Serving Sizes

Grade Level: 3rd

Title of Lesson: Serving Sizes

Performance Standard(s) Covered:
MCC3.NF.1 Understand a fraction 1/b as the quantity formed by 1 part when the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a parts of size 1/b.

MCC3.NF.2 Understand a fraction as a number on the number line; as a number on the number line; represent fractions on a number line diagram.

Essential Question: What is a fraction?

Objective: Students will be able to measure out fractions to 100% accuracy.

Key Words and Terms:
- Fractions
- Serving size

Learning Activity

Abstract: Students will measure out serving sizes of fruits and vegetables and compare.

Materials Needed:
- Measuring cups (one per pair of students)
- An assortment of fruit and vegetables (enough for each group to measure a serving size, anything will do)
  - Carrots
  - Grapes
  - Berries
  - Apples
  - Tomatoes
  - Oranges
  - Grapefruit
  - Spinach
  - Radishes
- Bowls (one per fruit per pair)
- One knife per group (sharp enough to chop)
- One cutting board per group
- Paper towels
- Access to a sink to wash produce and hands
- Hand soap
- Serving size chart (see chart at end of lesson)
**Safety Concerns:**
- Be aware of any food allergies among students.
- Make sure students wash their produce and their hands before prepping and consuming it.
- Give students proper instruction on how to use knives to slice vegetables.

**Procedure:**
1. Explain to students what a serving size is.
2. Teach them proper sanitation techniques and knife handling skills.
3. Have students select a few fruits and vegetables to measure.
4. Using the cutting board and knives, have students slice and measure out serving sizes for each produce selected.
5. Once each amount is measured out, have students record their observations and compare and contrast the measurement.
6. Allow students to consume a few servings.
7. Once done, have students clean up their area and return the knives to you.
8. Have students answer the following questions –
   a. Why is it important to measure serving sizes?
   b. Why are fractions important?
      i. Plot the fractions on a number line.
   c. How many berries does it take to equal a serving size? How many apples? Why is there a difference in number of produce?
   d. How many serving sizes did you consume?
   e. How many serving sizes of fruits and vegetables should you consume a day?
   f. Why do you think some serving sizes are different than others?
   g. If you have 1 cup of radishes, how many servings is that? If you eat half a cup how many do you have left?
   h. If you have \( \frac{1}{4} \) cup of carrots how many more do you need to make \( \frac{1}{2} \) a cup? How many servings is \( \frac{1}{4} \) cup?
1/2 cup peas or cooked dry beans
3/4 cup fruit or vegetable juice
1 cup leafy salad greens
1/2 cup cut-up fruits or vegetables (raw, cooked, fresh, frozen or canned)
One medium piece of fruit (e.g., apple, banana, orange or pear)
1/4 cup dried fruit (e.g., raisins or cranberries)