

The Water Cycle

Grade 4 • SCIENCE • Identifying evaporation, condensation, precipitation, and collection and explaining how water moves through weather and Earth's systems. • Standards: 5-ESS2-1

Read each description carefully and identify which part of the water cycle is happening or explain where the water goes next. Remember that water is always moving through Earth's systems!

1. When puddles dry up on a sunny day, the water turns into water vapor and rises into the air. What is this process called?
2. Rain and snow are both examples of water falling from clouds to the ground. What is this process called?
3. When water vapor in the air cools down and changes back into tiny water droplets that form clouds, what is this process called?
4. After a rainstorm, water flows across the ground and gathers in streams, rivers, and lakes. What is this process called?
5. On a cold morning, you see tiny water droplets on the outside of a cold glass of juice. The water vapor in the air touched the cold glass and changed into liquid. Which process caused this?
6. The sun heats the water in a lake, causing some of the water to turn into water vapor and rise into the atmosphere. Where does this water vapor go next in the water cycle?
7. Snow falls on a mountain and melts in the spring. The water flows down the mountain into a river. Identify the two water cycle processes described in this example, in the order they happen.
8. A farmer notices that the soil in her field is damp after a heavy rain, but three days later the soil is dry even though no plants used all the water. Explain two ways the water left the soil.

9. Water from the ocean evaporates, forms clouds over land, and falls as rain into a river that flows back to the ocean. Explain why this shows that the water cycle does not have a true starting or ending point.

10. During a summer day, water evaporates from both a pond and from the leaves of trees nearby. Both sources of water vapor rise and cool to form the same cloud. Explain how this example shows that water can enter the atmosphere through different pathways.

Answer Key — The Water Cycle

For the teacher / parent. Do not distribute with the worksheet.

1. Evaporation (*Evaporation is when liquid water changes into water vapor and rises into the atmosphere.*)
2. Precipitation (*Precipitation is any form of water that falls from clouds, including rain, snow, sleet, and hail.*)
3. Condensation (*Condensation occurs when water vapor cools and changes back into liquid water droplets.*)
4. Collection (*Collection is when water gathers in bodies of water like streams, rivers, lakes, and oceans.*)
5. Condensation (*When warm, moist air touches a cold surface, the water vapor condenses into liquid droplets.*)
6. It rises into the air and eventually cools to form clouds through condensation. (*After evaporation, water vapor rises and cools in the atmosphere, leading to condensation and cloud formation.*)
7. Precipitation, then collection (*The snow falling is precipitation, and the water flowing into the river is collection.*)
8. The water left the soil in two ways: evaporation, which changed surface water into water vapor that rose into the air, and infiltration, which pulled water down deeper into the ground toward groundwater. (*Water can leave soil through evaporation into the atmosphere and by seeping down into underground water sources.*)
9. The water keeps moving from ocean to air to land and back to ocean in a continuous cycle with no beginning or end. (*The water cycle is continuous because water constantly moves between different parts of Earth's system without stopping at any particular stage.*)
10. Water can evaporate from bodies of water and also from plants, showing that evaporation happens from multiple sources and both contribute to cloud formation. (*This demonstrates that the water cycle includes evaporation from various sources, not just oceans and lakes, and that water from different sources can combine in the atmosphere.*)