Spec ref: 4.4.1.2

KEY FACTS

- Three limiting factors: light intensity, CO■ concentration, temperature
- At any time: ONE factor limits the rate — the one in shortest supply
- Rate plateauing: ANOTHER factor is now limiting — identify which one
- Temperature: increases rate to optimum (~25°C) then DROPS sharply (denaturation)

★ Light intensity ∝ 1/distance² (inverse square law)

- Greenhouse growers use artificial lighting + CO■ generators + heating to remove all three limiting factors simultaneously

KEY TERMS

Limiting factor	Factor in shortest supply that controls the rate of photosynthesis
Optimum temperature	Temperature at which rate is maximum — above this, enzymes denature

■ EXAM TIP: If rate plateaus on a graph despite increasing one factor: ANOTHER factor is now limiting. Always say WHICH factor (CO■ or temperature, not just "another factor").