Summary: Building a planter box is a simple way to start gardening. This lesson will help you build your own planter box using a few simple items that you can get at any hardware or garden store or by upcycling things you have already.

Time: 60-90 minutes

Materials:
- See the Create Your Own: Planter Box (attached below) visual to determine what materials you will use.

Teacher Notes:
- Students may need support using a drill, knife, or punch to create drainage holes in the bottom of the container.
- The “student notes” section of the lesson offers great ways to extend this lesson.
- For sections that instruct students to READ, you can record yourself reading aloud and send it to students. Direct them to read along with the recording. This is a helpful strategy for differentiating learning that supports all students, especially English Language Learners.
- The READ sections can also serve as talking points for teachers if the lesson is being taught in person.
- If students are completing this lesson as part of Know, Sow, Grow this is lesson four.
CREATE YOUR OWN: PLANTER BOX

**READ**: Think of starting a planter box like you would a flexible recipe that can turn out great no matter which ingredients you choose. Whether you use a pot designed for planting or an old dresser drawer, they’ll both hold soil.

Like any recipe, there are a few key steps you shouldn’t skip! **You’ll want to make sure there are holes in the bottom of your container** so that the soil doesn’t become too wet, which can hurt some plant roots. You’ll also want to figure out a watering system. This can be as simple as watering by hand every few days, or you can take the time to set up a water-efficient irrigation system or olla system that will save you time later on.

**DO**: Complete the Create Your Own: Planter Box (located on page 3.) process by following each step and making your own choices. If you want to learn more about some of the options presented, check out the appendix below.

**RECORD**: Write down your “recipe” by coloring in the items you choose or drawing in something you used instead of the options on the sheet.

**ENJOY**: Place your planter in a sunny spot and watch your plants flourish and grow!

**Appendix:**

**READ**: Learning how to garden involves understanding the meaning of new vocabulary terms. For example, the following section details a number of vocabulary terms about water systems and organics nutrients—important information to help inform your choices as you build your planter.

- **Choosing a Water System**
  - **Drip Irrigation** is made from plastic tubing. It can be finicky to set up but it is highly water-efficient and can be attached to automatic timers.

**Ollas** are unglazed clay pots that can be partially buried in the soil and filled with water. They slowly release water into the ground and reduce the need for frequent watering. There are many do-it-yourself resources for [making ollas from standard terra cotta planters](https://www.edibleschoolyard.org) or even [approximating the effect using old plastic bottles](https://www.edibleschoolyard.org).
**CREATE YOUR OWN: PLANTER BOX**

- **Organic Nutrients**
  - Organic soil amendments add nutrients that plants need without using chemical fertilizers. They also improve the texture of the soil and its ability to hold water. Here is some more information on a few of our favorites.
    - **Compost** is decomposed plant matter that provides essential nutrients and micronutrients for plants.
    - **Worm castings are worm poop.** Worm castings are an excellent soil amendment because they help the soil retain moisture and add nutrients. Worm castings smell less strongly than many other fertilizers!
    - **Fish emulsion** is a smelly and potent fertilizer. Fish emulsion is a liquid made from fish remains.
    - **Kelp meal** is a dry powder fertilizer made from dried seaweed. Kelp meal provides many essential nutrients for plants.

- **Direct Seed or Transplant your favorite plants**
  - Choose small, quick-growing, easy-to-maintain plants for your first planter box. Try transplanting fresh herbs like parsley, basil, and cilantro. Direct seed radishes, beets, spinach, or mixed salad greens. Marigolds are hardy flowers that will add some color to your planter box.

**DO (Optional):** Identify some key terms and related terms from the appendix READ section of the lesson and fill out the Building Your Garden Vocabulary worksheet.

**Student Notes:** You can extend this lesson and learn more with the following activities:
- Want to learn more about starting plants from seeds? Check out this [Direct Seeding lesson](#).
- Confused about how to space your plants or how long they might take to sprout? Check out our [How to: Read a Seed Packet Lesson](#).

**References:**


Authored by Nick Lee | www.edibleschoolyard.org
Create your own: Planter Box

1. Choose a container
   - Wooden box
   - Old dresser drawer
   - Pot

2. Drill cut holes in the bottom for drainage

3. Line it with cloth so that soil doesn’t spill out
   - Dish towel
   - Cheese cloth
   - Old t-shirt
   - Burlap

4. Fill with potting soil mixed with compost

5. Add some organic nutrients
   - Worm castings
   - Fish emulsion
   - Kelp meal

6. Choose a watering system
   - Drip irrigation
   - Hand watering

7. Direct seed or transplant your favorite plants

8. Keep watering and keep growing!