

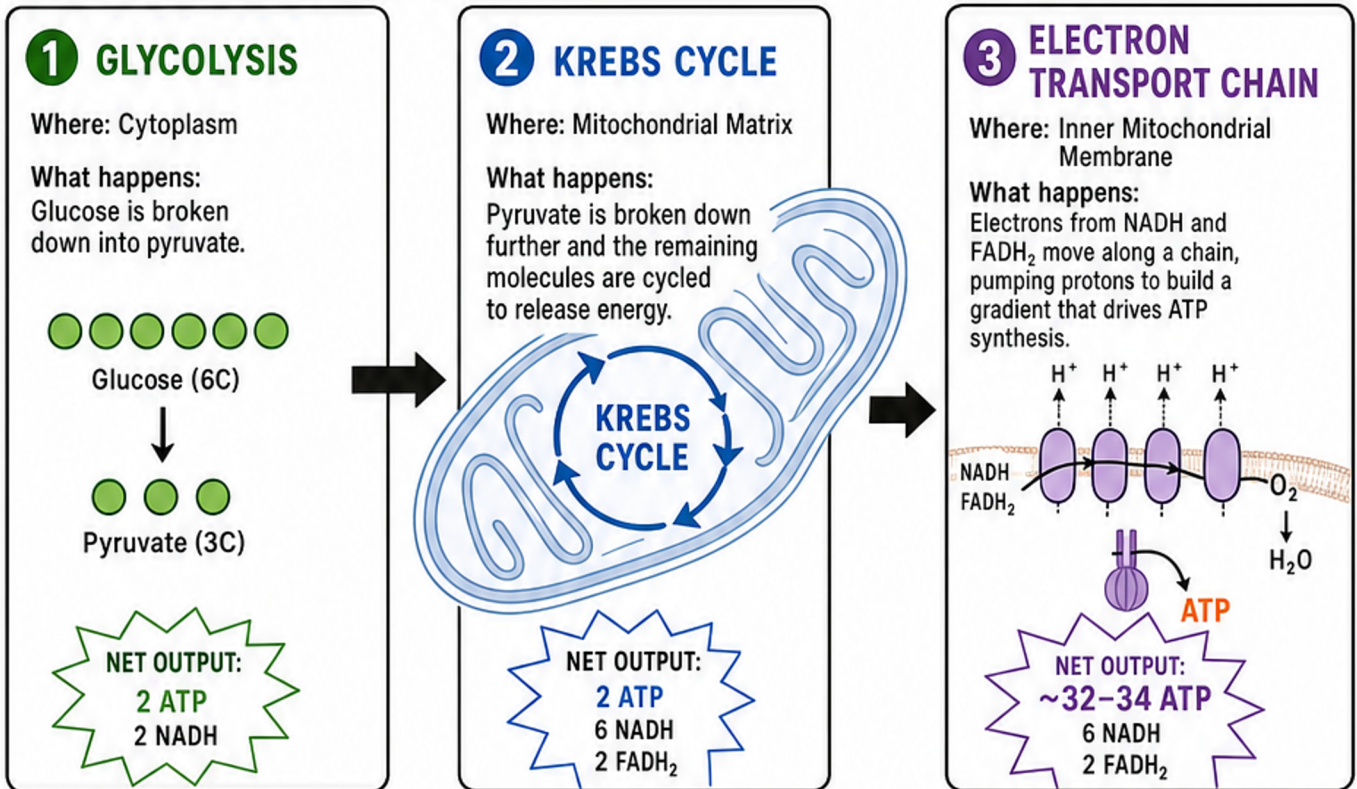
CELLULAR RESPIRATION

REFERENCE POSTER

The process cells use to break down glucose and release energy (ATP).



THE 3 MAIN STAGES



KEY MOLECULES

- ATP** Adenosine Triphosphate – the cell's main energy currency.
- NADH** Carries high-energy electrons to the electron transport chain.
- FADH₂** Another electron carrier for the electron transport chain.
- O₂** Final electron acceptor; combines with electrons and protons to form water.

AT A GLANCE

STAGE	LOCATION	MAIN INPUT	MAIN OUTPUT	ATP (NET)
1 GLYCOLYSIS	Cytoplasm	Glucose	Pyruvate NADH	2
2 KREBS CYCLE	Mitochondrial Matrix	Pyruvate NADH	CO ₂ NADH, FADH ₂	2
3 ELECTRON TRANSPORT CHAIN	Inner Mitochondrial Membrane	NADH FADH ₂ O ₂	H ₂ O ATP	~32-34
TOTAL ATP YIELD (PER GLUCOSE)				~36-38



REMEMBER: Most ATP is made during the electron transport chain using energy carried by NADH and FADH₂.