

Better Beverages Math Exercise

Nutrition Lesson(s) Supported:

- Better Beverages

Supplies Needed:

- Ingredients for each recipe
- Supplies based on recipes chosen: juicer, blender, etc.
- Mixing bowls, measuring spoons, ladle for serving
- Tasting cups

Length of Time to Complete:

10 to 15 minutes

Audience (grades): 3-5th grade

Background:

Working in the kitchen with measuring utensils provides a great opportunity for kids to practice their math skills. By doubling or tripling (or more!) a recipe, kids will use their math skills to ensure that ingredients are added in the correct proportions.

Process:

Decide how many recipes you will be doing, and assign the children to a group that will be responsible for a given recipe. Within groups, assign each child a specific task (juicer, pourer, in charge of an ingredient, etc.). Have the children fill out their math skills sheet to make about 1 oz (tasting) per child in the entire class (e.g. if there are 20 children in the class, the recipes should be modified to create enough for 20 ounces or more). Use the following worksheets to guide their work.

Recipe for Homemade Lemonade

1 Tablespoon honey or 100% pure maple syrup

2 Tablespoons lemon juice (or grapefruit juice), freshly squeezed*

8 oz water

Squeeze the lemons to extract the juice (*about one lemon yields 2 tablespoons juice). Place all the ingredients in a pitcher and stir together. Makes approximately 8 ounces.

Worksheet:

To make enough for my entire class, I will need to make _____ ounces.

Since this recipe makes approximately 8 ounces, I will _____ (double/triple/quadruple, etc.) the recipe. Therefore, we need to mix:

_____ Tablespoons honey or 100% pure maple syrup

_____ Tablespoons cup(s) lemon juice --How many lemons? _____

_____ ounces of water

Recipe for Freshly Squeezed Orange Juice

It will take about 3-4 oranges to yield 8 ounces of juice. Use a juicer to get as much out of the fruit as you can!

Worksheet:

To make enough for my entire class, I will need to make _____ ounces.

Since this recipe makes approximately 8 ounces, I will _____ (double/triple/quadruple, etc.) the recipe. Therefore, we need to squeeze:

_____ oranges

Recipe for “Wuice”

-8 ounces of water

-orange, lemon, lime, cucumber, watermelon, or other fruit slices (2-3 per 8 ounce glass)

Directions: Add the above to a glass, stir, and enjoy!

Worksheet:

To make enough for my entire class, I will need to make _____ ounces.

Since this recipe makes approximately 8 ounces, I will _____ (double/triple/quadruple, etc.) the recipe. Therefore, we need:

_____ slices of fruit.

Recipe for Green Machine

½ Banana

1-2 Tablespoons Lemon Juice

1 cup of washed spinach

2 teaspoons honey

3-4 oz of water

Place all the ingredients in a blender, and blend until smooth. You can add a few ice cubes if you like your green juice extra cold. Makes approximately 8 ounces.

Feel free to get creative, you can swap out any fruit such as frozen blueberries, strawberries or mangos. Also, if the lemon juice is too tart try a splash of orange or apple juice.

Worksheet:

To make enough for my entire class, I will need to make _____ ounces.

Since this recipe makes approximately 8 ounces, I will _____ (double/triple/quadruple, etc.) the recipe. Therefore, we need to mix:

_____ Banana (s)

_____ Tablespoons Lemon Juice

_____ cup(s) of washed spinach

_____ teaspoons honey

_____ ounces of water