Water Cycle Study Guide

Name:_____

1. What are the four main processes of the water cycle? Describe each.

Evaporation - Water is heated by the sun and rises into the air as water vapor. This process includes transpiration - Water is released from the leaves of plants

Condensation - The warm water vapor hits the cold air in the atmosphere. This makes the water vapor cool off and form a cloud

Precipitation - The water falls to the ground as snow, sleet, hail, or rain.

Runoff - water flows downhill, eventually making its way back to the ocean.

2. Why is Earth called the "Water Planet?"

Because the surface of the Earth is 75% water.

3. Where can freshwater be found? Is the majority of this water accessible to us? Why or why not?

Freshwater doesn't have any salt in it. Only 3% of the water on Earth is fresh. Most of it is locked in frozen glaciers where we can't get to it. The rest is in rivers, lakes, and streams.

4. How do clouds form?

When warm water vapor rises and collides with the cooler atmosphere, This changes the gas into a liquid and a cloud forms..

5. What is the driving force of the water cycle? What does it do and why is that important?

The sun is the driving force. The water cycle would not happen without heat from the sun. It heats up water and causes evaporation.

6. What factors could increase evaporation?

If it is a sunny hot day, there will be more evaporation. More sun, more heat = more evaporation.

7. Does condensation only happen in the air? Name two examples of condensation that we can see and feel.

No, condensation does not just happen in the air.

Ex 1 - When water condenses on the outside of a cold soda can

Ex 2 - When a mirror steams up in a bathroom

8. How do plants affect the water cycle?

When plants are heated by the sun, they release water from their leaves.

9. Name some different forms of precipitation. What would determine which type would fall?

Rain, snow, sleet, hail. Temperature would determine what type will fall.

10. Let's say that you went on a hike. When you got to the river, the water level was very low. What may cause this? (Be sure to use water cycle vocabulary and explain your answer.)

The water is low for two reasons. 1st, there was an increase in temperature causing the river to evaporate. 2nd, there has been a decrease in precipitation.