Farm Work: Planting & Harvesting
3rd grade and up

Students learn proper techniques for performing farm tasks including planting seeds, transplanting seedlings, cultivation, bed preparation and harvest. Students will distinguish between ripe and unripe vegetables.

What You Need

- Baskets or bowls for harvest
- Tools for farm work

What to do

Below are descriptions for basic farm tasks, you will be given specific tasks and harvest list from RVF2S staff when you arrive to lead this activity.

Harvest:

Explain to students that they will be harvesting vegetables and/or fruits for today’s lunch. In order to make sure that we get the tastiest veggies we must make sure that we harvest only ripe plants. Ask students to describe what to look for to determine ripeness, hopefully you will hear:

- Size
- Color
- Firmness
- Ease of removal

Each plant is a little different, but there will usually be one or more of the above characteristics that determine ripeness. For example: tomatoes come in all sorts of colors, we must know the variety of tomato to know what color it should be when ripe (some are orange, red, yellow, and even green!)

Discuss the plant or plants you will be harvesting and how to tell if they are ripe. Show examples indicating what of the above list you are using to determine ripeness. Give clear instructions about how to harvest and how much each student can pick. When necessary, demonstrate harvest techniques (digging carrots, snapping off greens, etc)
Next, bring the students to the washing area. Explain that farmers must follow specific rules for handling produce after harvest. This involves washing things multiple times, that’s why we have three bins. If it is time to rotate, this group will wash produce with the leaders of the kitchen station. If you still have time, demonstrate washing in each bin and placing in a clean bowl or tub. Before we wash, we wash our hands with soap and water!

**Planting Seeds**

Now, with help from parents or volunteers divide into partners and set out to plant seeds in the garden or greenhouse. Always demonstrate first before handing out supplies.

Remind students that seeds are valuable and special and therefore we do not want to waste them. Planting too many seeds in one place results in poor plant health because of competition (if you have an example of this it is very helpful)

**Planting in Trays:** Fill the trays with potting soil. Have students make a small depression in the soil with their finger, place two seeds there and lightly cover with soil, water, label, and send it LOVE! Clearly label trays with popsicle sticks—Date and Vegetable Name.

**Planting in the field:** Make furrows ahead of time to help students stay in straight lines when planting. Have one pair start at one end and another at the other end and work towards each other to meet in the middle, and another pair can start in a different row. Use hands or fingers to measure spacing between plants. One student can measure and the other places the seed, then switch. Do not cover the furrow until the entire bed is planted, this will help students see what has and has not been planted. Once all the rows in the bed are planted cover the seeds with a rake or by hand. Mark rows with painted plant signs.

**Transplanting Seedlings**

Split into small groups of 3 or 4 for transplanting. Explain that these plants were started in the greenhouse to allow them to grow large enough to plant in the field when the weather was not appropriate for planting them outside. Have the students guess when the seeds were planted. Many plants benefit from starting in a greenhouse and getting big and strong before planting in the field, it also helps the farmer get an earlier harvest. Some plants do not transplant well, especially root crops.

*Demonstrate once before handing out supplies*
Show students how to measure correct spacing for the plants they are transplanting—encourage them to use body parts to measure the spacing.

Have students work in pairs, one digs the hole, and adds compost, and the other removes the plant from the container and places it in the hole, and covers it. Show students how deep to plant and remind them to be careful for the sensitive roots.

Have one or two students water-in the starts

**Preparing the soil**

Preparing an area for planting involves making sure the soil has enough nutrients, and will have the best texture and structure for plant growth. If the Soil Lesson is being taught today and the group has already participated, ask them to list the key nutrients and soil composition that is ideal for vegetables (Nitrogen, Potassium, and Phosphorous. Well-drained “loam” soil). Explain the state of the area they are to work in, has it been tilled, amended with compost etc? Will they be mixing in compost today?

Often students will be adding a 2-inch layer of compost to the bed, and raking it in and making a nice fluffy, flat bed for planting.

Sometimes students will be breaking sew ground and will be removing grass to the compost pile and turning over the ground with shovels.

**Mulching**

Mulch is any material that is spread on the soil to slow moisture evaporation, keep the surface loose and porous, and keep down weeds. Organic materials such as wood chip, ground bark and compost are excellent mulches that allow air and water to enter the soil, and add nutrients as they decompose.

Explain that mulch needs to be quite thick and should cover everything except the plants we are trying to grow. Be gentle with the plants, be thorough with the mulch.

*Demonstrate once before handing out supplies*

You will be using straw, wet newspaper or cardboard, or other material for mulching.