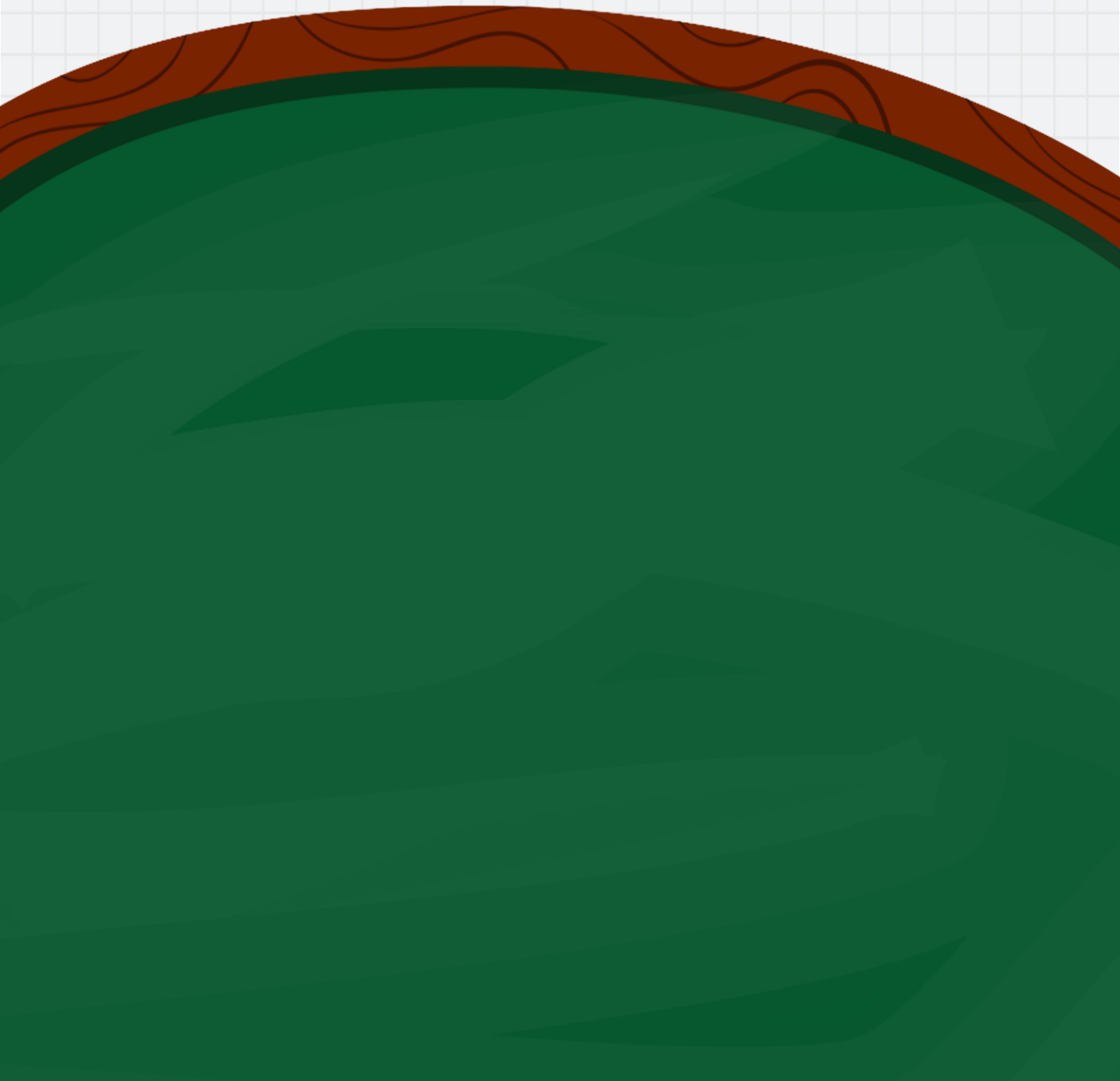




# schoolio

**GRADE 3 SCIENCE**






# SCHOOLIO ONTARIO CURRICULUM GRADE 3 SCIENCE – TABLE OF CONTENTS

---


Unit 1: Growth and Changes in Plants	<ol style="list-style-type: none"><li>1. Basic Needs of Plants</li><li>2. Plants and Energy</li><li>3. Trees</li><li>4. Parts of the Plant</li><li>5. Flowers and Leaves</li><li>6. Seeds</li><li>7. Pollination</li><li>8. Life Cycles</li><li>9. Uses of Plants by Humans</li><li>10. Plants for Food</li><li>11. Threats to Plants</li><li>12. The Forest</li></ol>
--------------------------------------	--


## Lesson 1 – Basic Needs of Plants


### Discussion:






 What are some of the basic needs of living things?

- ✓ Food
- ✓ Water
- ✓ Air
- ✓ Warmth
- ✓ Space

 These are the same basic needs of plants, as they are also living things

 Plants adapt to their surroundings much like animals, and different plants have different features that help them to survive.

 Some examples:

- ✓ Sunflowers need lots of sun, so they turn to follow the sun across the sky throughout the day 
- ✓ Plants in windy areas, like mountains and peaks, grow low to the ground to protect themselves from the wind. They often grow “out” instead of “up”. 
- ✓ Cacti have thick stems that can store huge amounts of water to survive the desert climate they live in. 
- ✓ Vines climb other trees and structures both for support and to reach the sun. 
- ✓ Trillium plants (the official plant of Ontario!) grow low to the forest floor, so they complete their entire lifecycle in just a few weeks of early spring, when they can get sun before the tall trees above them fully leaf out and block it all. 

### Practice Work:

Complete Canadian Curriculum 3, pg. 288-289 (The Needs of Plants)

### Activity:

Planting Day! Begin your Planting Journal

# Planting Journal

Plant a seed! Keep track of its growth over the next several weeks. Record your actions and findings as it grows.

1. What type of plant are you planting? What are you planting it in?

---

2. What do you need to provide for your plant for it to survive?

---

3. How will you track its growth? (Placing a ruler, or a popsicle stick you can mark periodically, is a great way to track height!)

---

4. Fill out the table on the next page as you check on and water your plant. Print more copies if you need them. How long your plant takes to grow will depend on the type of plant you chose, so you may need more or fewer slots for recording!

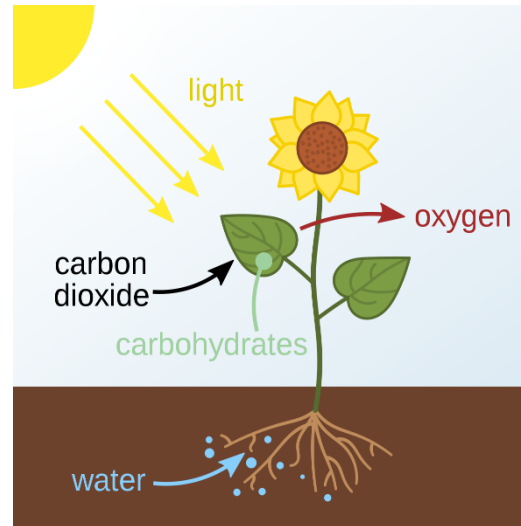
Day #	Things I Provided:	How Healthy Is It?	How It Looks:

## Lesson 2 – Plants and Energy

### Discussion:

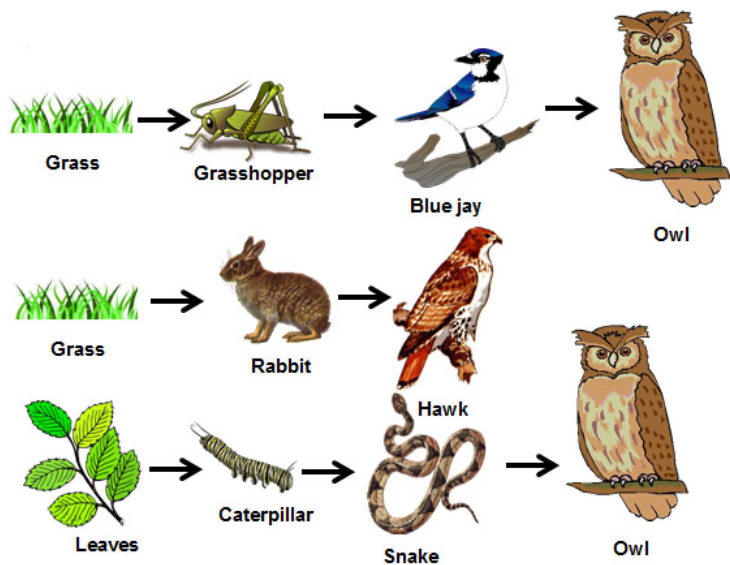
#### How do plants get energy (their food)?

- ✎ Plants get their energy from the sun. It is a process called Photosynthesis.
- ✎ What is Photosynthesis?
  - ✓ This is a chemical process where plants take in water, carbon dioxide and sunlight and convert them into food and oxygen.
  - ✓ Plants without sunlight will die because photosynthesis cannot occur.



#### How do plants give energy?

- ✎ Plants give energy to animals and humans when they are consumed as food.
- ✎ Plants also give energy to animals that don't eat plants by the process of the Food Chain. A food chain shows how energy and nutrients are passed from one living thing to another.
- ✎ All of these food chains begin with plants!



### Activity:

Design A Food Chain

## Design a Food Chain

1. Choose any animal you like, they can be a plant eater (herbivore), meat eater (carnivore) or eat both (omnivore).
2. Research about your animal and what it eats. Then research what that eats.
3. Create a Food Chain. Start with the sun (that's the plant's food) and show all the steps.
4. Repeat #1-3 with a new animal! Create four food chains.