

Green Revolution's Environmental STEM Learning at Home



Color of Spring By Demekia Biscoe

If we take a walk during early spring the landscape is dramatically changing. Signs of spring can be found in the buzzing of insects, the smell of freshly opened blooms, and in the green leaves sprouting daily. Have you ever wondered, "Why so green?"

During spring plants are busy growing. To grow they need energy. Unlike animals that need to eat for energy, plants have specialized cells that can transform energy from the sun into food. This energy is captured in most plants by a green *pigment* called *chlorophyll*. The captured energy is then used to power the food make process called *photosynthesis*. Want to see the pigments in plants? Try the activity below.

Love, laugh, and learn together!

Try it!

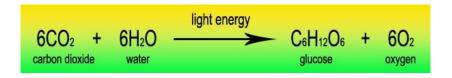
Below is a link for a Chromatography activity. You'll need rubbing alcohol, a coffee filter, and green plants! Extend the activity by collecting leaves of different colors. Comment on our Facebook page to let us know how your experiment went!

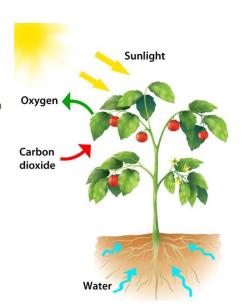
https://learning-center.homesciencetools.com/article/leaf-chromatography-science-project/

Extending your learning

Chlorophyll is the energy capturing pigment for *photosynthesis*. Photosynthesis can be separated to make two smaller words; "photo" which means light and "synthesis" which means putting together. Photosynthesis takes place in the leaves of plants which are made up of very tiny cells. Inside these cells are microscopic structures called *chloroplasts*. Each chloroplast contains chlorophyll. Chlorophyll absorbs the sun's energy. It is this energy that is used to splits water into hydrogen and oxygen molecules. The oxygen leaves the plant out into the atmosphere while the hydrogen is used to make glucose. Glucose is a sugar used as food by the plant.

The equation below shows the chemical formula for photosynthesis.





Info and art taken from:

https://photosynthesiseducation.com/photosynthesis-for-kids/