

Nova's Weather Watch: The Water Cycle Experiment Record

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

Help Nova the owl track how water moves through our environment. Use this template to record your observations and scientific explanations of the water cycle. Use the word bank to ensure you are using the correct scientific vocabulary in your answers.

Word bank: evaporation · condensation · precipitation · transpiration · collection · water vapour · temperature · atmosphere

1. The Sun's Role: Explain how the Sun provides the energy needed for evaporation to occur. What happens to liquid water when it is heated? (3 marks)

2. Condensation: Describe what happens when water vapour rises into the cooler atmosphere. How are clouds formed in this stage? (3 marks)

3. Precipitation: List three different types of precipitation. What determines whether it falls as rain, snow, or hail? (3 marks)

4. Collection: Where does water go after it hits the ground? Describe the journey of water as it travels back towards oceans or lakes. (3 marks)

5. The Cycle Concept: Why do we call this a 'cycle'? Explain why the total amount of water on Earth remains relatively constant. (4 marks)

Extension challenge: Imagine you are a single droplet of water. Write a short, creative paragraph describing your journey from a deep ocean, up into the sky, and back down to a mountain stream.