

**KEY FACTS**

- Only PHOTOSYNTHESIS removes  $\text{CO}_2$  from atmosphere
- $\text{CO}_2$  added by: respiration, decomposition, combustion
- ★ Nitrogen cycle: fixing ( $\text{N}_2 \rightarrow \text{NH}_4^+$ ), nitrifying ( $\text{NH}_4^+ \rightarrow \text{NO}_3^-$ ), denitrifying ( $\text{NO}_3^- \rightarrow \text{N}_2$ ), decomposers
- Eutrophication: fertilisers  $\rightarrow$  algal bloom  $\rightarrow$   $\text{O}_2$  depletion  $\rightarrow$  aquatic life dies

**KEY TERMS**

<b>Nitrogen fixation</b>	$\text{N}_2 \rightarrow$ ammonia/nitrates — by bacteria
<b>Eutrophication</b>	Nutrient excess $\rightarrow$ algal bloom $\rightarrow$ $\text{O}_2$ depletion

■ EXAM TIP: Nitrogen cycle: 4 bacteria types. All four needed for 4-mark question.