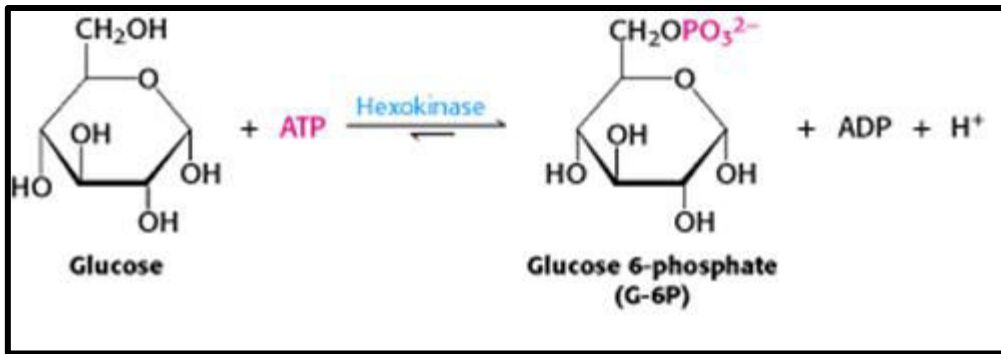


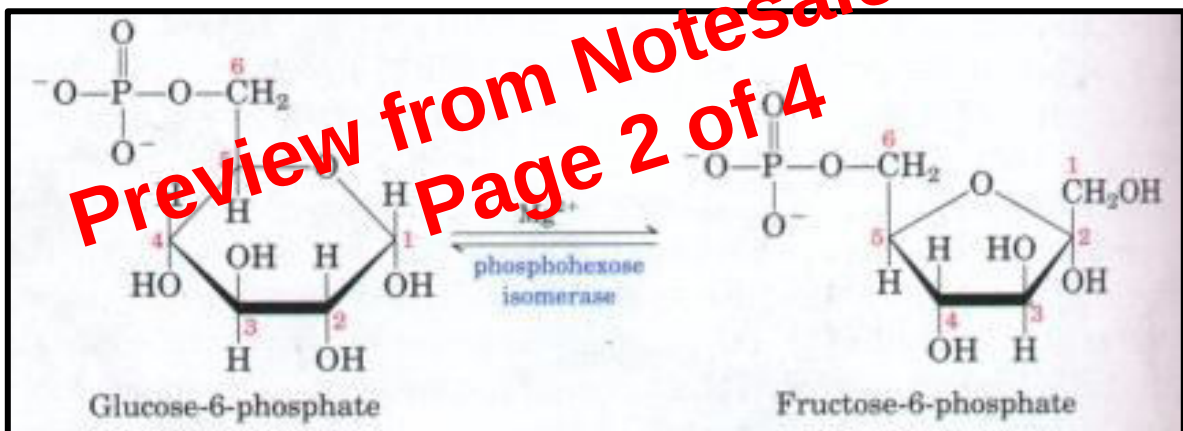
- **Coenzymes** are non-protein compounds that are necessary for some enzymes to function, the ones used in cellular respiration are:
 - **NADH** ($\text{NAD}^+ + 2\text{e}^- + \text{H}^+$)
 - **FADH₂** ($\text{FAD} + 2\text{e}^- + 2\text{H}^+$)
- **Glycolysis** takes place in the cytoplasm of all prokaryotes and eukaryotes

The Process of Glycolysis

- Glucose, using the enzyme **hexokinase** and a molecule of ATP, is **formed into glucose 6-phosphate**:



- Next, **glucose 6-phosphate** is **converted to fructose 6-phosphate** using the enzyme **phosphoglucose isomerase**:
 - This involves the conversion of an **aldose** to a **ketose**



- The

new

compound, **fructose 6-phosphate** is **phosphorylated to form fructose 1,6-bisphosphate** using the enzyme **phosphofructokinase** and a **molecule of ATP**:

