Edible Plant Parts
3rd & 4th Grade

Students identify the 6 plant parts and describe the plant lifecycle. Students discuss the structure and function of the plant parts and classify fruits and vegetables by plant parts. 30 minutes

Lesson Objectives:
- Students are able to identify the 6 plant parts
- Students describe the plant lifecycle
- Students can classify fruits and vegetables based on plant parts

What You Need
- Plant lifecycle poster (optional)
- Vegetable cards (2 sets)
- Hoola Hoops
- Plant Part Cards
- Clipboard and paper

What To Do
Start by passing out the vegetable cards. Lead a discussion about the plant lifecycle by talking about the plant parts. When you introduce a plant part, ask students to raise their hand if they think they have an example in their hand. Ask students to think of other things we eat that represent each plant part. You may want to draw each part as you discuss or ask the students “what grows first from the seed?” whoever guesses correctly (root) gets to draw the root, then ask “what grows next? (stem) and have a student draw that part. As they draw, discuss the function of the plant part and have them offer examples from their cards or elsewhere of things we eat that are that particular plant part:

**Root**: The root has two main jobs, to deliver water and nutrients to the plant and to help stabilize (hold up) the plant. Roots we eat: carrots, radish, turnip (be careful, potatoes are not roots, they are tubers which are underground stems storing up energy for the plant)

**Stem**: The stem’s main task is to provide stability and to transport water and nutrients throughout the plant. You may want to mention that xylem (water transport) and phloem (food transport) are the main highways in the stem, like our veins in our bodies. Stems we eat: celery, asparagus, broccoli, chard, kale

**Leaf**: Leaves soak up sunlight and are the places where sunlight is transformed into food for the plants. This is called photosynthesis. Leaves we eat: spinach, lettuce, cabbage

**Flower**: Flowers have very important jobs; they attract pollinators to insure that a viable seed is made. Flowers we eat: nasturtiums, broccoli, cauliflower, calendula
**Fruit:** A fruit is technically seeds contained in a fleshy body. This means that many vegetables we eat are technically **FRUIT.** Can you think of some examples? Fruits: zucchini, tomato, peach

**Seeds:** Seeds contain the plant baby, the embryo and the food needed to feed the baby plant while it starts to grow. Seeds we eat: peas, beans, corn, wheat

**Play the Game**
Set up the game ahead of time. Place 8 hoola hoops in a circle with plant card stakes by each one (make sure there is at least one of each of the plant parts- there can be more than one of some). Place the Plant Part Cards in the center of the circle. Have students take turns picking a plant part card and placing in the hoola hoop of the correct plant. If the student needs help the others can assist. Play multiple times. You can use a stop watch to time them and have them try beat their last time working together.

If you have time, you can ask some final questions about plant parts:
- What plant part do you think we eat the most of?
- Think of your favorite food, what plant parts are included?
- Describe your breakfast using plant parts. **Example:** “I had flattened seeds with sap from a tree, and berries” (oatmeal with maple syrup & berries)