Edible Plant Parts Scavenger Hunt: Teachers' Guide

Background Information:

This Activity Deck is designed to encourage students to explore the functions of plant parts, and to identify common plants we eat that are seeds, roots, stems, leaves, fruits, and flowers.

Many students may not immediately make the connection between the food we eat and the part of the plant it is. Many people also might not realize that we can often eat more than just one part of a particular plant.

Each plant part plays an important role in the function of the growth of the plant, and depending on the plant, certain parts (not only the fruits!) are edible.

This activity deck can lead in varying directions, with the overarching goal of providing students with a greater ability to identify the parts of the plant we eat. As teachers see fit, it is also relevant to address seasonality of produce, food waste, and agriculture throughout the activity deck's discussions.

Slide 2: Plant Parts Drag & Drop (Independent or Think-Pair-Share Activity)

The **slide 2 activity** is interactive, and designed to occur independently or as a virtual think-pair-share, prior to class discussion. Students should do their best to drag and drop the names of each plant part to the correct location on the diagram. Once the students complete the activity, they can learn more about each part of the plant on the following slide.

They are welcome to return to slide 2 as needed to adjust their answers based on what they learn in slides 3 and 4.

Slides 3 & 4: Plant Parts Guide (Independent Reading or Class Discussion)

Teachers can guide students through **slide 3 and slide 4** or students can independently review the information.

- **Seed**: a seed is a baby plant that is protected by an outer seed coat, inside the seed there is food for the baby plant to survive on until it is planted (this is why seeds have an expiration date - after a certain amount of time seeds will run out of food for the baby plant.)

- **Roots**: the roots have two functions; they hold the plant in place by anchoring in the soil and they soak up the nutrients and water from the soil.
- **Stem**: the stem transports water and nutrients from the roots to the leaves and flower of the plant.
- **Leaves**: the leaves soak up sunlight and store chlorophyll to make sugar - which is food for the plants.
- **Flower**: flowers are needed for plants to reproduce (grow fruits), they make pollen which is spread around by pollinators. They also provide food for many insects and animals.
- **Fruit**: fruits are what hold the new seeds that will be spread and grow so the cycle can continue. They are also what we love to eat!

Slide 5: Edible Plant Parts Drag & Drop (Independent or Think-Pair-Share Activity)

On **Slide 5,** students are asked to drag and drop the parts of the plant that are edible. This activity is designed to be completed independently or as a virtual think-pair-share. This might be tricky for some, as all of the part plants should be dragged into the box.

Slide 6: Edible Plant Parts Labeling (Independent or Think-Pair-Share Activity)

On **slide 6**, students are asked to look at photos of common foods, and label the parts of the plant we eat. If they didn't drag all the parts of the plants into the box on the previous slide, this activity should lead them in the direction to do so.

Once slides 5 and 6 are complete, review material with a **class discussion:**

- Which parts of the plant do we eat?
    - Many students might have initially thought only to drag fruit to the edible box. But in fact, we eat all parts of plants.
    - Farmers plant specific seeds for the purpose of growing specific parts. Celery seeds for instance, are planted so that we can eat their stems. Radish seeds are planted, so that we can eat their roots.

- Ask the students for edible examples representing each part of the plant
    - Seeds -- sunflowers, corn, beans, wheat, rice
    - Roots -- beets, carrots, radishes, turnip
    - Stem -- asparagus, celery, onion
    - Leaf -- lettuce, kale, collards, spinach, cilantro
    - Fruit -- apple, orange, tomato, eggplant
    - Flower -- broccoli, cauliflower

Slide 7: At-Home Scavenger Hunt

Students will continue to familiarize themselves with edible plant parts by exploring the food they have at home. The goal is not to write the most in the boxes, but rather to explore what is common in their homes or communities at this time, and categorize those foods appropriately.

Guiding questions:

- Ask students to share the foods that they wrote in each category. Are there any categories (parts of the plant) that seem to be more common than others?
- Do you think certain parts of the plant are more common to eat at one time of year than another?
    - In the colder weather, it'll be more common to see leafy greens and root vegetables because they are "in season." They can grow more comfortably in cooler weather.
    - If we eat fruits in the colder weather months, it's likely that they are traveling long distances to get to us. For example, tomatoes we eat in the winter or spring, travel from warmer climates to get to our tables. They might taste different than the tomatoes we eat in the summer months that can grow closer to home.
- Are there any foods that farmers grow for more than one part of the plant?
    - Absolutely!
    - You can eat carrots as a root vegetable, but you can also eat their leaves (some people make pesto with them).
    - Similarly, broccoli is primarily grown for its flower. But its stem and leaves are also edible.