Name: _____ Period: _____

Photosynthesis - P11

ON1-L2: Explain how photosynthesis provides energy to organisms

Anticipation Guide: Do this Google Form INDIVIDUALLY.

Answer the following questions: **There are 4 paragraphs.**

Statements	**Before reading**	**After reading**	**Evidence, Paragraph**
Plants are consumers because they make their own food.	Agree or Disagree	Agree or Disagree	
Plants make their own food using carbon dioxide and oxygen.	Agree or Disagree	Agree or Disagree	

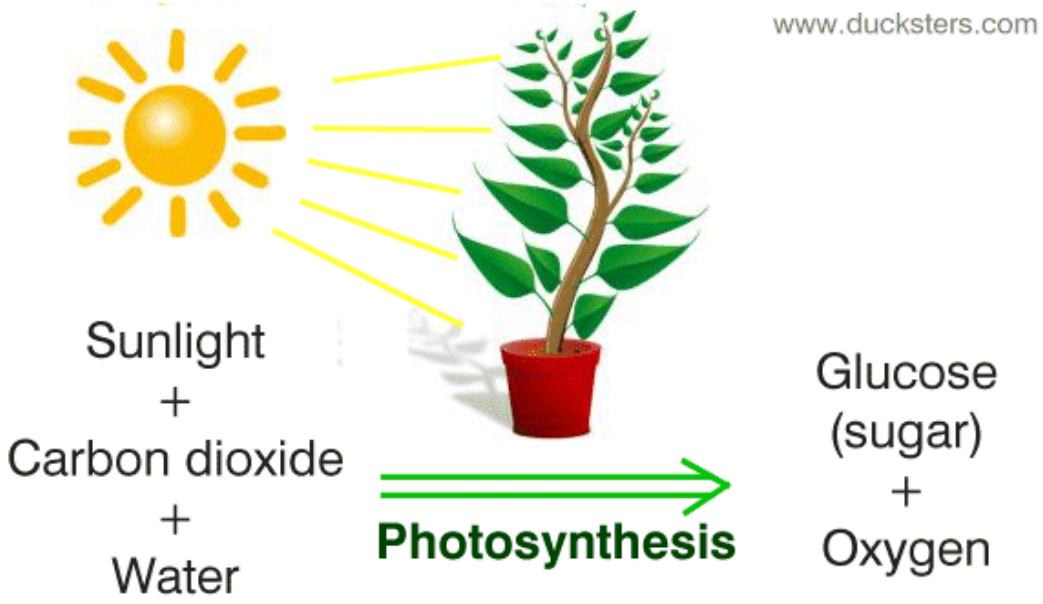
Science Vocabulary

- **Producer** - make their own food (ex. plants)
- **Photosynthesis -** carbon dioxide + water = into food (occurs in plants)
- **Convert -** change
- **Glucose** - sugar that plants make
- **Transport (v.) / transportation (n.)** - carry
- **Atmosphere -** air around us
- **Stomata -** holes in leaves, allows gases to enter and leave
- **Absorb (v.) / absorption (n.) -** to take in
- **Chlorophyll -** green colored part in plants, absorbs/(takes in) sunlight
- **Chloroplasts** - part of the cell that makes food; it contains chlorophyll

Word Root	**Meaning**	**Examples**
Atmos		
Photo		
Syn		
Sphere		
Vert		

What is photosynthesis?

¶ 1: Have you ever noticed that plants need sunlight to live? It seems sort of strange, doesn't it? Did you know that plants are producers? That means they produce their own food. They make their own food in a process called photosynthesis. Sunlight is energy and photosynthesis is the process plants use to take the energy from sunlight and use it to convert carbon dioxide and water into food.



Carbon dioxide + water → glucose + oxygen

Ingredients for Photosynthesis

¶ 2: Plants make their own food in the process called photosynthesis. They need 3 basic things to make food:

1.) Water
2.) Sunlight
3.) Carbon Dioxide

	Plants	Humans
Breath In	Carbon Dioxide - CO_2	Oxygen (O_2)
Breathe Out	Oxygen (O_2)	Carbon Dioxide - CO_2

¶3: Plants are the major source of oxygen on planet Earth and help keep us alive. We know now that plants use sunlight as energy. They get water from the soil and they take up the water in their roots. The water gets transported from the roots to the leaves. They get carbon dioxide from breathing. They take in the carbon dioxide from the atmosphere. They absorb carbon dioxide in the leaves through tiny holes called stomata. The process of taking these three key ingredients and making them into food is called photosynthesis.

Why are plants green?

¶4: Plants capture sunlight using a compound called chlorophyll. Chlorophyll is green, which is why so many plants appear green. Chlorophyll is found in the chloroplasts. The chloroplasts are where the plants take carbon dioxide, water, and sunlight and make sugars. The type of sugar plants make is called glucose.

https://www.ducksters.com/science/photosynthesis.php