

The Incredible Journey of a Water Droplet

Learning objective: To describe and explain the stages of the water cycle, including evaporation, condensation, transpiration, precipitation, and collection.

Use this writing scaffold to draft an informative explanation text. Imagine you are Nova the owl observing the Earth from above, tracking the constant movement of water. Use the word bank to help you link your ideas together.

High above the shimmering landscape, a tiny droplet of water begins a journey that has repeated itself for billions of years.

Word bank: subsequently · transforming · accumulates · due to · vapour · process · consequently · as a result · evaporates

1. Evaporation and Transpiration: How does the sun's energy cause water to change state? Start your paragraph by explaining... (2 marks)

2. Condensation: Explain why the water vapour turns back into liquid droplets in the sky. You might want to use the word 'cools'... (2 marks)

3. Precipitation: Describe the conditions under which water returns to the ground. Justify why the water falls as either rain, snow, or hail... (3 marks)

4. Collection: What happens to the water once it reaches the Earth's surface? Explain the path it takes to get back to the sea... (2 marks)

5. Comparison: Compare and contrast the role of the sun in the water cycle with the role of temperature in the atmosphere. Why are both essential? (3 marks)

6. Evaluation: What might happen to the water cycle if the Earth's global temperature were to rise significantly? Predict the outcome for the collection stage... (3 marks)

Extension challenge: Imagine you are a water droplet. Write a short, creative diary entry describing your journey through all four stages of the cycle. Use scientific vocabulary to explain how you feel as you change from a liquid to a gas and back again.