**Cellular Respiration Notes-- Aerobic!!**

* **The overall process of Aerobic cellular respiration converts \_\_\_\_\_\_\_\_ into \_\_\_\_\_\_\_\_\_\_using oxygen.**
* Cellular respiration makes ATP by breaking down \_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* Cellular respiration is **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, or requires oxygen**.
* Aerobic stages take place in **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.**
* Cellular respiration is like a *\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_* of photosynthesis.
* **Meaning the ­­­­­­­­­­­­­­­­­­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_ of Photosynthesis are the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of Cellular Respiration**
  + takes place in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ matrix
  + breaks down \_\_\_\_\_\_\_\_\_\_\_\_\_\_ and Gives off \_\_\_\_\_\_\_\_\_
  + Releases \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Draw a mitochondria here🡪

* The Aerobic respiration produces a **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
* takes place in inner membrane \* oxygen enters process
* **\_\_\_\_\_\_\_\_\_\_\_\_** produced \_\_\_\_\_\_\_\_\_\_\_\_ released as a waste product
* The equation for the overall process is:  **Glucose + Oxygen --🡪 Carbon Dioxide + water + energy**
* **Cellular Respiration--Aerobic**
* Reactants ( what’s required) : **C6H12O6 + 6O2**  Products (What’s produced) : **6CO2 + 6H2O + 36 ATP**

**Anaerobic Respiration… aka Lactic Acid Fermentation and Alcoholic Fermentation**

**Fermentation allows the production of a \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_of ATP without oxygen**

* **Fermentation allows \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ breakdown to continue even when \_\_\_\_\_\_\_\_\_is unavailable.**
* Fermentation is an **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  process.
* does **not** produce a lot of ATP … only \_\_\_\_\_\_ \_\_\_\_\_\_\_!

**Lactic acid fermentation** occurs in the **­­­­­­­­­­­­­­­­­­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  of muscle cells.

* + Lactic Acid is what makes \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ after a hard workout.
* Fermentation and its products are important in several ways.

**Alcoholic fermentation** is similar to lactic acid fermentation.

* Occurs in the **\_\_\_\_\_\_\_\_\_\_\_\_\_\_** of the yeast cells.
* **Products of Alcoholic fermentation are**  **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_**
* The yeast uses the sugar for food and as a result it gives off Carbon Dioxide… this is what makes the \_\_\_\_\_\_\_\_\_\_\_\_\_ in your bread☺
* Alcoholic Fermentation: The yeast creates ethyl alcohol which is used to make \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ & \_\_\_\_\_\_\_\_\_.
* Fermentation is used in food production. List some examples here☺ \_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_
* **Anaerobic Respiration:** C6H12O6 🡪 H2O and CO2 and 2 ATP  
   \_\_\_\_\_\_\_\_\_\_\_\_\_\_ 🡪 Water and \_\_\_\_\_\_\_\_\_\_\_ and 2 ATP
* **Lactic Acid Fermentation = Glucose** 🡪 **water + Carbon Dioxide + 2 ATP and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
* **Alcoholic Fermentation = Glucose** 🡪 **water + Carbon Dioxide + 2 ATP and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
* The reactant (what is required) is: \_\_\_\_\_\_\_\_\_\_\_\_\_
* The products (what is produced) are: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_