



**Middle School Science Virtual Learning**

**Life Science**

**Cellular Respiration**

**April 28, 2020**

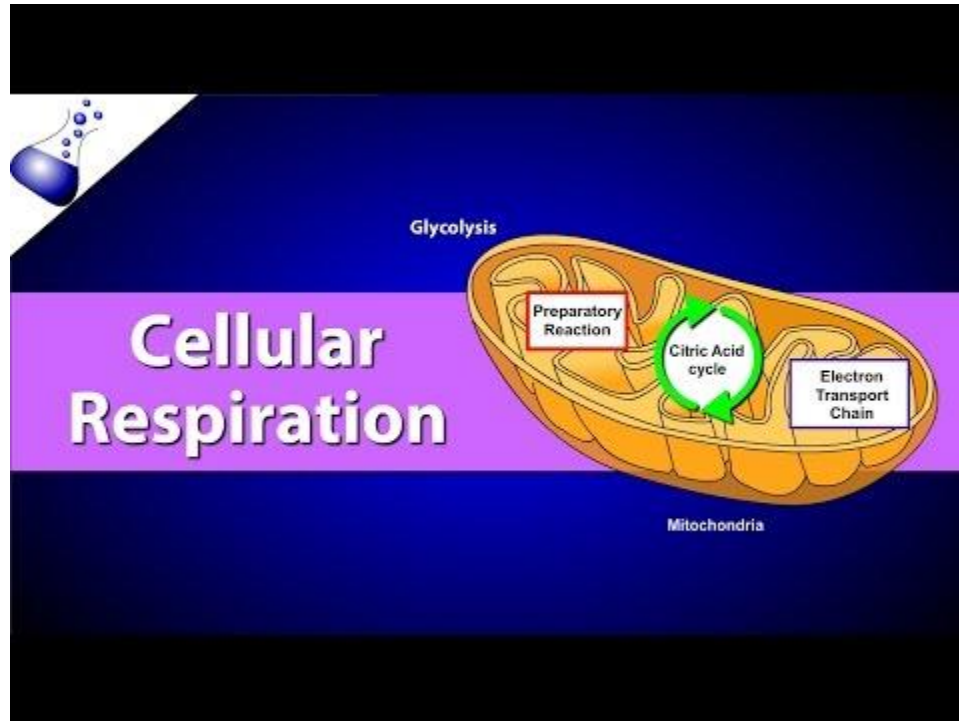


Life Science  
Cellular Respiration - Tuesday, April 28, 2020

**Objective/Learning Target:**

I can explain the process of cellular respiration.

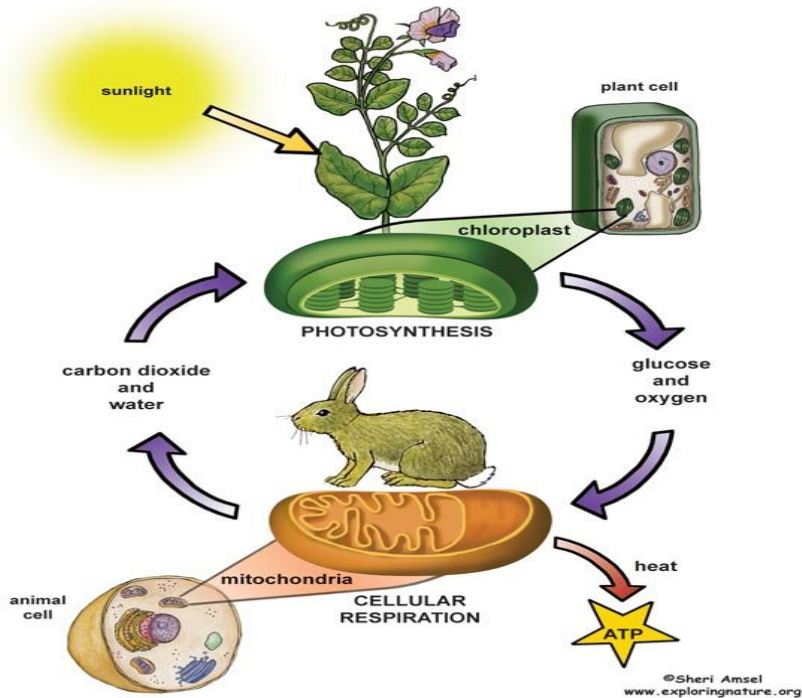
# Let's Get Started



Make sure you have a writing utensil and some paper to write down some notes about respiration. Click on the video to the left to get started.

# Just what is CELLULAR RESPIRATION anyway?

## Photosynthesis and Cellular Respiration



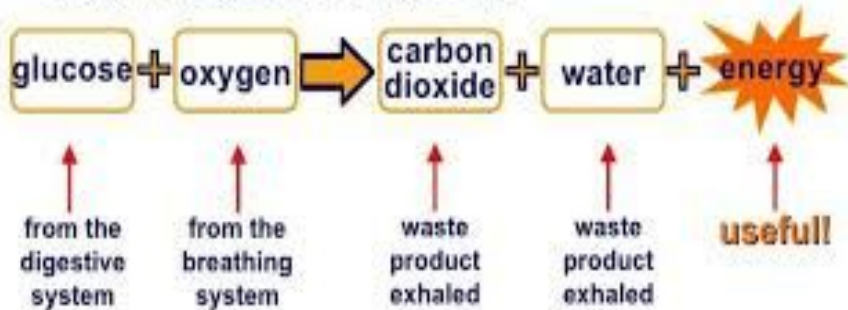
Take a look at the picture to the left. Notice the process of Photosynthesis is shown at the top-using sunlight to produce glucose (food) and oxygen. At the bottom shows the process of Cellular Respiration. Simply speaking, Cellular Respiration is the process by which cells obtain energy from glucose (food). *During this process, cells break down simple food molecules such as sugar (glucose) and release the energy they contain.* Living things need a continuous supply of energy and therefore living things carry out **Cellular Respiration** continuously. Watch the video below to learn more!

[Cellular Respiration and the Mighty Mitochondria](#)

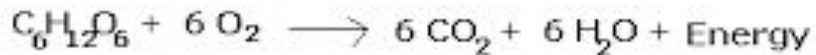
# More about CELLULAR RESPIRATION

## What is respiration?

**Respiration** is the process that the body uses to release energy from digested food (glucose):



### Cellular Respiration

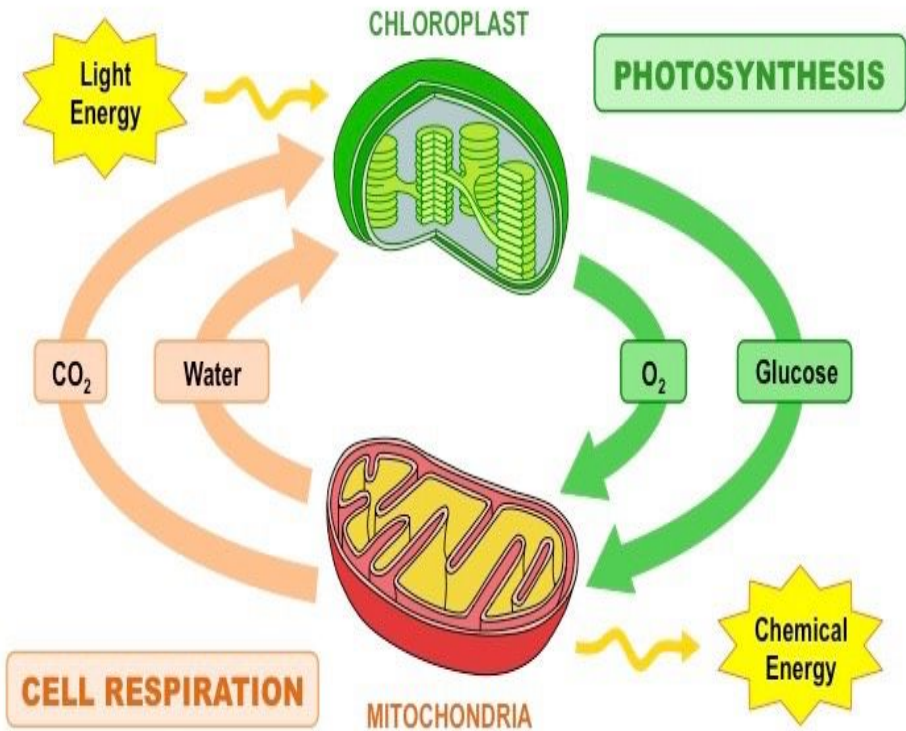


Take a look at the two images to the left. Notice the chemical reaction that occurs with **Cellular Respiration** - the glucose and oxygen yield the waste products carbon dioxide and water BUT also produce lots of **ENERGY!** As you learned in the video, this reaction occurs in the **mitochondria** of your cells.

Take a quick look at the video below to learn a little more about the mighty mitochondria.

[Mitochondria - Chalk Talk](#)

# PHOTOSYNTHESIS and CELLULAR RESPIRATION



## Chemical Energy and Food



### PHOTOSYNTHESIS



### CELLULAR RESPIRATION

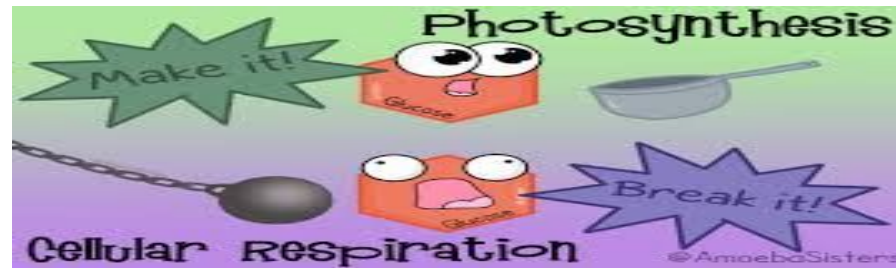


The two equations are exact opposites!

Therefore Photosynthesis and Cellular Respiration can be thought of and considered opposite processes. The Reactants of Photosynthesis are the Products (+Energy-ATP) of Cellular Respiration and the Products of Photosynthesis are the Reactants for Cellular Respiration! Pretty cool, huh?

Watch this neat Music Video about how Photosynthesis and Cellular Respiration work together to keep the oxygen and carbon cycles rather stable and constant.

## [Photosynthesis and Respiration MTV!](#)





# More Practice

1. Grab a writing utensil and a piece of paper.
2. Click the [Blue Link -Respiration Worksheet](#).
3. Use prior knowledge and information in this presentation to answer the questions.
4. Click the [Red Link - Answer Key to Respiration Worksheet](#) to check your answers.

[Respiration Worksheet](#)

[Answer Key to Respiration Worksheet](#)



# More Practice

Click on the following links for more practice online.

[Respiration and Fermentation Practice](#)

[Respiration Practice](#)

[Cellular Respiration Quizizz!](#)





# Check For Understanding

Play this to see what you remembered about respiration.

[Respiration!](#)