

Pocket Planter

Overview: When gardening space is limited, sometimes it helps to look up instead of around. Vertical container gardens are a creative solution for challenging environments like urban areas. This activity offers an idea for an easy vertical planter created by repurposing a shoe organizer.

Materials:

- Shoe organizer (fabric-based mesh/outdoor or plastic/indoor)
- Zip ties or alternate fasteners
- Potting soil
- Seeds or seedlings
- Container to catch water run off



Approximate Time to Complete: 1 hour

Location: Indoor or Outdoor

Ages: All Ages

Season: Spring to fall if outdoor, any season if indoor

Instructions

1. With just a little bit of soil and some plants, a shoe organizer can become a fun vertical container garden. First step is to obtain a new or repurpose an old over-the-door pocket shoe organizer. If your garden is going to live outdoors such as on a balcony or hanging from a fence, a fabric-mesh shoe organizer works well as it will easily allow for drainage and air exchange for the roots. If you want to create an indoor garden, then an organizer made from plastic will better protect your floor and other surfaces. If you go with an indoor option, you will need to add a few holes for drainage in each pocket and also obtain some kind of a container to place at the bottom of it to catch any excess water that may run off.
2. Decide where you want to locate your vertical garden. Your new planter can be hung from anything that can support its weight and allows for attachment at the top and possibly extra support at the bottom. Zip ties, rope, and chains are all common fasteners that may work. Some shoe organizers even come with their own hooks. Ideas for possible supporting structures for outdoor gardens include chain link fences, playground equipment, and arbors. For indoor gardens, one idea for a supporting structure is a sturdy rolling garment rack with a container secured at the bottom to catch drainage. This would also make your garden easy to move.

When choosing your location, remember that most common garden plants grow best with 6 to 8 hours of sunlight each day, unless you plan to grow plants that prefer shade, so make sure to select a location that receives adequate sunlight. When outdoors, if possible find a spot that is protected during the hottest parts of the day to slow water loss. Fortunately, one of the convenient features of the vertical pocket planter is that you can move it later if your original location does not work well.

3. Fill the pockets with a potting soil mix designed for container gardens. Good drainage is key. Choose a soil that drains well, retains moisture like a sponge, and offers support and

KidsGardening is a nonprofit educational organization. Support provided by sponsors and donors is critical to our ability to provide free garden-based resources for parents and educators. All gifts are tax-deductible.

nutrients. It's best to purchase potting soil mixes rather than using garden soil because it provides better drainage and aeration in a small space.

4. Choose your plants. First and foremost, involve your young gardeners in the selection for their maximum investment! Additional tips for success include:
 - Choose plants that require minimal to average care. You want the garden to be a successful endeavor. Don't increase the difficulty level by choosing picky, hard-to-grow plants.
 - Look for varieties developed for compact spaces. When obtaining seeds and plants look for words such as compact, bush, tiny, and dwarf.
 - Consider your growing conditions and try to choose plants that naturally perform well in the temperatures and light you have available, whether you plan to grow indoors or outdoors. Most vegetable and herb plants need at least six hours of sunlight each day. Leafy vegetables such as spinach, cabbage, and lettuce can tolerate a bit more shade; flowers vary.
 - Plan to grow plants with similar needs (sunlight/water) at the same time. Although planting a variety of plants engages young gardeners, mixing plants with different needs can be challenging.
 - Consider growth habits. To make sure each plant has acceptable space, plant taller plants at the top of the planter and plants that will hang down at the bottom.

For your first gardening attempt, lettuce and herb plants are great selections because they are well adapted to the size of the pockets and require minimal care.

5. Add plants. You can choose to sow seeds directly into the pocket planter or transplant small seedlings. For seeds planted outdoors, follow sowing dates recommended on seed packets. You can move the planting date up by a week or two if you're able to move your planter inside in case of a cold snap. If you've purchased seedlings or started your own seeds in other containers first, harden off the plants before popping them into their permanent homes.

When digging the plants into each pocket, install them closer to the back of the planter. Over time, the weight of the soil and repeated watering may cause the front of the pocket to pull away a bit from the planter. Planting closer to the back will help support the weight of the plants.

6. Keep it growing! Common maintenance activities include:
 - **Watering.** Your outdoor vertical pocket planter will need to be watered more often than in-ground gardens. In hot, sunny, dry weather, the planter may need watering as often twice a day. Water when the soil feels dry a couple of inches down, and be sure to saturate all the soil. Water will drain from the bottom once soil is saturated. Thorough watering will encourage deep root growth and help to wash away built-up fertilizer salts. If you find your planter is drying out very quickly, remove or prune some of the plants and move it to a new location with less direct sun and wind.
 - **Fertilizing.** Rapid growth and frequent watering remove the reservoir of nutrients quickly, so fertilizing is a critical task. One option is to mix slow-release fertilizer pellets and/or compost into the potting soil according to package instructions. You can also add additional nutrients throughout the growing season by dissolving a water-soluble fertilizer

KidsGardening is a nonprofit educational organization. Support provided by sponsors and donors is critical to our ability to provide free garden-based resources for parents and educators. All gifts are tax-deductible.

in the watering can once every week or two. You can use traditional fertilizers or organic fertilizers such as compost tea, fish emulsion, or liquid seaweed. If your planter is in contact with brick or concrete, try to avoid run off when applying liquid fertilizer or make sure to clean up excess fluid to avoid potential stains.

- **Grooming.** Remove spent flowers, prune leggy stems back to buds or branches, and remove off-colored and damaged foliage (this could be a sign of disease). Many plants continue to produce new flowers if you remove the spent blooms before they set seeds. Pinch the flower stems back to just above a leaf or bud.
- **Monitoring for pests and diseases.** Examine the leaves, flowers, and fruit regularly. It is much easier to control pests and diseases if identified when populations are small. Some insects, such as aphids, can be kept in check by simply hosing them off the plants every few days.

*If you do not have access to a shoe organizer, another idea for creating a vertical garden is to gather some repurposed planting containers (such as plastic food containers or milk or juice cartons) which you could then use zip ties to attach to a vertical structure such as an existing fence or arbor, stair banisters or repurposed wooden pallets!

KidsGardening is a nonprofit educational organization. Support provided by sponsors and donors is critical to our ability to provide free garden-based resources for parents and educators. All gifts are tax-deductible.