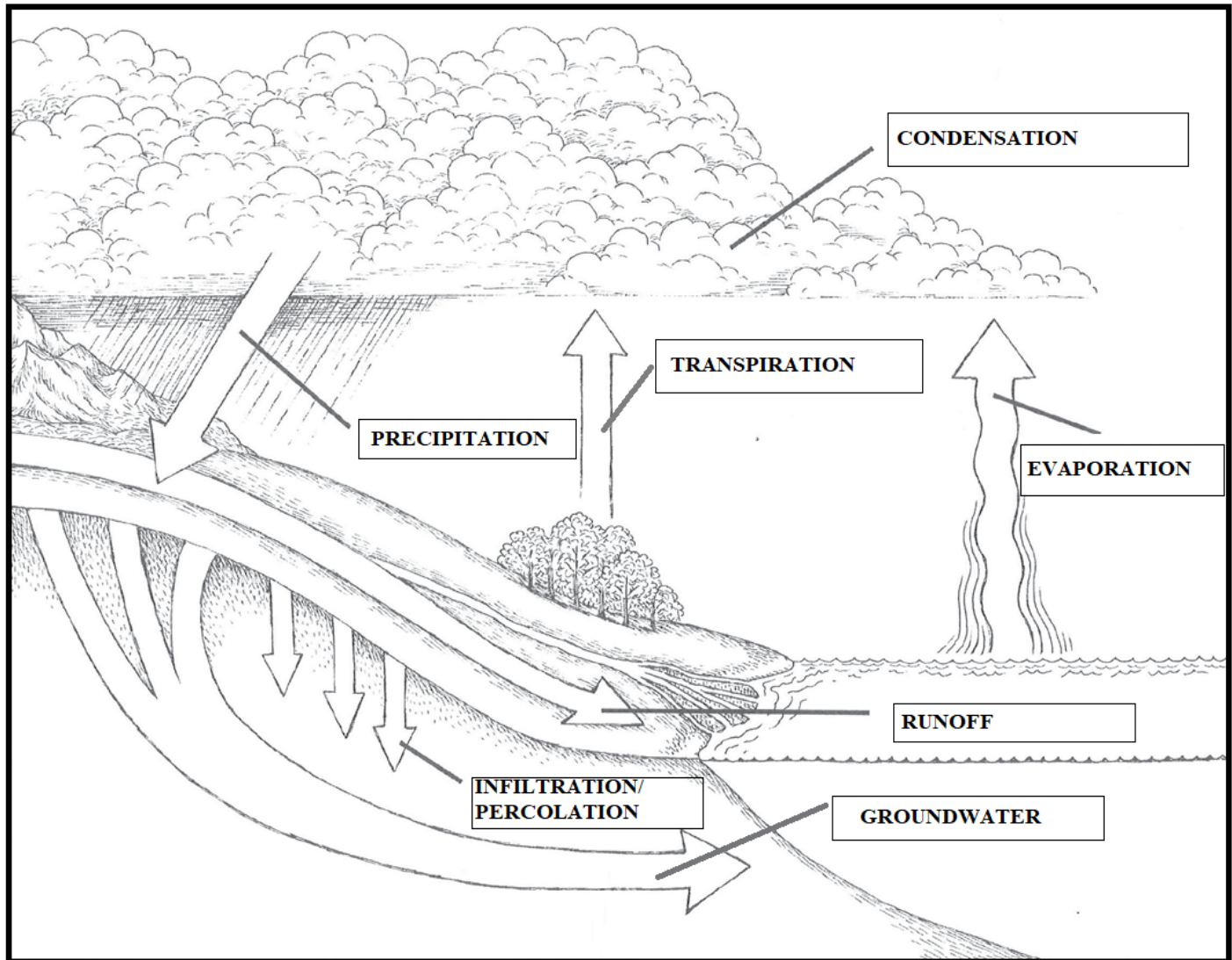


# The Hydrologic Cycle

NAME:

Class:

DATE:



The hydrologic cycle is a continuous thing and happens everywhere on this planet. Here is a small diagram that shows some of the more important processes. It really does not start or end anywhere because it is a cycle. Sometimes water is trapped in ice or the groundwater for thousands of years or in rock deposits for millions of years but the cycle goes on. We can look at the parts of the cycle like when water changes state from liquid to gas and goes into the atmosphere (Evaporation). From there, it forms droplets in the sky as it cools (Condensation) and forms clouds. These continue to grow until there is enough gravitational pull for the droplets to fall (Precipitation). This can fall as rain, snow and a mixture called hail or sleet. Once on the surface, it can run along the surface (Runoff) or can soak into the soil (Infiltration/percolation). If it soaks into the ground, it travels through the rock and soil (Groundwater) and comes out to the surface again through springs and drawn up by plants and some of that water from the plants is released back into the air (Transpiration).

Use the Paragraph to properly label the diagram above by using the words in parentheses by the indicated areas of the diagram.

# Questions on the Hydrologic Cycle

Where does the hydrologic cycle start?

It does not start or end at any point, It is a cycle and therefore has not beginning or end.

Give examples of how long the hydrologic cycle might take.

Sometimes water is trapped in ice or the groundwater the thousands of years or in rock deposits for millions of years.

Is the hydrologic cycle a recent thing since global climate change? Explain.

No, It has been happening for the last 3 billion years (Bill Nye Video). It is affected by global climate change but it has always been around and will continue to be around in the future.

What keeps the hydrologic cycle going? You may have to research this one a bit.

The sun provides most of the energy for the hydrologic cycle. Some comes from geothermal sources too.

What words do not make sense to you? How can you remember them?

Answers Will Vary

Percolation?

Transpiration?

How does transpiration work? How does the water get into the plants?

Water that is in the plant escapes through small openings between cells called stoma. The water is brawn into the plant through the roots in a combined process of osmosis and capillary action

When is the hydrologic cycle going to finish?

There is no end to the water cycle as long as there is a temperature range on the planet that allows for the three states of water to exist (solid, liquid and gas).