

This is the **Foundation Separate** version — Higher Tier content has been removed.

Matter is recycled continuously through ecosystems. The same atoms cycle through organisms and the environment indefinitely.

- Carbon cycle: photosynthesis removes CO<sub>2</sub>; respiration, decomposition and combustion return it
- Only photosynthesis removes CO<sub>2</sub> from atmosphere
- Water cycle: evaporation → condensation → precipitation → runoff
- Decomposers (bacteria and fungi): essential for releasing mineral ions from dead matter
- Eutrophication: fertiliser run-off → algal bloom → O<sub>2</sub> depletion → aquatic life dies

### Key Terms

<b>Decomposer</b>	Organism breaking down dead matter — releases nutrients
<b>Eutrophication</b>	Nutrient enrichment of water → algal bloom → O <sub>2</sub> depletion