

Name:

MAP Science Test Prep, Unit B Test

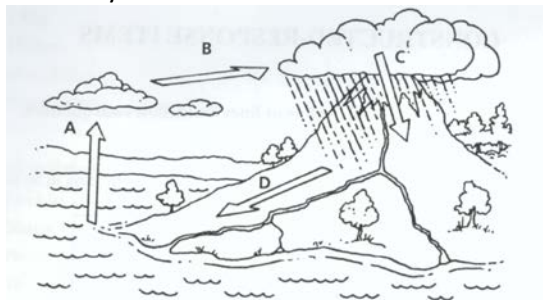
Directions Type your answer in the box displayed below.

1. The following chart shows a description of the weather for several days in an area.

Day	Weather Description
1	Sunny
2	Partly Cloudy
3	Light rain all day and turning warmer
4	Light rain all day
5	Light rain all day
6	Clouds moved slowly out of area
7	Clearing

- (a) What type of front moved into this area? Explain how you know.
- (b) Suppose the air temperature between the clouds and the ground in this area was -5 degrees Celsius. What type of precipitation would fall? Why?

2. The drawing below shows the water cycle.



- (a) Describe how the processes in steps A and B of the drawing are opposite of each other.
- (b) Which step in the drawing is skipped when frost forms? Explain your answer.

3. A hydroelectric power plant is built on a fast moving river. A lake forms behind the dam.
- (a) What is one positive effect of the lake on humans?

 - (b) What is one negative effect of the lake on plants or animals that live in the area?
4. Water is a renewable resource. However, the supply can be affected by human activities.
- (a) Some towns use surface water as a source of fresh water. What might cause this water to become polluted with harmful chemicals?

 - (b) The supply of fresh water on Earth is limited. You are asked to write an article for the community newspaper of conserving water. The editor wants to know two actions people can take to keep from wasting water. What would you write?

Selected Response items

Directions Read each question and answer choice. Fill in the circle next to each correct answer choice.

1. Which group of phrases would you use to classify oceans?
- Fresh water, liquid, small
 - Groundwater, liquid, large
 - Surface water, solid, salt water
 - Surface water, salt water, large
2. What would happen to the air in your lungs if you climbed a mountain that is four kilometers high?
- It would not contain any gases
 - It would contain less oxygen and nitrogen
 - It would contain more oxygen and nitrogen
 - It would contain the same amount of nitrogen and oxygen

3. Between which two parts of the water cycles does a glacier occur?

Precipitation and freezing

Precipitation and evaporation

Condensation and evaporation

Sublimation and condensation

4. A scientist discovers groundwater flowing through a layer of rock and soil. What process can the scientist infer formed this body of water?

Snowfall over many years squeezed snow into ice.

Rain collected in a low spot surrounded by higher land.

Rain soaked into the ground until it was stopped by a layer of rock.

Water from rain and melting snow flowed downhill in small streams.

5. The table below shows how the fractions of fresh water on Earth add to the total. What is the best kind of graph to display this data?

Source of Water	Fraction of Water
Ice sheets and glaciers	$\frac{77}{100}$
Groundwater	$\frac{22}{100}$
Lakes and rivers	$\frac{1}{100}$
TOTAL	$\frac{100}{100}$

Line graph with one line

Line graph with three lines

Bar graph with three lines

Circle graph with three sections

6. A fern is a plant that grows in warm climates. A scientist finds a fossil of a fern in a place with cold climate. What is the most likely conclusion from this finding?

Ferns are extinct

Long ago, ferns were able to live in cold climates

The climate where the fossil was found used to be warm

Fossils cannot be compared to organisms that live today.

7. Which statement about soil is true?

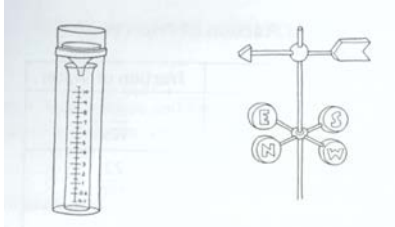
Soil contains weathered rocks.

The most fertile soil is subsoil.

Clay soils let water pass through easily.

Soil has the same properties from place to place.

8. What are the instruments shown in the drawing above?



Rain gauge and wind vane

Anemometer and wind vane

Hygrometer and anemometer

Barometer and anemometer

9. Doppler radar is technology that provides information on wind and precipitation. How do weather forecasters use the technology to keep people safe?

They report areas where the wind is calm

They issue thunderstorms and tornado warnings

They predict whether the weather will be cloudy

They describe when and where lightning will strike

10. The people in a town want to purchase a statue to place outside city hall. They buy the statue made of limestone instead of granite. What problem will they have with limestone that they would not have with granite?

Plants can grow in the cracks of the statue.

A limestone statue will weather more quickly.

Snow will collect on the limestone.

There will not be a problem.