LONGWOOD GARDENS

Hydroponics & Plant Careers Learn



At a Glance:

Discover what it takes to have a career working with plants and create your own self-watering plant container.

Did You Know?

Hydroponics is defined as the growing of plants in nutrient solutions with or without an inert medium (such as soil) to provide mechanical support.

Hydroponics is used by farmers to grow plants in indoor locations. Plants can grow with or without soil in this type of farming. The important factors for all plant growth include light, nutrients, air, and water. Plants that are planted outside get nutrients from the soil. In hydroponic facilities, nutrients are added to the water so the plant roots can successfully absorb what the plant needs to grow. No soil required!

Europe and Africa are two countries using hydroponics successfully to feed their population. In fact, hydroponic farming is booming, and some say it will grow to a \$16 billion industry by 2025!

Learn more about careers in hydroponics by visiting the links below:

https://www.youtube.com/watch?v=dsbP-1tjGvg

https://study.com/articles/Jobs_Working_With_Hydroponics_Career_Options_and_Requirements.html

Discover Your Plant Career Interest

A career working with plants is possible! There are so many opportunities to work in the green industry. Your personal interests can determine what type of career path you go on. Find out if you have what it takes to have a career in the plant world.

Take this quiz to see what plant careers might be of interest to you: https://www.wearebloom.org/

To learn more about more careers in Horticulture visit: https://www.seedyourfuture.org/careers

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Create a Self-Watering Planter Activity



Materials:

- 12-inch piece of string or yarn
- Empty plastic bottle with cap (water bottle or rinsed soda bottle)
- Painter's tape or masking tape
- Permanent markers
- Seeds or small plant
- For added fun, use herb seeds or small established herb plants so that you can continually harvest your herbs and use them in your cooking or baking!
- Scissors (or knife with supervision)
- Soil
- Water

Directions:

- 1. Remove the cap off the bottle and cut the plastic bottle in half.
- 2. Using the scissors or knife, carefully place a small hole in the center of the cap. The hole needs to be big enough to pass your yarn / string through it.
- 3. Pass the yarn or string through the hole so that there are 6 inches of string on each side of the cap. Tie a knot at the ends of the string to prevent it from slipping down through the hole.
- 4. Carefully place tape around the cut edges of the bottle. This will cover any sharp edges.
- 5. Use permanent markers to decorate both halves of the plastic bottle and the cap. Allow to dry.
- 6. Fill half of the bottom portion of the bottle with water and set aside.
- 7. Screw the cap with the string back on the bottle. Half of the string should be inside the bottle, and the other half will be hanging outside of the bottle.
- 8. Place the cap-side down into the bottom portion of the bottle, allow the string to dangle in the water.
- 9. Now you are ready to add your soil, seeds, or small plant to the top portion of the plastic bottle.
- 10. The string will automatically bring water from the bottom of the bottle to the soil as needed.
- 11. Place the container in a sunny location and watch it grow!

Hint: You will need to add water to the bottom of the container as the water evaporates.









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