

## I Need a Larger Recipe!

**Introduction:** For this final assessment, you will apply ratios and proportions to help you convert a recipe to serve more people. You have found your favorite recipe for a dessert or appetizer and want to bring it to the class party. The problem is that your recipe doesn't serve enough people. Use proportions to increase the recipe to serve all of the people in your class including your teacher. Make enough for 1 serving per person.

**For this project you will need to:**

1. Choose one recipe from the internet, cookbook or home. (www.recipes.com , www.allrecipes.com , www.foodnetwork.com/recipes )
2. The recipe must have at least 8 ingredients, must have the number of portions it makes, and it must serve greater than 4 people, but less than 10 people.
3. Use proportions to increase the recipe to serve the number of people in your class, including your teacher (1 serving per person).
4. Create a brochure that includes the following: (Use attached table to assist you)
  - a. Original Recipe
  - b. Ratio for one serving, for example: if the recipe uses 1 cup of sugar, and the recipe serves 8, the ratio for one serving equals  $\frac{1}{8}$  c. sugar (THINK UNIT RATES!!!)
  - c. Proportion used to increase recipe to number of servings to give one portion to each person in the class including the teacher.
  - d. Show ALL work to solve proportions.
  - e. Round your measurements to the nearest HALF (i.e. 3.222 teaspoons, rounds to 3 teaspoons, 3.666 teaspoons rounds to  $3\frac{1}{2}$  teaspoons.
  - f. Scaled Recipe – Ingredients and new amounts needed to give one serving per person in class.
  - g. Explain the math you used to solve this problem (your strategies!!!)
  - h. Directions on how to make the recipe.
  - i. Be creative! Use drawings, pictures, etc. to demonstrate your knowledge of ratios and proportions.

Learning Target	Exceeds	Proficient	Developing	Beginning
<b>LT A:</b> I can use ratios, rates, fractions, differences, and percents to write statements comparing two quantities in a given situation, including being able to distinguish between and use both part-to-part and part-to-whole ratios in comparisons of values with different units.				
<b>LT B:</b> Use percents to express ratios and proportions				
<b>LT C:</b> Recognize that constant growth in a table, graph, or equation is related to proportional situations. Relate the unit rate and constant of proportionality to an equation, graph, or table describing a proportional situation				
<b>LT D:</b> Write an equation to represent the pattern in a table or graph of proportionally related variables				
<b>LT E:</b> Scale a ratio, rate, percent, or fraction to make a comparison or find an equivalent representation				
<b>LT F:</b> Use various strategies to solve for an unknown in a proportion, including scaling, rate tables, percent bars, unit rates, and equivalent ratios for both fictional and real-world applications.				

**Table:** Proportions to Increase a Recipe

Original Receipt Serves: \_\_\_\_\_

New Recipe Serves (number of people in class): \_\_\_\_\_

Original Receipt Ingredients	Ratio for One Serving	Proportion used to increase recipe to serve classmates	Work to solve proportion	Scaled recipe- Amount needed to feed class
<i>Example: 1 Cup Sugar (serves 8)</i>	$1/8$	$\frac{1}{8} = \frac{x}{30}$	$\frac{8x}{8} = \frac{30}{8}$	$3\frac{1}{4}$ Cups of Sugar

**Write about your strategies:** On a separate sheet of paper, using complete sentences, describe the math you used to solve this problem. Make sure you attach that paper to your final project