

GLYCOLYSIS

1. Occurs throughout the cytoplasm (is not organelle associated)
2. Occurs without the use of Oxygen (anerobic metabolism; fermentation)
3. Involved in a stepwise, controlled energy release
4. Energy is transferred in several steps to ATP
5. Ten reactions turn glucose (C₆) to Pyruvate (C₃)
6. The overall glucose lytic reaction:
$$\text{Glucose} + 2 \text{ NAD} + 2 \text{ ADP} + 2 \text{ P}_i \longrightarrow 2 \text{ Pyruvic acid} + 2 \text{ NADH} + 2 \text{ ATP}$$
7. Pyruvic acid can continue to ferment into lactic acid