

3 December Supplemental Activity: Kitchen Conversions

Nutrition Lesson(s) Supported:

- Break-the-fast

Supplies Needed:

- MyPlate Fraction Worksheet

Length of Time to Complete:

- 5 minutes to introduce activity
- 10 minutes to complete worksheet

Audience (grades): 3rd grade

Common Core Standards Taught:

- Math: Measurement and Data: 3.2
 - Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l).¹ Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.
- Math: Number and Operations in Base Ten: 3.2
 - Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.

Lesson:

Raise your hand if you can think of a breakfast that would give you long lasting energy?

(Eggs and toast; cereal and fruit; bagel and nut butter etc.)

There are a lot of great 'go' breakfast foods that will give you long lasting energy.

How many of you have ever helped make breakfast? What did you help make?

No matter what you cook in the kitchen, there will come a time when you have to do math! Chefs and bakers are always doing math! They have to count, convert, measure, add, subtract, multiply, and divide! If a chef makes a math mistake, it could be disastrous! Can you imagine if a baker put 12 dozen eggs (144 eggs) in a bagel mix instead of 12 eggs (1 dozen)?!

Today, we are going to solve some kitchen conversion problems.

Conversion Chart

1,000 gram = 1 kilogram

1,000 milliliters = 1 liter

12 eggs = 1 dozen

Kitchen Conversions

Use the conversion chart and recipe to answer the following questions.

Muffin Recipe:

300 grams flour

100 grams of sugar

10 grams of baking soda

200 milliliters of milk

3 eggs

Makes 10 muffins

1. **Chef wants to make 100 muffins. Write the recipe for the new total (100) to reflect how much he needs of each ingredient.** The current recipe is for 10 muffins. To make 100 muffins each ingredient must be multiplied by 10.

To make 100 Muffins the recipe would read:

_____ grams of flour x 10 = _____ grams of flour

_____ grams of sugar x 10 = _____ grams of sugar

_____ grams of baking soda x 10 = _____ grams of baking soda

_____ milliliters of milk x 10 = _____ milliliters of milk

_____ eggs x 10 = _____ eggs

Extra challenge question: How would you convert the first 3 answers to kilograms?

2. **If Chef has 3 dozen eggs, does he have enough eggs to make all 100 muffins? Show your work. Hint a dozen = 12.**

3 (dozen eggs) x _____ = _____ total eggs

Number of eggs needed for 100 muffins (from problem #1)? _____

Does chef have enough eggs to make 100 muffins? _____

Tabla de conversión

1,000 gramos = 1 kilogramo

1,000 mililitros = 1 litro

12 huevos = 1 docena

Conversiones de Cocina

Use la tabla de conversión y la receta para responder a las siguientes preguntas:

Receta de Panecillos:

300 gramos de harina

100 gramos de azúcar

10 gramos de bicarbonato de sodio

200 mililitros de leche

3 huevos

Hace 10 panecillos

- 1. El Chef quiere hacer 100 panecillos. Escribe la receta para el nuevo total (100) para reflejar la cantidad que necesita de cada ingrediente.** La receta actual es de 10 panecillos. Para hacer 100 panecillos cada ingrediente debe ser multiplicado por 10.

Para hacer 100 panecillos la receta se leería:

_____ gramos de harina x 10 = _____ gramos de harina

_____ gramos de azúcar x 10 = _____ gramos de azúcar

_____ gramos de bicarbonato de sodio x 10 = _____ gramos de bicarbonato de sodio

_____ mililitros de leche x 10 = _____ mililitros de leche

_____ huevos x 10 = _____ huevos

Pregunta adicional de desafío:

¿Cómo convertiría las primeras 3 respuestas a kilogramos?

- 2. Si el Chef tiene 3 docenas de huevos, tiene los suficientes huevos para hacer 100 panecillos? Demuestra tu trabajo. Ejemplo: 1 docena = 12.**

3 (docenas de huevos) x _____ = _____ total de huevos

Número de huevos necesarios para 100 panecillos (del problema #1)? _____

El Chef tiene los huevos suficientes para hacer 100 panecillos? _____