## 7. Cellular Respiration

- 1. Aerobic cellular respiration is the processes that creates ATP energy by breaking down glucose and other food molecules in the presence of oxygen
- 2. Anaerobic cellular respiration (fermentation) is the process that creates ATP without oxygen being present. Lactic acid and alcoholic fermentation are the two types.

Comparison of aerobic and anaerobic respiration			
	Aerobic	Anaerobic	
		In animals	In plants, yeasts
Oxygen required?	Yes	No	No
Occurs in	Cytoplasm and Mitochondria	Cytoplasm	Cytoplasm
Glycolysis occurs?	Yes	Yes	Yes
Citric acid cycle occurs?	Yes	No	No
ETC?	Yes	No	No
ATP yield	36 ATP / glucose	4 ATP / glucose	4 ATP / glucose
End products	$CO_2$ and $H_2O$	Lactic acid	Ethanol and CO <sub>2</sub>