

Name \_\_\_\_\_ Bell \_\_\_\_\_ Date \_\_\_\_\_

# CELLULAR RESPIRATION GUIDED NOTES

## What Is Cellular Respiration?

- Cellular Respiration: The process by which cells obtain \_\_\_\_\_ from Glucose.
- During cellular respiration, cells break down \_\_\_\_\_ and other molecules from food in the presence of \_\_\_\_\_, releasing oxygen.
- ALL LIVING THINGS GO THROUGH CELLULAR RESPIRATION!!

## Storing and Releasing Energy

- When you eat a meal, you \_\_\_\_\_ energy
- When cells need \_\_\_\_\_, they break down glucose through cellular respiration.
- Like a bank, your body stores and uses energy.

## Breathing and Respiration

- Breathing brings \_\_\_\_\_ into your lungs, which is carried to cells for cellular respiration.
- Breathing also removes the waste products of cellular respiration from your body.

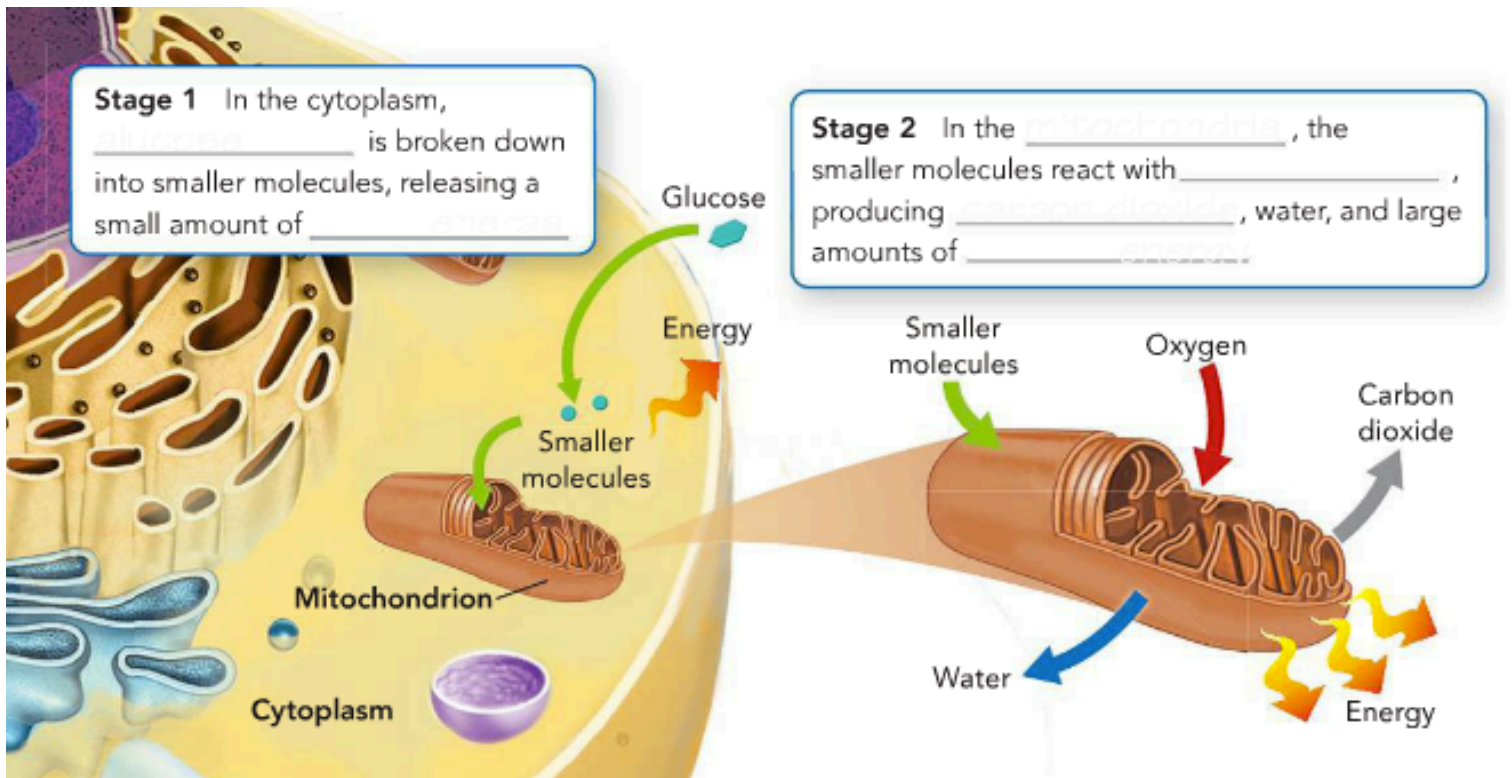
# • Two Stages of Cellular Respiration

## STAGE 1:

- Occurs in the \_\_\_\_\_
- Molecules of \_\_\_\_\_ are broken down into smaller molecules.

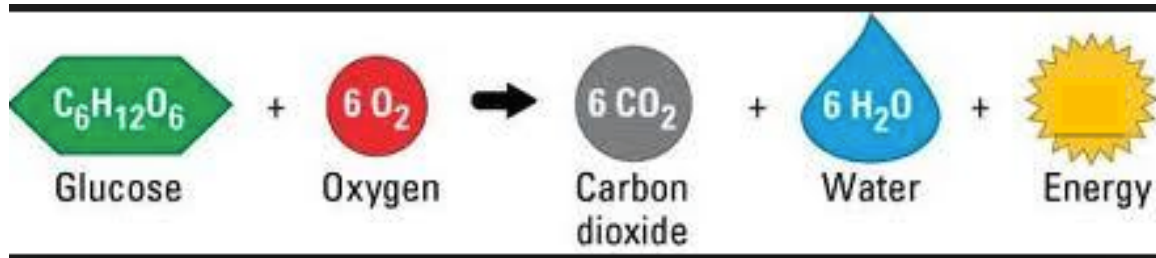
## STAGE 2:

- Occurs in the \_\_\_\_\_
- Smaller molecules of glucose are broken down even more.
- This change requires \_\_\_\_\_ and release A LOT of \_\_\_\_\_ that the cell can use for all of it's activities.



# The Cellular Respiration Equation

- The overall process can be summarized with an equation:



- Raw materials: \_\_\_\_\_ and \_\_\_\_\_.
- Animals get glucose from \_\_\_\_\_.
- Products (What is produced): \_\_\_\_\_ and \_\_\_\_\_.

## Comparing Two Energy Processes

- NOTICE: The Cellular Respiration Equation is the OPPOSITE of the Photosynthesis equation.
- These two processes form a CYCLE.
  - Keep Oxygen and Carbon Dioxide \_\_\_\_\_ in the Earth's atmosphere
- The energy released through cellular respiration is used or lost as \_\_\_\_\_.

\_\_\_\_\_



Photosynthesis



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Cellular Respiration