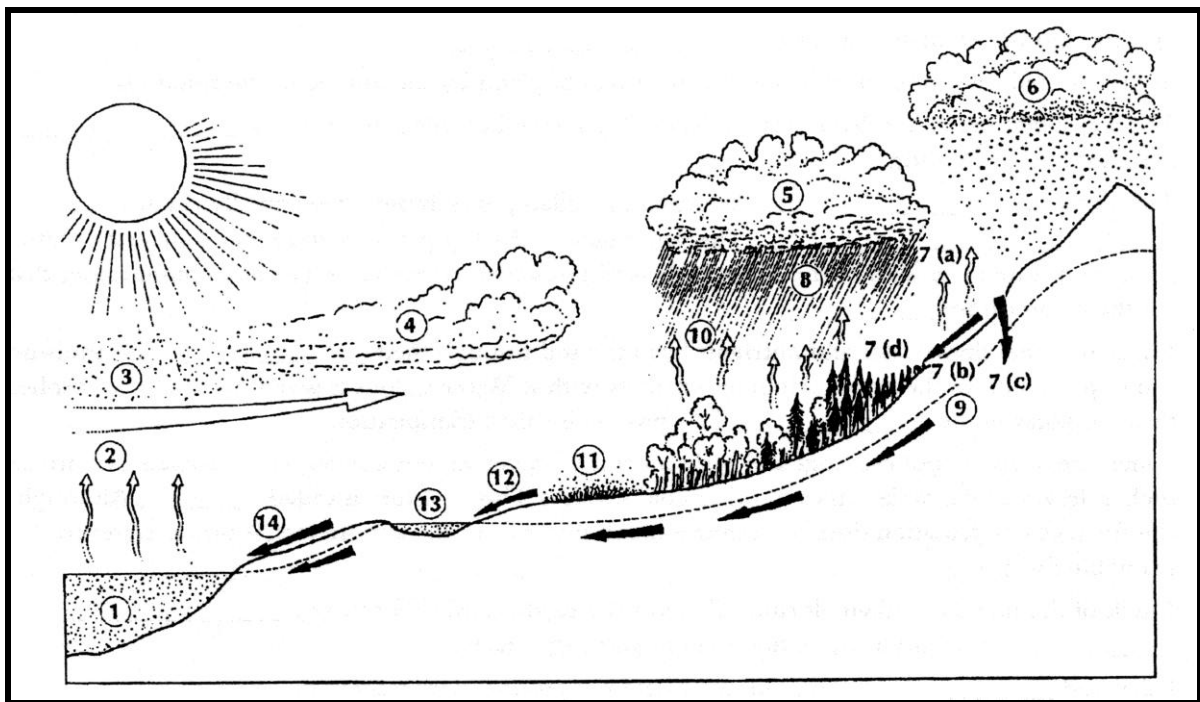


## The Hydrologic Cycle

Water is perhaps the most important substance in the world. Without it, life could not exist. Water exists in many forms: as rain, snow or fog in the atmosphere; as humidity on a sticky summer day; as water from a well; as a river or lake; and as a major component of food (both plant and animal).

The earth's water supply is constantly moving through different parts of the environment – from the ocean, through the atmosphere, plants, and the land, and back to the ocean again. This process is called the hydrologic cycle (water cycle). Scientists have estimated that water molecules spend about 98 out of every 100 years in the oceans. Of the remaining time, about 1¾ years are spent as ice, two or more months in lakes and rivers, and less than a week in the atmosphere.



The following statements describe the hydrologic cycle as illustrated above. Each statement has a number that corresponds to the number in the figure. Examine the figure and write the word(s) that best fits the blank. Select the word(s) from the following list. Each word may be used only once.

evaporated	condensation	dew	hydrologic
evaporate	leaves	gas	groundwater
precipitation	wells	atmosphere	rain
run off	liquid	oceans	roots
wind	snow	clouds	sinks
rivers	drainage system	water table	swamps

1. The \_\_\_\_\_ are great storehouses of water. They hold about 97% of the world's water.
2. The heat of the sun causes water to \_\_\_\_\_ from the oceans. It becomes water vapour which is an invisible \_\_\_\_\_.
3. The moisture-laden air is blown by the \_\_\_\_\_ towards the land.
4. As air rises it cools. It eventually reaches the point where it can no longer hold all of its moisture in gaseous form. Some of the water vapour changes into a \_\_\_\_\_ around particles of dust, to form tiny droplets of water. When water vapour changes into water, the process is called \_\_\_\_\_. We can see the results of this process in the atmosphere in the form of \_\_\_\_\_ that are carried by the wind.
5. Many droplets of water join together and fall to the earth as \_\_\_\_\_.
6. If temperature conditions are suitable, the water vapour may change directly into a solid form. This produces \_\_\_\_\_.
7. When the rain reaches the ground, or snow melts, the water can follow one of four paths.
  - a) evaporate back into the \_\_\_\_\_.
  - b) \_\_\_\_\_ along the surface of the earth.
  - c) sink into the earth and become \_\_\_\_\_.
  - d) be released into the atmosphere from the leaves of plants by the process of transpiration
8. The water that evaporates back into the atmosphere may become some form of \_\_\_\_\_ again at another location.
9. The water that \_\_\_\_\_ into the ground is called groundwater. It eventually reaches the \_\_\_\_\_. The water table is the top part of a \_\_\_\_\_ zone that is soaked or saturated with water. The level of the water table is of great importance to people and communities that get their water from \_\_\_\_\_.
10. Plants and trees draw water and nutrients from the soil through their \_\_\_\_\_. This moisture is transported up to the leaves bringing nutrients with it. Water vapour is given off to the atmosphere through pores in the \_\_\_\_\_. This process is called transpiration.
11. Sometimes during cool evenings and early mornings, water vapour condenses as droplets on surfaces such as leaves, spider webs, cars and other cold surfaces. This moisture is called \_\_\_\_\_. Although this form of condensation does not remove much water from the atmosphere, it brings water to many life forms.
12. Much of the rain and snowmelt runs off across the earth's surface forming a \_\_\_\_\_ that may include tiny streams and large rivers.
13. Lakes and \_\_\_\_\_ form in places where the groundwater reaches the surface.
14. Much of the surface run-off and groundwater makes its way back to the oceans where it again may be \_\_\_\_\_ into the atmosphere to start the \_\_\_\_\_ cycle all over again.