

GCSE Biology Equations Cheat Sheet

Photosynthesis

- Word: Carbon dioxide + Water → Glucose + Oxygen
- Balanced: $6\text{CO}_2 + 6\text{H}_2\text{O} \rightarrow \text{C}_6\text{H}_{12}\text{O}_6 + 6\text{O}_2$

Aerobic Respiration

- Word: Glucose + Oxygen → Carbon dioxide + Water + Energy (ATP)
- Balanced: $\text{C}_6\text{H}_{12}\text{O}_6 + 6\text{O}_2 \rightarrow 6\text{CO}_2 + 6\text{H}_2\text{O} + \text{Energy}$

Anaerobic Respiration (Animals)

- Glucose → Lactic acid + Energy

Anaerobic Respiration (Yeast/Plants)

- Glucose → Ethanol + Carbon dioxide + Energy

Rate of Reaction

- Rate = Change ÷ Time

Magnification

- Magnification = Image size ÷ Actual size

Percentage Change

- Percentage change = $(\text{Change} \div \text{Original}) \times 100$

Surface Area to Volume Ratio

- Surface area : Volume (compare ratios when calculating)