

Nova's Science Assessment: The Wonderful Water Cycle

Learning objective: To identify and explain the main stages of the water cycle and describe the role of the Sun in this process.

Read each question carefully and write your answers in the spaces provided. Ensure your explanations are clear and use scientific terminology.

Nova the owl has been watching the mountain streams and the clouds above the forest. She has noticed that water is constantly on the move, changing its state as it travels from the earth to the sky and back again. This continuous movement is driven by the heat from the Sun.

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

1. 1. What is the name of the process where liquid water turns into water vapour due to heat from the Sun? (1 mark)

2. 2. Explain what happens to water vapour when it rises into the cooler air in the atmosphere. (2 marks)

3. 3. Name two different forms of precipitation that might fall from clouds. (2 marks)

4. 4. Describe the role of the Sun in the water cycle. Why is it essential for the cycle to continue? (3 marks)

5. 5. A puddle on the pavement disappears after a few hours on a sunny day. Using your knowledge of the water cycle, describe where the water has gone and how it got there. (4 marks)

6. 6. Look at the local park. If it rains heavily for three days, where does the water go? Describe the process of collection and how water might eventually return to the atmosphere. (5 marks)

7. 7. How might a change in global temperature affect the rate of evaporation? Explain your reasoning. (3 marks)

8. 8. Why is the water cycle considered a 'cycle'? Explain why it does not have a beginning or an end. (3 marks)

Draw: Draw a diagram of the water cycle. Label the following stages clearly: Evaporation, Condensation, Precipitation, and Collection. Make sure to include the Sun as the energy source.



Extension challenge: Total: /25