

SfS Away from the Classroom!

LS27: Investigating Photosynthesis (Recommended for Grades 6-8)

Please use the following resources to learn about photosynthesis

Watch this Video: TED-Ed talk on photosynthesis

Answer these questions:

- What are three things plants need in order to carry out photosynthesis? How do they get these things?
- Which product of photosynthesis do the plants use?
- What products of photosynthesis do people and animals use?

Activities: Follow these directions to see evidence of leaves performing photosynthesis.

You will need:

- One or more clear glass jars with lids.
- Water (tap water is fine)
- Green plants, preferably with large leaves (and the fresher the better -- ideally from outdoors!)
- A sunny place (that will stay sunny for at least an hour)
- 1. Completely fill your glass jar(s) with water.
- 2. Place your leaf or leaves in the jar, and put the lid on the jar.
- 3. Set the jar(s) in a sunny place. Either indoors or outdoors is fine!



- 4. Observe the leaves and jars now: sketch, photograph, or describe in words.
- 5. Wait for 1 hour, and observe the leaves and jars again. What do you notice?
- 6. Continue checking hourly. What changes do you observe?





Photo 1: Start. Photo 2: After 1 hour Photo 3: After 2 hours

Watch this video if you need help with this activity.

https://drive.google.com/file/d/1PeWOkwqo0J-aL98poVdrUwfA8ifzVn-D/view?usp=sharing

Make observations & use Claims, Evidence, and Reasoning!

- 1. Claim: Plants produce oxygen gas as a byproduct of photosynthesis.
 - Evidence:
 - Reasoning:
- 2. Claim: Normally, plants have some carbon dioxide in their leaves.
 - Evidence:
 - Reasoning:

