

# AT THE CONSERVATORY

The Let's Garden area in the Scotts Miracle-Gro Foundation Children's Garden connects young visitors to the wonderful world of edible gardening.

Families help with the gardening activity of the day, whether that be planting, weeding, harvesting, or preparing for a garden feast.

Gardening is more than digging in the soil and planting seeds. It involves plant science, botany, math, and observational skills, plus a love of plants.





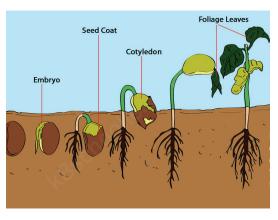


# A SEED'S LIFE

How does a plant start its life? It begins as a seed. Like plants, seeds need the same things to grow – soil to grow in, sunlight to give them warmth. water to drink, and air to live. Before a seed can sprout, it must go through a process called "germination." Germination is what happens inside the seed. What would that process look like? Let's grab some supplies from the kitchen and find out!







### Materials:

- dried beans 4 paper towels
- 2 quart-size baggies water
- sharpie marker 👙 ruler
- 1. Wet your paper towels and then squeeze out water.
- 2. Spread two of your paper towels on a table, so they are flat.
- 3. Place ten bean seeds on each towel.
- 4. Spread out the seeds evenly 1-inch apart
- 5. Cover the seeds with a second paper towel and roll it up.
- 6. On one baggie, write "Light" and on the other write "Dark."
- 7. Place a rolled paper towel in each baggie and place the Light one in a sunny window sill and the other in a dark closet.
- 8. In 5 days (mark your calendar!), unroll each paper towel and compare your seeds.

### What do you see?

- Do your seeds look bigger? Seeds take in oxygen (air) and water through the seed coat's micropores (tiny holes) to break open.
- Use an unfolded the end of a paperclip or your fingernail, break a seed apart to see what is inside. What do you see?
- Do the seeds that were in the Light look different from those in the Dark?
- Can you identify the parts of your seed? The embryo is the baby plant; the seed coat is the hard outside shell that protects it; the cotyledon (seed leaf) provides food until the first true leaves emerge, and photosynthesis begins (leaves are a food factory for plants!).

What would seed germination look like in the soil? https://www.youtube.com/watch?v=w77zPAtVTuI







## LIFE OF A PLANT

All living things grow and change as they progress through their life cycle. A plant's life cycle includes sprouting, developing roots, stems, leaves, and flowers, reproducing (making seed), and eventually dying. While this may sound a little little sad, remember with each seed, life begins again. Let's plant some seeds and watch them grow!







#### Materials:

- plastic berry container
- seeds
- soil potting soil

- bowl or bucket
- measuring cup
- 拳 water

- sharpie maker
- 👙 plate
- 1. Moisten 4 cups of potting mix in a bowl or bucket before placing it in containers. Add water to potting soil 1/2 cup at a time till the soil feels damp, but not wet.
- 2. Use a sharpie marker to write the date and type of seed.
- 3. Fill the containers 1 inch below the rim with moistened soil.
- 4. Follow the recommended planting depth on the seed packet.
- 5. Water seeds gently after planting. Close lid.
- 6. Place your seeds in a sunny window sill.
- 7. Check daily to make sure the soil stays evenly moist.
- 8. Once seeds have germinated and produced their first set of true leaves (cotyledon). Open lid once the seedling starts to touch the lid. How many days did it take for your seeds to germinate?
- 9. If seedlings are growing too close together, pluck out a few.
- 10. When seedlings have one to three sets of true leaves and are a couple of inches tall, transplant to a deeper container or your garden.
- 11. If you planted mesclun lettuce mix, no need to transplant, just cut your greens and have a tasty salad!

For more on the life cycle of a plant, check out the book: From Seed to Plant - https://www.youtube.com/watch?v=Rb7n\_B8kzNY

Try to identify the different phases in the plant life cycle in this beautiful video: Story of Flowers - https://www.youtube.com/watch?v=vDpFyHmtOAE&t=145s

## REPURPOSED CONTAINER GARDENING

A container garden makes a great first garden project. All you need is something that can hold soil with small holes in the bottom for excess water to drain. A pair of boots you have outgrown, a kiddie pool you no longer use, or a toy dump truck will do. Look around the house and see what you can find!







#### Materials:

- container that holds a minimum of 4- 6 inches of soil
- a drill or tool to punch holes (adult assistance required)
- soil potting soil
- seeds or young plants
- 1. Think about where your container will go in the shade or sun.
- 2. Pick out your plants. You can start your garden by planting seeds or transplanting seedlings.
- 3. Choose your container. Drill 5-7, ¼ to ½" holes in the bottom so that that water will run out.
- 4. Moisten your soil and place it in your container and plant. If plant seeds, add soil to about 1 inch below the rim, then follow the directions listed on the seed packet. If you are planting seedlings, add soil until reaching the size of the seedling pot. For example, if you are planting seedlings currently in a 4-inch-tall pot, add soil until you have about 5 inches left (this leaves an inch of soil below the container). Then take the seedlings out of the pot, place them in the container, and carefully add soil around the roots.
- 5. Gently water your new garden until water begins to drain from the bottom. Place your containers in a spot to match your plants' sunlight needs.
- 6. Check on your container garden daily and look for changes and growth. Stick your finger in the soil. Is it wet or dry? If it is dry, then it is time to water your garden!

So many plants to choose from; check out Pre-K Gardens for a great list to get started: https://kidsgardening.org/gardening-basics-plants-for-pre-k-gardens/





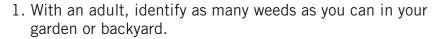
### **GARDEN WARRIORS**

Gardeners define a weed as any plant in the wrong place. Weeds compete with our garden plants for light, moisture, and nutrients, so we need to keep them in check. Plants that are very hard to stop once they start growing are invasive weeds – bad guys like thistle and garlic mustard. Good gardeners learn how to identify weeds and know when to pull them out. Are you ready to defend your garden against the invaders? Garden Warriors unite, let's pull those weeds out!

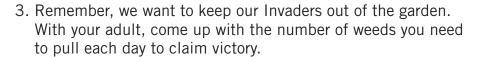


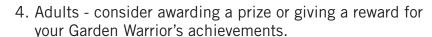
### Materials:

- gloves
- bucket
- trowel or weeding tool
- weed identification sheet











#### Weeds to watch for:

Crabgrass, Clover, Dandelion, Nutsedge, Plantain, Purslane, Spurge, Wood Sorrel



### **Weeds and Nature:**

Weeds in our garden may be bad; however, in nature, they may be beneficial to wildlife and humans. For example, clover, dandelion, and wood sorrel are food for bees. Many weeds are edible for people and contain the vitamins we need or have healing properties. In this sense, weeds are the good guys!

For a complete guide on weeds in Ohio, check out Ohio State University Weed Guide: https://www.oardc.ohio-state.edu/weedguide/







### **GARDEN SCAVENGER HUNT**

A home garden is not required; investigate your backyard, walk your neighborhood, or head out to the park and see what you can find!







#### Materials:

- pencil
- checklist
- digital camera

Record what you find on the checklist or use your camera.

### Things to Find:

- ☐ a spider in a spiderweb
- ☐ a flower that has more than five petals
- ☐ a heart-shaped rock
- ☐ three different bugs with wings
- ☐ a seed
- ☐ a bird with red or orange feathers
- ☐ the biggest leaf

### Things to Do:

- ☐ a spider in a spiderweb
- ☐ smell two different flowers
- □ touch a leaf that is soft or fuzzy
- ☐ feel something rough
- □ pick a ripe vegetable
- ☐ chase a butterfly
- ☐ find a stick in a Y shape
- water a plant
- ☐ find a shape in a cloud
- ☐ find something w/a hole





