

This is the **Foundation Combined** version — Higher Tier and Separate-only content removed.

Matter cycles continuously through ecosystems — the same atoms are reused again and again.

- Carbon cycle: photosynthesis removes CO<sub>2</sub>; respiration, decomposition and combustion return it
- Decomposers (bacteria and fungi) break down dead matter → release CO<sub>2</sub> and mineral ions
- Water cycle: evaporation → condensation → precipitation → runoff
- Only photosynthesis removes CO<sub>2</sub> from atmosphere — all other processes add CO<sub>2</sub>

### Key Terms

#### Decomposer

Organism breaking down dead matter — releases nutrients for reuse

■ **Exam Tip:** The key fact about carbon cycle: **ONLY** photosynthesis removes CO<sub>2</sub>. All others add it. This comes up in every exam series.