

Nova's Water Cycle Investigation

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

Read each question carefully and use your scientific knowledge to answer. Refer to the word bank if you need help with key terminology.

Word bank: Evaporation · Condensation · Precipitation · Collection · Water vapour · Sun

1. Nova the owl is watching a puddle disappear on a sunny day. What is the name of the process where the sun turns liquid water into invisible water vapour? (1 mark)

2. Explain what happens to water vapour when it cools down high up in the sky to form clouds. What is this process called? (2 marks)

3. Describe the difference between rain, snow, and hail. Which stage of the water cycle do these all belong to? (3 marks)

4. Why is the sun considered the 'engine' or the main power source for the entire water cycle? (2 marks)

5. If you left a bowl of water outside on a warm day, would the water level be higher or lower after 24 hours? Explain your answer using one of the key terms. (2 marks)

Draw: Draw a diagram of the water cycle. Include the sun, a mountain, a sea, and clouds. Use arrows to show the movement of water and label the stages: Evaporation, Condensation, and Precipitation.



Extension challenge: Imagine you are a tiny droplet of water in the ocean. Write a short diary entry describing your journey as you travel through the water cycle. How do you feel when you are heated by the sun, and what is it like to fall as rain?