Nova’s Guide to the Water Cycle

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

Read the text carefully and answer the questions below in full sentences. Remember to use evidence from the text to support your answers.

High up in her oak tree, Nova the owl watches the world below. She knows that water is always on an incredible journey called the water cycle. It starts when the sun warms the water in our oceans and rivers. This heat turns the liquid water into an invisible gas called water vapour, which rises high into the sky; this is called evaporation. As the vapour rises, it meets cooler air. The gas cools down and turns back into tiny liquid water droplets, forming fluffy clouds. Nova calls this stage condensation. When these clouds become too heavy with water, the droplets fall back to the ground as rain, snow, or hail. Scientists call this precipitation. Finally, the water flows into streams, lakes, and oceans, where it waits to begin its journey all over again. Nova loves watching the rain fall, knowing that every drop is just a traveller returning home to the sea. Without this continuous cycle, life on Earth would be very thirsty indeed!

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

1. According to the text, what are the three forms that precipitation can take when it falls to the ground? (2 marks)

2. What causes the water in our oceans and rivers to turn into water vapour? (1 mark)

3. Why does Nova describe the water cycle as a 'journey'? (2 marks)

4. What happens to the water vapour when it meets cooler air high in the sky? (2 marks)

5. Why do you think the water cycle is important for living things on Earth? Justify your answer. (3 marks)

Draw: Draw a labelled diagram of the water cycle. Show the sun shining on a lake, the vapour rising to form a cloud, and rain falling over a mountain.

Extension challenge: Research what 'transpiration' means. Write a short sentence explaining how plants contribute to the water cycle.