Cellular respiration: the process that releases energy by breaking down glucose and other food molecules in the presence of oxygen.

aerobic: requires oxygen

## Cellular Respiration

$$
\mathrm{C}_{6} \mathrm{H}_{12} \mathrm{O}_{6}+6 \mathrm{O}_{2} \longrightarrow 6 \mathrm{CO}_{2}+6 \mathrm{H}_{2} \mathrm{O}+\text { Energy }
$$



Glycolysis: the process in which 1 glucose is broken in half $\rightarrow$ produces 2 molecules of pyruvic acid, a 3 carbon compound
$\rightarrow 2$ ATP are used in this process, creates


- 2 molecules of ATP are used up during glycolysis
- But the cell gets 4 ATP back at the end of this process.


