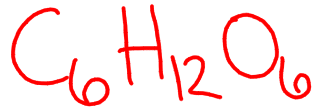


Get a clicker!

BellRinger:

What is the chemical formula for glucose?



What do organisms use glucose for?

energy

Autotroph or Heterotroph?

Grade: 9th

Subject: Biology

Date: 1-16-12

Autotroph or Heterotroph?

1 Oak Tree?

A **Autotroph**

B Heterotroph



Autotroph or Heterotroph?

2 Coyote

A Autotroph

B **Heterotroph**



Autotroph or Heterotroph?

3 Cow

A Autotroph

B **Heterotroph**



Autotroph or Heterotroph?

4 Algae

A **Autotrophic**

B Heterotrophic



Autotroph or Heterotroph?

5 Mushroom

A Autotrophic

B Heterotrophic

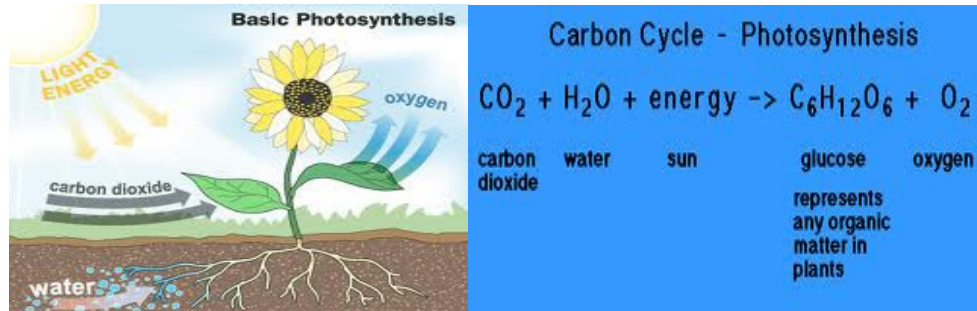


Standard: Students will derive the relationship between single-celled and multi-celled organisms and the increasing complexity of systems.

Element: Explain the cycling of energy through the processes of photosynthesis and respiration.

EQ: What is photosynthesis?

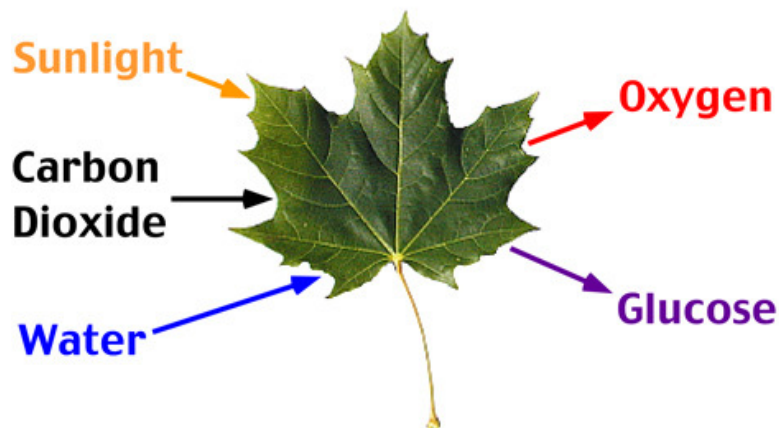
Photosynthesis is the process by which plants, algae and some bacteria use water, carbon dioxide and energy from the sun to produce carbohydrates and oxygen.



Remember, **carbohydrates** are used as a source of **energy**.

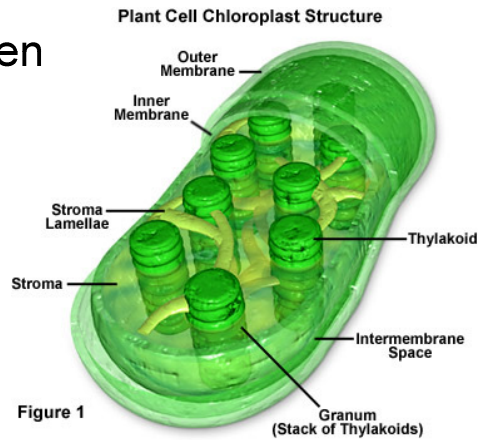
Organisms that are able to perform photosynthesis, such as plants, are **autotrophs**.

Autotrophs make **carbohydrates** that serve as food for them and almost all other organisms on earth.

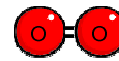


Photosynthesis takes place in the **chloroplast**, which is why **plant** cells have chloroplasts and **animal** cells do not.

Chloroplasts appear green because of **chlorophyll**, which is a green **pigment** that absorbs light energy for photosynthesis.

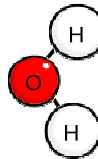


Match the labels with the correct symbol.



glucose

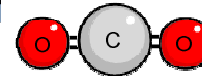
oxygen



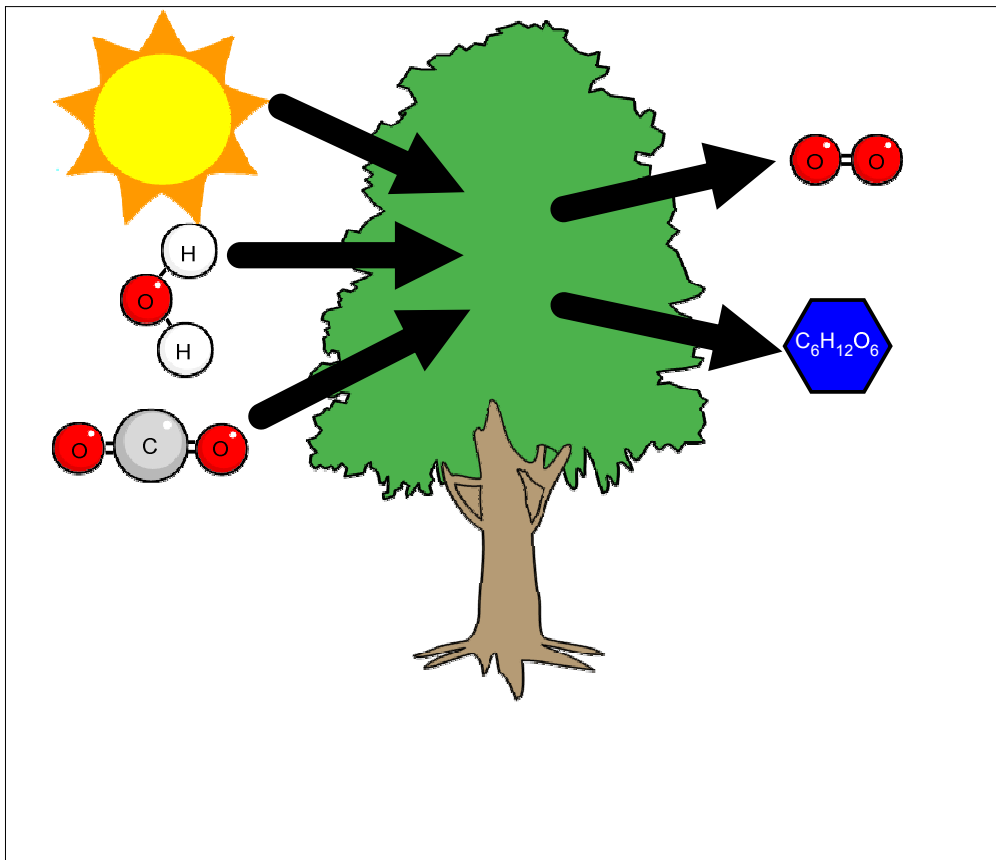
water



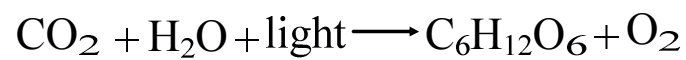
light energy



carbon dioxide



The Equation for Photosynthesis:



carbon dioxide + water + light → glucose + oxygen