Lesson Plans : Maths

Problems
Grade Level : 3-4
Activity Type : Math Activity Size : Large
Objective:

The students will solve addition, subtraction, multiplication and division problems that focus on serving size and counting 5 A Day.

Description :
Materials:
Fruits and Vegetables Problem Sheet

Introduction:
• Students may need to review addition, subtraction, multiplication, and division skills, especially when regrouping or renaming is involved.
• Students may also need to review basic problem solving skills such as identifying the needed operation, excluding extraneous information, and determining if the actual question has been answered.

Group/Individual Activity:
• Have students solve the word problems on the 'Problem Solving' sheets.
• If problem solving sheets are used in a group setting, students may be asked to solve all or a designated number of problems, asking for assistance from group members as needed. After the set number of problems have been solved, group members should compare answers and try to reach a consensus as to the correct answers. The teacher may intervene when a consensus cannot be reached.

Related Activities:
• Have students create their own fruit and vegetable word problems. Problems may be shared on the board or overhead, or the teacher can make a booklet of the class' problems.
• Students may use Cuisenaire rods to demonstrate portions or fractions of foods.

Fruits and Vegetables Problem Sheet

1. Tom ate a salad for lunch. His salad had 3 servings of his 5 A Day. Fill in the blanks to tell how much of each item he could have eaten to get 3 servings. [HINT: There is more than one correct answer.]

___cup lettuce leaves
___cup spinach leaves
___cup carrots
___cup tomatoes

Bonus activity: Make a salad in the 5 A Day Adventures Salad Factory that has 3 servings of your 5 A Day . What items are in your salad

2. The salad Tom ate for lunch contained 3 servings of fruits and vegetables. If he had a small glass of 100% juice for breakfast with his cereal, how many servings of fruits and vegetables does he need to eat for supper to get his 5 A Day ?

Bonus: What is one way Tom can complete his 5 A Day at dinner?

3. Juanita loves Carrot & Raisin Sunshine salad. At lunch she ate salad that contained 1/2 cup shredded carrots, 1/4 cup raisins and 1 cup lettuce leaves. How many servings of fruits and vegetables did she get from the salad?

4. Jerry loves Fruit 'N' Juice Shakes for an afternoon snack. To make the shake, he used 1 banana, 6 oz. of 100% pineapple juice, 1/2 cup of low fat vanilla yogurt, and 1/2 cup strawberries. How many servings of fruit are in this recipe? If the recipe makes enough for 2 glasses, how many servings of fruits will Jerry have if he and his friend Chad each have a shake?

5. Jake helped with dinner by cooking both broccoli and carrots in the microwave. He ate 1/2 cup broccoli and 1/2 cup carrots. How many servings of vegetables did he get from his dinner that night?

Bonus: If Jake had 100% juice with his breakfast, and an apple as a snack after school, how many servings of fruits and vegetables did he have during the day?

6. Annie loves to cook Chinese food. She cooked Chinese Vegetable Stir-Fry for supper and ate two cups of it herself. How many servings of vegetables did she have for supper?

Bonus: If Annie had an orange for breakfast, and a bunch of grapes with her lunch, how many servings of fruits and vegetables did she have today? Did she reach her 5 A Day goal?

7. Have you ever stopped to measure your salads? Well, Joyce decided it would help her figure up her 5 A Day , so she began to use a large measuring cup as she made salads for her family. She makes salads for four people like this: 2 cups of spinach, 2 cups of romaine lettuce, 2 cups of carrots, 2 cups of tomatoes, 1 cup of cauliflower florets, and 1 cup of broccoli florets. Add up the total number of servings for this salad, and figure out how many servings each person will get if all four people at the table get the same amount.

8. Jamie loves fruit salads, and decided to help make one for dinner. He is making a salad for six people. The salad contains 3 cups of watermelon chunks, 1 1/2 cups raisins, 3 cups pineapple chunks, and 3 cups of apples. He divides the salad into six bowls. How many servings of fruit salad will each person get?

9. Fernando and Omar made Musical Fruit Melodies for their school project. They made enough for four servings. How many servings of fruits can you get if you have a serving of their Musical Fruit Melodies. Here's the fruit they used in their recipe.

1 cup chunked fresh pineapple = 2 servings
1 banana = 1 serving
1 cup grapes = 1 serving
1 orange = 1 serving
1 apple = 1 serving
1 cup pitted prunes = 4 servings
1/2 cup pitted dates = 2 servings
__ total servings / 4 people

10. Antoinette and Robin took a picnic lunch to the park. They had a bag of carrot sticks, a bag of celery sticks, 2 small boxes of raisins, 2 apples, 2 turkey sandwiches, and 2 small 100% orange juice drinks. If they divided their lunch equally, how many servings of fruits and vegetables did each one have for lunch?
(HINT: The bags of celery and carrot sticks had about 12 sticks each.)

11. Look at the Food Guide Pyramid in the 5 A Day Stadium. It tells you to have 3 - 5 servings of vegetables and 2 - 4 servings of fruits each day. To eat 5 A Day , how much of each, should you have?

12. How much of each should you have to equal one serving? Visiting the 5 A Day Stadium in the Land of 5 A Day will help you answer these questions.

___ piece(s) of fruit = 1 serving
___cup(s) of cooked vegetable = 1 serving
___cup(s) of canned fruit = 1 serving
___cup(s) of leafy greens like lettuce and spinach = 1 serving
___ounce(s) 100% juice = 1 serving
___small glass(es) of 100% juice = 1 serving
___handful(s) of raisins = 1 serving
___ carrot(s) or celery stick(s) = 1 serving

Use this table as needed:

What counts as 1 serving?
1 piece fruit, such as banana, orange, apple, peach, pear
1/2 cup cooked or canned vegetable such as beans, peas
1/2 cup canned fruit, such as canned pineapple
1 cup raw leafy greens, such as spinach or lettuce
1 small glass 100% juice
6 ounces 100% juice
1 small box raisins
1/4 cup dried fruit, such as raisins
1 handful raisins

Students' Reactions :