



## Items Needed for Lesson:

- Ice Breaker
  - Farm-Themed Pictionary Cards (For more than one use, laminate and cut cards)
  - Paper/Pencil or Marker Board and Marker
- Garden in a Glove
  - 5 Cotton Balls
  - 5 Lettuce Seeds
  - 5 Corn Seeds
  - 5 Tomato Seeds
  - 5 Carrot Seeds
  - 1 Clear Glove
  - Water
  - Water Bottle
  - Permanent Marker
  - Twist Tie
- Craft Project
  - Flower - 1 per youth (preferably card stock)
  - Paint
  - Q-Tips

## Time for Each Part of the Lesson

Ice Breaker - 15 minutes

Career Connections - 5 Minutes

Garden in a Glove - 40 Minutes

Craft Project - 15 Minutes

## Craft Project

Q-Tip Flower Painting

- Materials
  - Flower - 1 per youth (preferably card stock)
  - Paint
  - Q-Tips

# Horticulture Lesson

## Introduction

Have you ever noticed how a tiny seed can grow into a big plant? Today, we are going to become plant explorers and learn about horticulture, which is a big word that means growing and taking care of plants! Plants help us in so many ways: they give us fruits and vegetables to eat, beautiful flowers to enjoy, and even clean air to breathe. In this lesson, we will learn by playing, creating, and getting our hands a little messy! We'll start by playing farm-themed Pictionary, where we'll draw and guess animals, plants, and tools you might see on a farm or in a garden. Then, you'll get to plant seeds in gloves, learning how seeds are planted and what they need to grow big and strong. You'll also paint your own flower, using your imagination to create colorful blooms. We'll finish by learning about jobs in horticulture, like gardeners, farmers, greenhouse workers, and people who grow flowers and food for others. By the end of the lesson, you'll be a gardener who knows how plants grow and how people can work with plants every day!

## Ice Breaker

Farm-Themed Pictionary

1. Introduce the concept of Pictionary. Explain that students will get into groups of 4-5 and each group will receive several blank pieces of paper (or white board), a timer and the Pictionary cards.
2. Select one student in each group to draw first and keep score.
3. Demonstrate the game in front of the card pile, read the card silently to themselves, and have one minute to draw the product that's on the card. Group members will guess what the product is until a person guesses successfully or sixty seconds have passed.
4. After a successful guess or the allotted time, the student who drew the produce should ask if there are any guesses as to which crop or livestock is an ingredient in the product. A correct guess awards an extra point to the person who guessed the commodity. The score keeper will award a point to the person who guessed the drawing and the person who guessed the commodity.
5. A student who guesses the drawing successfully will be the next person to draw. Repeat steps 2-5.
6. After 15 minutes, call for the game to end.

<https://www.iowaagliteracy.org/Article/Agriculture-Pictionary>

## Career Connections

Horticulture is a unique blend of art and science that touches nearly every aspect of our lives. It includes:

- **Food production:** Growing fruits, vegetables, nuts, and herbs.
- **Ornamental horticulture:** Designing and maintaining landscapes, gardens, and green spaces for beauty and recreation.
- **Environmental stewardship:** Using plants to restore habitats, improve air and water quality, and combat climate change.
- **Business and economics:** From nurseries and greenhouses to landscaping companies and farmers' markets, horticulture is a major economic driver.
- **Education and research:** Teaching sustainable practices and advancing plant science to solve modern agricultural and environmental challenges.

In essence, horticulture is the intentional cultivation of plants for the benefit of people and the planet – and yes, it really is all about plants!

- **Landscape Design & Construction:** Creating and implementing beautiful outdoor spaces, including parks, gardens, and residential landscapes.
- **Florist:** Creating floral arrangements and providing plant-related services.
- **Farmer:** Growing food crops, including fruits, vegetables, and flowers
- **Groundskeeper:** Maintaining the grounds of parks, golf courses, and other public spaces.
- **Research and Development:** Conducting research on plant breeding, genetics, and pest control to improve plant health and production.

## Activity - Garden in a Glove

### Background

Plants provide food, fiber, oxygen, and more to animals and humans. They are an important part of our livelihood and well-being. Although plants may take on complex life cycles and structures, the germination, or sprouting, process can be simple enough to demonstrate in the classroom. This activity will allow the observation of the germination process and provide a good view of the plant's root system.

### Vocabulary

- Germination - When the seed begins to grow a root and a shoot
- Root - Part of the plant beneath the soil that absorbs water and nutrients
- Sprout - The beginning growth of plant

## Materials Needed Per Youth

- 5 Cotton Balls
- 5 Lettuce Seeds
- 5 Corn Seeds
- 5 Tomato Seeds
- 5 Carrot Seeds
- 1 Clear Glove
- Water
- Water Bottle
- Permanent Marker
- Twist Tie



## Directions

1. Write your name on a clear plastic glove.
2. Wet five cotton balls and wring them out. (Squeeze the extra water out)
3. Place 3-5 seeds of the same type in each cotton ball. (Write the seed type on the finger of the glove with a permanent marker)
4. Put a cotton ball with the seeds attached into each finger of the glove. (You may need to use a pencil to get the cotton ball all the way to the tip of the glove)
5. Blow up the plastic glove and close it with a twist tie.
6. When youth get home, tape the glove to a window or wall.
7. The seeds will need 3-5 days to germinate. Keep a plant diary and look at the seeds with a microscope. Note, the cotton balls need to stay moist, if it appears dry, add a small amount of water to the glove.
8. If you want to transplant the seeds, do so 1-2 weeks after by cutting the finger tips off the glove. Transplant the cotton ball and small plants into soil.

## Activity - Garden in a Glove Continued

---

### Guiding Questions

- Have you ever wanted to see what happens to a seed when it is planted in soil?
- What are the key ingredients necessary for a plant to grow?
  - Good soil or plant media (the more nutrient-rich the soil, the better the plant will grow) Water, Air, Sunlight, Proper soil temperature, Proper air temperature.
- What would happen to plants if they could not get all the necessities needed for their growth?
- How would that affect your life?
- Can you give examples of how plants are present in your life?

### Closure/Review

Discuss the activity. Make some predictions about when the seeds might germinate, and what that will look like. Also, discuss what would happen if the glove were placed in various locations with different light and temperature. Ask how the seeds might be affected. Relate back to the necessary ingredients plants need to grow. Go over plant parts and their functions.

### References

<https://www.kfb.org/WebsitePageFile/File/3DC98B61-020C-45FE-A10A-C607EAD8393E/GardeninaGloveLP814.pdf>

## Activity - Garden Glove Take Home Worksheet

Today in Cloverbuds, we made Garden in a Glove. Below are some instructions to keep the seeds growing. In each finger of the glove, there are 3-5 seeds of lettuce, corn, tomato, soybean, and carrots.

1. When youth get home, tape the glove to a window or wall.
2. The seeds will need 3-5 days to germinate. Keep a plant diary and look at the seeds with a microscope. Note, the cotton balls need to stay moist, if it appears dry, add a small amount of water to the glove.
3. If you want to transplant the seeds, do so 1-2 weeks after by cutting the finger tips off the glove. Transplant the cotton ball and small plants into soil.

# Seed Germination Observation Sheet

Name \_\_\_\_\_ Date \_\_\_\_\_

**Directions:** After you have planted your garden in a glove, keep a daily journal of the changes your seeds make. Be sure to write a description and draw a picture of any changes you see.

**Day 1**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Day 2**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Day 3**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Day 4**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Day 5**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Day 6**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Day 7**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Farm-Themed Pictionary Cards**

---

<b>Tootsie Roll</b>	<b>Ketchup</b>	<b>Toilet Paper</b>
<b>Ice Cream</b>	<b>Diaper</b>	<b>Cow Feed</b>
<b>Crayon</b>	<b>Fireworks</b>	<b>Noodles</b>
<b>Paint Brush</b>	<b>Candle</b>	<b>Shoe</b>
<b>Apple</b>	<b>Shirt</b>	<b>Football</b>
<b>Steak</b>	<b>Jeans</b>	<b>Chewing Gum</b>
<b>Buttons</b>	<b>Chicken</b>	<b>Cow</b>

