Combined Science - Biology - Key stage 4 Ecology

Cycles

Dr Clapp



Independent practice

- 1. Define the following key processes: transpiration, condensation and evaporation.
- 1. Sketch a diagram of the water cycle and describe the main stages that are involved.

Key words: transpiration, evaporation, condensation, precipitation



Independent practice

1. Define the following key processes: transpiration, condensation and evaporation.

Transpiration is the movement of water through a plant and its evaporation from the leaves
Condensation is a change of state from a gaseous state to a liquid state
Evaporation is a change of state from a liquid state to a gaseous state



Independent practice - answers

2. Evaporation happens at the surface of bodies of water. Transpiration occurs in plants. The water vapour from these processes then rises into the atmosphere. Condensation occurs in the clouds and precipitation happens. The water is then stored as ground water or runs off back into the bodies of water so the cycle can begin again.



Independent practice

Sketch a diagram of the carbon cycle and answer the following questions:

- 1. By what process is carbon dioxide taken out of the air by plants?
- 2. By what process can carbon be transferred into the body of an animal?
- 3. If the animal uses a substance from a plant for energy, what is breathed out?
- 4. What is this process called?
- 5. When an animal or plant dies, what process releases carbon dioxide?



Independent practice - answers

- 1. By what process is carbon dioxide taken out of the air by plants? **Photosynthesis**
- 2. By what process can carbon be transferred into the body of an animal? **Feeding**
- 3. If the animal uses a substance from a plant for energy, what is breathed out? **Carbon dioxide**
- 4. What is this process called? Respiration
- 5. When an animal or plant dies, what process releases carbon dioxide? **Decay/respiration of microorganisms**

