Monrovia Unified School District
Level Three Nutrition Integration
4th Grade

Standards:

- Essential Concepts, Analyzing Influences, and Accessing Valid Health Information
- Science Investigation and Experimentation 6 a, b, f
- Number Sense 3.2 and 3.3 (solve problems by multiplying multi-digit numbers)
- Writing Applications 2.1 (narratives)

Objectives:

- Students will utilize process skills while teacher prepares the Tasting Trio recipe.
- Students will be able to identify internal and external influences about the things they do during Halloween.
- Students will be able to identify and analyze key nutrients from a food label.
- Students will be able to solve a problem using multiplication skills with a healthy recipe.
- Students will explain internal and external influences of eating healthy through writing a narrative.

Outline

1. Tasting Trio

Preview Tasting Trio

1. Think of all the ways you have eaten pumpkin. Have you ever eaten pumpkin straight from a can? Today you will when we try our Tasting Trio recipe called Jack-o-Lantern Smash.
2. Today you will learn some facts about pumpkins and determine why we eat certain foods at Halloween. Also, we will incorporate investigation skills while we cook, use multiplication skills with a food label and writing skills as you write about what you learned today through a narrative!

Halloween Tradition/Analyzing Influences

1. Pumpkins are especially popular in October, why? *Halloween*.
2. Hold a brief discussion about the things we do and eat around the Halloween holiday. Create a list as the students discuss.

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3. Ask the students why they choose to eat those foods/do those things during Halloween? Do we do them because "we want to" or because "others want us to do it"? Define Internal and External Influences.
4. Record answers on a tree map and point out that many of the foods we eat around Halloween can be unhealthy.
5. Tell the students that although it's OK to eat treats, candy, and dessert once in a while, there are also some healthy options they can prepare or choose to eat.

Recipe for Tasting Trio/Investigation Skills

1. Our Tasting Trio is a healthy option for Halloween: Jack-o-Lantern Smash, so let's try it.
2. But before we begin…cooking is a science and if you don't follow the recipe just right the result will not be as planned. So, I want everybody to take out your Science Journal and use your Scientific Investigation Skills while we make our recipe.
    a. We will use the following investigation skills today: Prediction, Observation, Recording, Measurement and Inference (write on the board)
        i. Prediction: Predict what ingredients we might use.
        ii. Observe: Use your 5 senses as I make the recipe.
        iii. Record: What you observe, use words, symbols and pictures. Write about the pumpkin facts that are new to you. (Refer to Pumpkin Facts on the Bulletin Board)
        iv. Measurements: Don't forget to record the measurements.
        v. Inference: What assumptions can you make based on the observation?
3. Serve and taste Jack-o-Lantern-Smash and evaluate satisfaction.
4. While they eat, discuss healthier food items to eat during Halloween celebrations. (Think of foods made with pumpkin—make sure Pumpkin Pancakes are mentioned) Ask: Can you eat pumpkin for breakfast?

2. <u>Food Labels and Multiplication</u>

Preview the Food Label

1. I have a surprise for you; the cafeteria has decided to make pancakes for the whole school on Halloween. What can make those pancakes healthier? Adding pumpkin.
    a. Why is pumpkin so healthy? Let's look at the food label.
    b. BRIEFLY GO OVER LABEL. (Students should have prior experience reading food labels).
    c. Have students evaluate if pumpkin is a good source of dietary fiber, vitamin A, and calcium.

2. So, after I convinced the cafeteria how healthy pumpkin is, they agreed to add pumpkin to the recipe! However, since they have never put pumpkin in their pancakes, they needed to know how much to buy to make 600 pancakes.
3. Today we are going to use our math skills to problem solve how much pumpkin the cafeteria needs to buy to add pumpkin to the pancake recipe.
    a. Here is the recipe. Let's look at how many servings it makes (10) and how much pumpkin you need to make that many servings (1/2 cup)
    b. If each recipe makes 10 servings, then divide 600 students by 10 and we get 60, so we need to multiply the recipe by 60.
    c. Let's convert the ½ cup of pumpkin to a decimal: .50 and multiply it by 60 and what do we get 30. So we need 30 half (½) cups of pumpkin or 15 cups. Let's go tell the cafeteria!
    d. Did anyone get the answer using another method?

3. <u>Narrative Writing/Analyzing Influences</u>

1. Today you learned about internal and external influences that affect what you eat around Halloween. Now I would like you to write a narrative that discusses the food choices you make at Halloween time and determine if those choices are influenced by internal or external factors. Now that you know what influences your choices, end your narrative with what you can do to during Halloween to make healthier choices.
    a. Use a Thinking Map to help with this discussion.
    b. Discuss ways to write the introductory paragraph.
    c. Students who do not have time to finish can complete the assignment for homework.

<u>Closure</u>

1. Ask students what they learned about today. Make a list of their answers.
2. Ask them one or two of the following questions:
    a. What is the difference between internal and external influences?
    b. How did we prepare the Jack-o-Lantern Smash recipe?
    c. What nutrients are found in pumpkin?
    d. How much pumpkin would you need to make a recipe for 80 students?