

What is **Respiration**? Using **Glucose** & **Oxygen** molecules, harvest stored energy for cell's use.
 - Plants, animals, all Eukaryotic

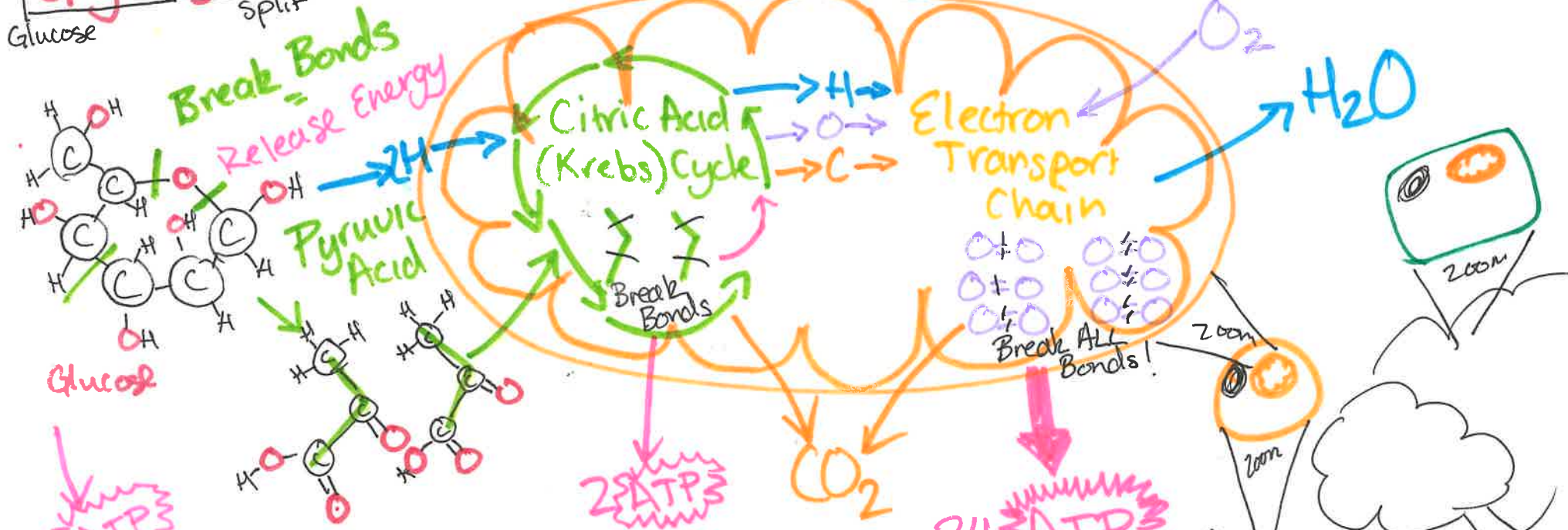
Energy: ability to do WORK
Bonds

outside mitochondria

Glycolysis
 Glucose split

Mitochondria

Matter: ~~stuff~~ Stuff
atoms



2 ATP
 Anaerobic

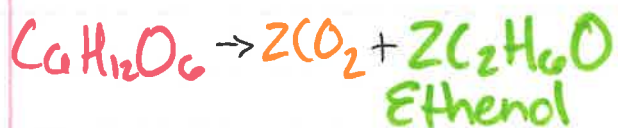


Anaerobic



| Name | Definition | Reactants | Products |
|--|---|----------------------|--|
| <u>Aerobic</u> Respiration with oxygen | Happens w/ O_2 molecules present | $C_6H_{12}O_6 + O_2$ | $H_2O + CO_2$ |
| <u>Anaerobic</u> Respiration w/OUT oxygen | Happens when O_2 molecules are not present! | $C_6H_{12}O_6$ | 1) $2CO_2 + 2C_2H_6O$ 2) $2C_3H_6O_3$ |

Alcohol Fermentation



Yeast, bacteria...

Lactic Acid Cycle



Muscles when run out of O_2