

# HOW DOES MY SUNFLOWER GROW?

## LEARNING THE STEPS OF PHOTOSYNTHESIS

### What is Photosynthesis?

Photosynthesis is the process in which green plants use sunlight to make their own food. Plants (such as your sunflower), use sunlight, water, and carbon dioxide to grow and make their own food.

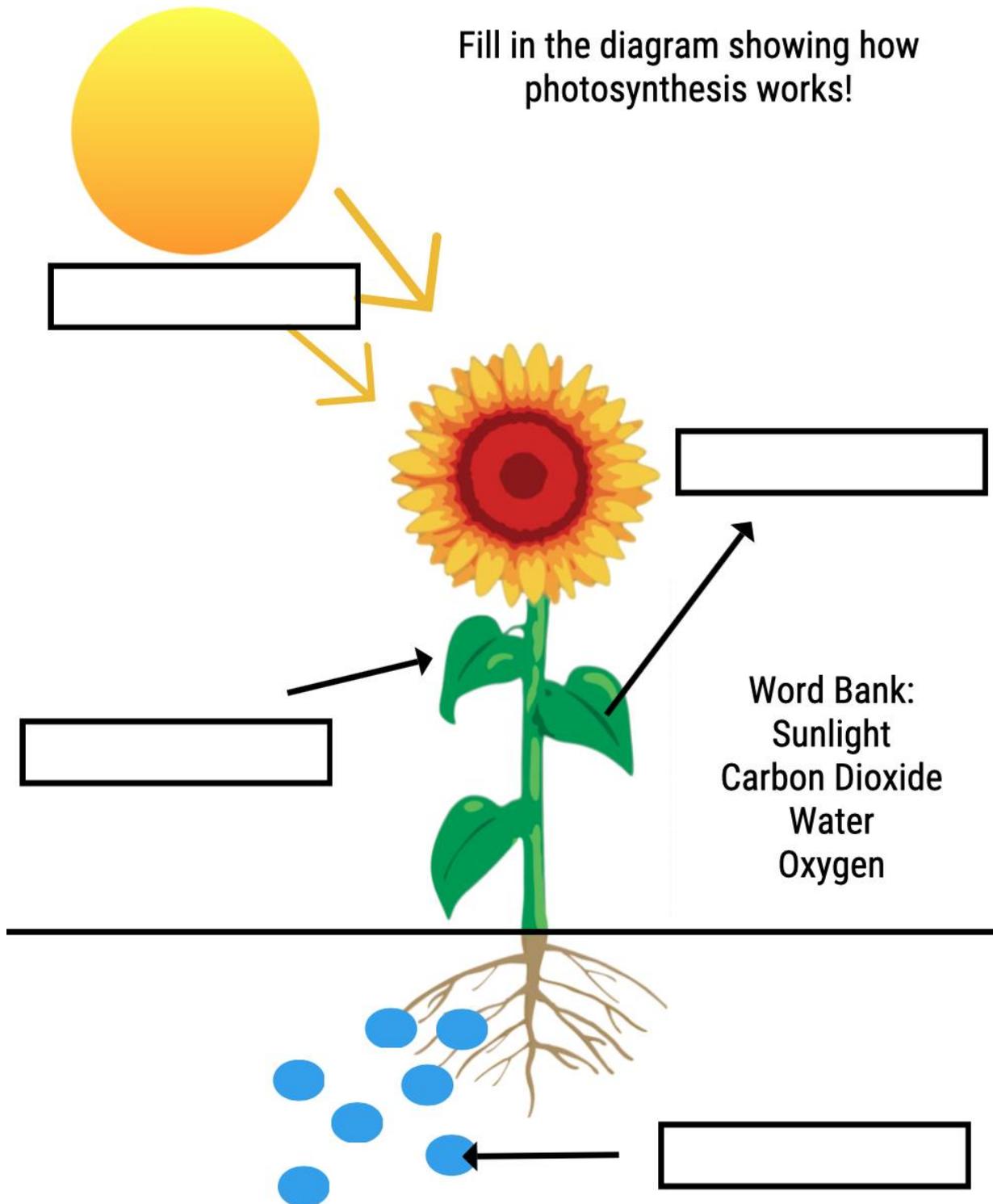
### The Steps of Photosynthesis:

1. **Carbon dioxide** from the air passes through small holes called **vessels** in the plant's leaves.
2. **Water** is absorbed from the plant's roots.
3. **Sunlight** is absorbed by a green chemical called **chlorophyll** that is located in the **chloroplast** of the plant's leaves.
4. Once the carbon dioxide, water, and sunlight enter the plant, the plant begins to make its food. The plant creates **sugar**, which it uses to grow, and **oxygen**, which it releases through its leaves, allowing us to breathe!

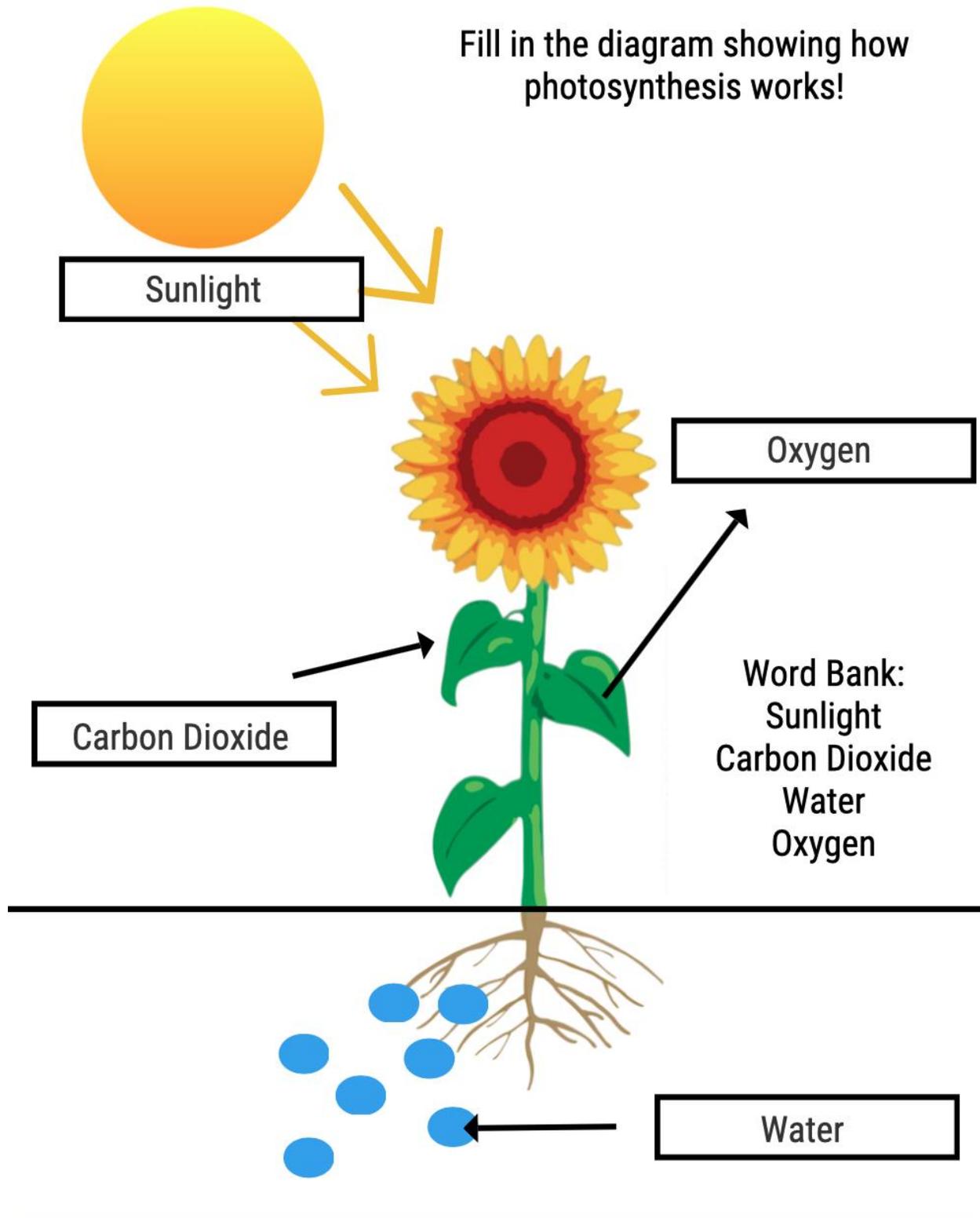
Now that we know that Photosynthesis is a never-ending cycle, let's fill out a diagram of how photosynthesis is going to help your sunflowers grow!



Fill in the diagram showing how photosynthesis works!



Fill in the diagram showing how photosynthesis works!



# SUNFLOWER CHART

HOW DOES AN ENVIRONMENT CHANGE PLANT GROWTH PATTERNS?

Make a prediction:

Seed #1 will grow \_\_\_\_\_ (**bigger/smaller**) than  
Seed #2 because it got \_\_\_\_\_ (**more/less**) sunlight.

Day Number	Plant #1: _____	Plant #2: _____	Water Check
Day 1			
Day 2			
Day 3			
Day 4			
Day 5			
Day 6			
Day 7			
Day 8			
Day 9			
Day 10			
Day 11			
Day 12			
Day 13			
Day 14			

Conclusion: Which seed grew more? \_\_\_\_\_

\_\_\_\_\_

Let's Grow a Sunflower!

## Materials:

- 2 Plastic Cups with Lids
  - 2 Sunflower Seeds
  - Potting Soil
  - 2 Popsicle Sticks
  - Data Sheet
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## Instructions:

1. Ask an adult for help!
  2. Unpack your take-home lab bag and get your materials ready.
  3. Evenly distribute the potting soil between the 2 plastic cups.
  4. Place 1 sunflower seed in each cup, covering them with potting soil.
  5. Measure 1 tablespoon of water into each cup (repeat daily).
  6. Label one cup “sun” and the other “no sun”.
  7. Place the “sun” cup in an area where there is direct sunlight (Ex: a window sill).
  8. Place the “no sun” cup in an area where no sunlight is (Ex: a closet).
  9. Fill out the datasheet accordingly.
  10. Use one popsicle stick per cup to make how tall your sunflower grows (repeat daily).
  11. Get ready to watch your sunflowers grow!
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