

4 *October Supplemental Activity: Beverage Math*

Nutrition Lesson(s) Supported:

-Hydration Station

Supplies Needed:

- Recipe handouts
- 25- 9 oz cups (optional)
- Liquid measuring cup (optional)
- 150 oz. drinking water (optional)
- 64 oz. 100% juice (optional)

Length of Time to Complete:

5 minutes to introduce activity

10 minutes to complete recipe worksheet

Audience (grades): 4th

Common Core Standards Taught:

- English Language Arts: Speaking and Listening: 4.1
 - Pose and respond to specific questions to clarify or follow up on information, and make comments that contribute to the discussion and link to the remarks of others.
- Math: Operations and Algebraic Thinking: 4.3
 - Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.
- Math: Operations and Base Ten: 4.5
 - Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.

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 increased in the correct proportions.

Lesson:

Raise your hand and tell me why it is important to stay hydrated?

Staying hydrated is incredibly important for our health. Over 60% of our body is made of water! Water helps regulate our body temperature, protects our organs and tissues, helps remove waste, and transports nutrients to our cells.

Water is the best beverage to drink to stay hydrated. Aim for at least 5 cups of water each day (more if you're very active or if it is hot outside).

Today, we are going to work on beverage recipes. Each recipe is enough for one person, so we are going to have to do a little math.

(Distribute Handout)

Let's do the first recipe together. "Wuice" is water with splash of juice. It is a great way to add flavor to water, without adding too much sugar.

The recipe calls for 6 oz. of water and 2 oz. of juice. That is 8 oz. total, or one cup. This recipe is only for one person. If we wanted to make enough for the entire class, how many servings would we need?

(Assume 25 servings).

How many ounces of water do we need to make 25 servings of wuice?

We need to multiply 6 times 25. That equals 150 oz.

How many ounces of juice do we need to make 25 servings of wuice?

We need to multiply 2 times 25. That equals 50 oz.

Finally, how many ounces of wuice do we need to make? We just need to add the total amount of water and the total amount of juice.

That is 200 oz.

Optional: Make wuice for the entire class. Encourage students to try the recipes at home.

Recipe for “Wuice”

-6 ounces of water
-2 ounces of 100% juice

Serves 1

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

Worksheet:

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

How many ounces of water do you need? _____

How many ounces of juice do you need? _____

How many ounces of wuice do you need to make? _____

Recipe for Lemonade

-1 Tablespoon honey
-2 Tablespoons lemon juice
-8 oz water

Serves 1

Directions:

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

Worksheet:

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

Therefore, we need to mix:

_____ Tablespoons honey

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

_____ Ounces of water

Recipe for Green Machine

½ Banana
2 Tablespoons Lemon Juice
1 cup of washed spinach
2 teaspoons honey
4 oz of water

Serves 1

Directions: 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.

Worksheet:

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

Therefore, we need to mix:

_____ Bananas

_____ Tablespoons Lemon Juice

_____ cup(s) of washed spinach

_____ teaspoons honey

_____ ounces of water

Receta de "Wuice"

- 6 onzas de agua
- 2 onzas de jugo 100%

Sirve 1

Instrucciones: Añada los ingredientes en un vaso, mezcle y ¡disfrute!

Ejercicio :

Para preparar suficiente para toda mi clase, necesito hacer _____ raciones.

¿Cuántas onzas de agua necesito? _____

¿Cuántas onzas de jugo necesito? _____

¿Cuántas onzas de "wuice" necesito preparar? _____

Receta de Limonada

- 1 Cucharada de Miel
- 2 Cucharadas de Jugo de Limón
- 8 onzas de agua

Sirve 1

Instrucciones:

Exprima el limón para extraer el jugo (*un limón hace dos cucharadas de jugo). Ponga todos los ingredientes en una jarra y revuélvalos.

Ejercicio:

Para preparar suficiente para toda mi clase, necesito hacer _____ raciones.

Por lo tanto, necesitamos mezclar :

_____ Cucharadas de Miel

_____ Cucharadas taza(s) jugo de limón --¿Cuántos limones? _____

_____ Onzas de agua

Récipe para Máquina Verde

½ Plátano

1-2 Cucharadas de Jugo de Limón

1 taza de espinacas lavadas

2 cucharaditas de miel

3-4 onzas de agua

Sirve 1

Instrucciones: Ponga todos los ingredientes en la licuadora y mézclelos hasta que estén molidos. Puede añadir unos cuantos cubos de hielo si le gusta su jugo súper frío.

Ejercicio:

Para preparar suficiente para toda mi clase, necesito hacer _____ raciones.

Por lo tanto, necesitamos mezclar :

_____ Plátanos

_____ Cucharadas de Jugo de Limón

_____ tazas de espinacas lavadas

_____ cucharaditas de miel

_____ onzas de agua