

Nova's Guide to the Wonderful Water Cycle

Learning objective: To describe and understand the processes of the water cycle, including evaporation, condensation, and precipitation.

Read the passage below carefully. Use the information to answer the questions. Nova the owl is waiting for your answers to help her understand how clouds are made!

Nova the owl loves watching the night sky, but she also keeps a close eye on the weather. The water cycle is nature's way of recycling water. It begins with evaporation, where the sun warms up the water in our oceans and rivers, turning it into invisible water vapour. As this warm vapour rises high into the sky, it cools down. This cooling process is called condensation, which turns the vapour back into tiny water droplets that form clouds. When these clouds get too heavy, the water falls back to the Earth as precipitation, such as rain, hail, or snow. Finally, this water gathers in rivers and seas, which is known as collection, and the whole cycle starts all over again.

Word bank: evaporation · condensation · precipitation · vapour · collection · temperature

1. Identify the stage of the water cycle where water turns from a liquid into an invisible gas. What provides the energy for this to happen? (2 marks)

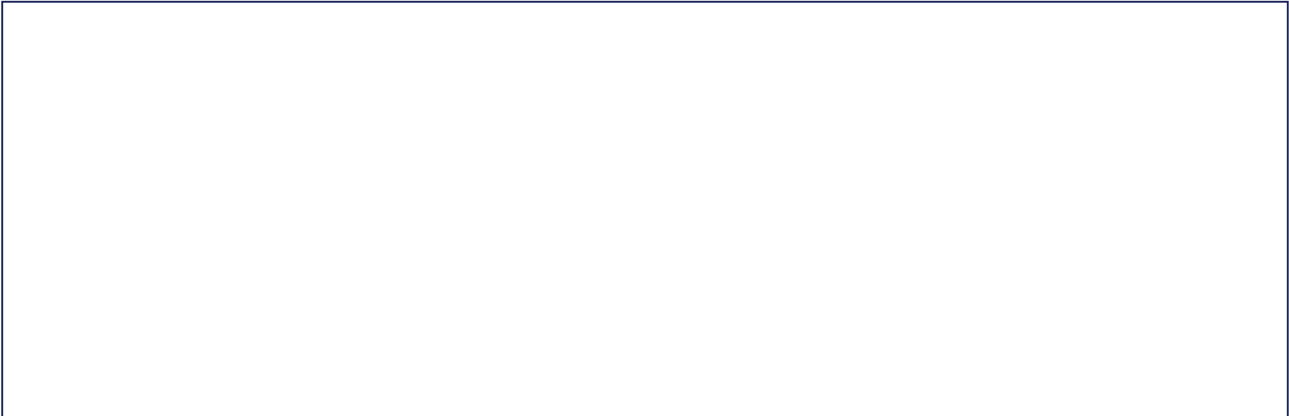
2. Nova notices clouds forming in the sky. Explain, in your own words, what is happening to the water vapour to create these clouds. (2 marks)

3. List three different forms of precipitation that might fall from a heavy cloud. (3 marks)

4. Why is the water cycle called a 'cycle'? Use the word 'collection' in your explanation. (2 marks)

5. If the sun stopped shining, what do you think would happen to the water cycle? Give a reason for your answer. (2 marks)

Draw: Draw a large diagram showing the water cycle. Label the sun, the ocean, the clouds, and use arrows to show the movement of water during evaporation, condensation, and precipitation.



Extension challenge: Imagine you are a tiny droplet of water. Write a short, creative diary entry describing your journey through the water cycle. Start your journey in a deep blue ocean and finish it as you fall as rain onto a mountain.