

# Notes: Cell Respiration

We already learned that plants make their own \_\_\_\_\_ during photosynthesis.

Plants take in \_\_\_\_\_ through the roots, up the stem, and out to the leaves.

The leaves also capture \_\_\_\_\_ and \_\_\_\_\_.

These 3 things react to produce \_\_\_\_\_ and \_\_\_\_\_ gas.

Glucose is a \_\_\_\_\_ compound that provides \_\_\_\_\_ to the plant so that it can grow, develop and reproduce.

Cellular respiration is the process that breaks down \_\_\_\_\_ to make carbon dioxide, water, and a high energy compound called \_\_\_\_\_.

**IMPORTANT NOTE:** \_\_\_\_\_ and \_\_\_\_\_ run cellular respiration too! The cells in our bodies have the same structure as plant cells to do this. They are called \_\_\_\_\_. Without these, our bodies would not be able to \_\_\_\_\_ the food to provide it with energy to go about its daily activities.

Photosynthesis and Cell Respiration happen in one big \_\_\_\_\_!

Cell respiration is not the same thing as breathing, but they are closely related.

When you breathe in, you take in oxygen needed for your cells to run cell respiration. (\_\_\_\_\_)

When you breathe out, you get rid of carbon dioxide that is made during cell respiration. (\_\_\_\_\_)

If you breathe out onto a mirror or window, what other product of cell respiration will you see?

Yep, \_\_\_\_\_ (in the form of water vapor!) It will collect in small drops on the glass or window.

Photosynthesis - happens in the \_\_\_\_\_ and only in \_\_\_\_\_.

Cell Respiration happens in \_\_\_\_\_ and \_\_\_\_\_ in a structure called the \_\_\_\_\_.

**IMPORTANT NOTE:**

The reactions of photosynthesis and respiration have an interesting relationship!

The reactants in photosynthesis are the \_\_\_\_\_ in cell respiration!

The \_\_\_\_\_ in cell respiration are the products in photosynthesis!

**SUMMARY:**

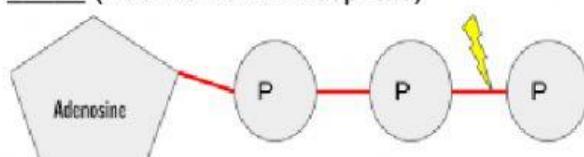
Photosynthesis - \_\_\_\_\_ cells only inside \_\_\_\_\_.



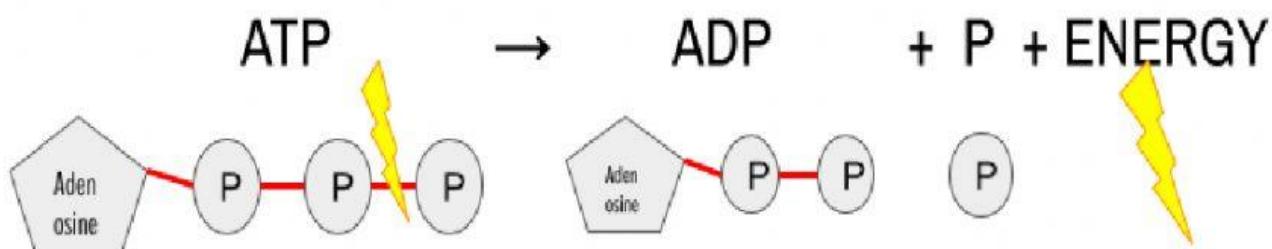
Cell respiration - \_\_\_\_\_ and \_\_\_\_\_ cells in \_\_\_\_\_.



\_\_\_\_\_ (Adenosine TriPhosphate)

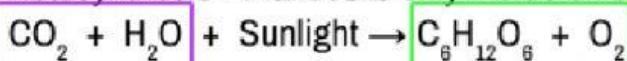


The energy is \_\_\_\_\_ in the chemical bonds that hold the molecule together. When the molecule is broken down, the bonds break releasing \_\_\_\_\_!



The bond broken held one of the three phosphate groups on the adenosine. With only \_\_\_\_\_ phosphate groups, it is now called adenosine Diphosphate (\_\_\_\_\_)

Photosynthesis - Plant cells only inside chloroplasts



Cell Respiration - Plant & Animal cells in mitochondria

