

# **Plant Part Pizza**

## **4<sup>th</sup> Grade**

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### **References:**

CPS Curriculum Guide for vocabulary

### **Benchmarks & Objective:**

LS-2: Relate plant structures to their specific functions (e.g., growth, survival and reproduction)

SI-5: Record and organize observations (e.g., journals, charts and tables).

### **Objective:**

Students will learn that foods that they eat are comprised of many different parts of plants. They will need to think about where each ingredient comes from (wheat crust- we eat the seeds from wheat harvested from the plain states), cheese- (most dairy from California, Idaho, New York, Pennsylvania, and Wisconsin), pepperoni- (hogs leading state is Iowa). Vegetables will be identified by which part of a plant they represent.

### **Materials:**

- Pizza Crust(s) (Boboli works well if time is limited)
- Tomato Sauce
- Mozzarella
- Oven (preheating while you set up the activity)
- Baking Pans
- Vegetables of the kids choice
- Meat optional

### **Target Concept:**

- Students know that different parts of a plant perform different functions (leaves get the food for plants by being the engines of photosynthesis). In this lesson students will review the parts of a plant by examining their favorite pizza ingredients in detail
- We will identify which ingredient is which part of a plant along with attempting to identify where that ingredient may have come from. Our system of food supply is very elaborate with ingredients coming from all over the country (and the world).

### **Initial Introduction:**

Ask the students to brainstorm a list of pizza ingredients. After they have listed a few, circle the ingredients that are parts of a plant. Ask the students what do the ingredients have in common? They should brainstorm a few ideas.

**Procedure:**

- 1) Have the kids work in small groups and identify what part of a plant the circled ingredients represent. (You should add ingredients they may have missed).
- 2) You may consider handing out a list of vocabulary words with definitions including: Bulbs, flowers, leaves, roots, stems, and ovaries and/or quizzing the kids at the beginning of class (especially if the kids are having a tough time remembering or this is their first exposure to these words).
- 3) Students should make a list of ingredients in their notebook with 2 columns Hypotheses & Actual. They should fill in their hypotheses while working with their groups.
- 4) Hold up the ingredients (in the order they will go on the pizza). Go over what they hypothesized for each ingredient in class.
- 5) As each ingredient identified, have the students place them on their pizzas.
- 6) After the pizza(s) is finished place it in the oven.
- 7) While the pizza is cooking (10-15 min for Boboli) discuss where the different ingredients come from including the crust, the cheese and the tomato sauce.
- 8) Why did their ingredients come from different locations? Why does wheat grow best in the Dakotas and tomatoes grow best in Florida and California? (temperature and rain, different requirements for best growth)
- 9) What other insects and animals eat plants?

**Target Observations:**

- The students should understand the parts of a plant not only help the plant survive, but provide food to us and other living things.
- Students will review the parts of the plant and their function.
- Students will learn that their food needs are met from food that comes from outside of the place that they live, often traveling hundreds if not thousands of miles.

**Extensions (Optional):**

- Students may review physical and chemical change by looking at changes in their ingredients before and after baking. (The cheese is melted: physical change, turned brown: chemical). This activity may work best with a yeast crust that will rise.)
- Students can review the states of matter that each ingredient represents: (ex. runny sauce: liquid, carbon dioxide released by rising dough: gas, green peppers: solid, etc.)