

Nova's Water Cycle Investigation

Learning objective: To describe and explain the key processes of the water cycle: evaporation, condensation, precipitation, and collection.

Read each question carefully and use your scientific knowledge of the water cycle to provide clear, detailed answers. Ensure you use the correct scientific terminology.

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

1. Nova the owl is watching a puddle disappear on a warm day. Explain which process is happening to the water and identify the energy source that drives this change. (2 marks)

2. Describe the process of condensation. How do clouds form in the sky according to the water cycle? (2 marks)

3. List three different forms of precipitation that might fall back to the ground once clouds become saturated. (3 marks)

4. Explain why the water cycle is described as a 'cycle'. What happens to the water once it is collected in oceans, lakes, and rivers? (2 marks)

5. Max the monkey is trying to calculate how much water might evaporate from a small bowl. If the bowl holds 500ml and 15% evaporates in the sun, how much water is left? Show your working. (2 marks)

Draw: Draw a labelled diagram of the water cycle. Include the sun, a mountain with a river, the sea, and clouds. Use arrows to show the direction of water movement and label the four main stages: Evaporation, Condensation, Precipitation, and Collection.



Extension challenge: Research 'transpiration'. How do plants contribute to the water cycle, and how would the cycle be different if there were no plants on Earth?