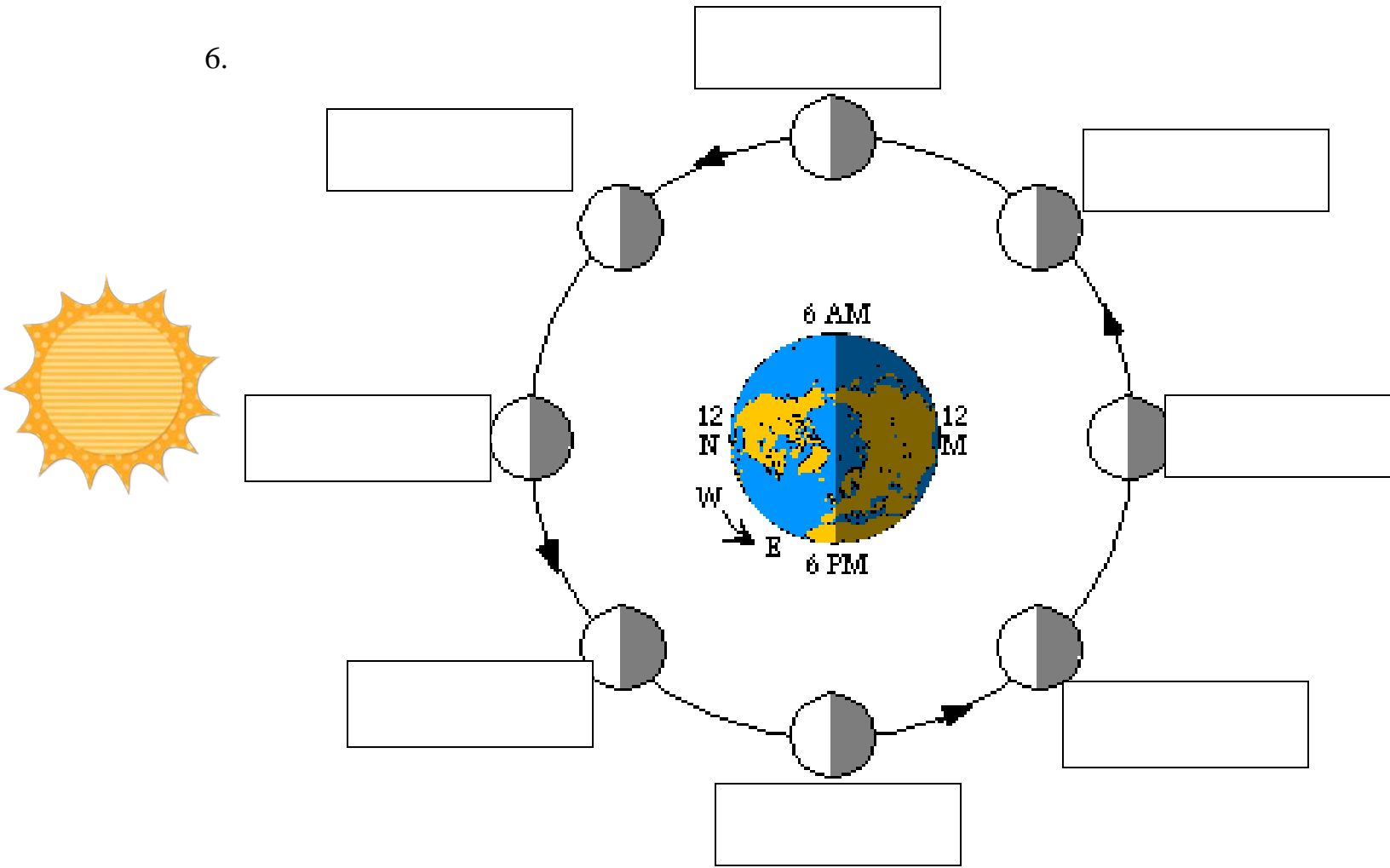
2. The earth _____, or spins to create day and night.
 - a. rotates
 - b. revolves

3. The earth goes around the sun one time every _____.
 - a. 365 days
 - b. 24 hours
 - c. week
 - d. month

4. The earth spins once every _____.
 - a. 365 days
 - b. 24 hours
 - c. week
 - d. month

5. Explain why the earth has seasons.

6.



Use the words in the word box to label the different phases of the moon.

First Quarter	Full	Last Quarter	New Moon
Waning Crescent	Waxing Crescent	Waning Gibbous	Waxing Gibbous

7. The size of the sun is _____.
- a. extra small
 - b. small
 - c. average
 - d. large

8. What color is the sun? _____?
9. The sun is about _____ times larger than the earth.
- a. 50
 - b. 75
 - c. 110
 - d. 145
10. The sun is about _____ years old.
- a. 3.7
 - b. 4.6
 - c. 5.7
 - d. 6.8
11. Which two scientists thought the earth was at the center of our solar system? (Circle Two)
- a. Aristotle
 - b. Copernicus
 - c. Galileo
 - d. Ptolemy
12. Which two scientists found that the sun was at the center of the solar system?
- a. Aristotle
 - b. Copernicus
 - c. Galileo
 - d. Ptolemy
13. Name one thing that scientists learned from the NASA Apollo Missions about the moon.
