## I Need a Larger Recipe!

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:

A. Choose one of the recipes from among those provided.
B. Use proportions to increase the recipe to serve the 36 people in seventh grade, including your teacher ( 1 serving per person).
C. Create a brochure that includes the following: (Use attached table to assist you)

1. Original Recipe
2. 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 $1 / 8 \mathrm{c}$. sugar (think unit rates)
3. Proportion used to increase recipe to number of servings to give one portion to each person in the class including the teacher.
4. Show ALL work to solve proportions.
5. Round your measurements to the nearest HALF (i.e. 3.222 teaspoons, rounds to 3 teaspoons, 3.666 teaspoons rounds to $31 / 2$ teaspoons.
6. Scaled Recipe - Ingredients and new amounts needed to give one serving per person in class.
7. Directions on how to make the recipe. (Mixing instructions, cook time, preheat temperature, etc.)
8. Be creative! Use drawings, pictures, etc. to demonstrate your knowledge of ratios and proportions.

## Project Rubric

|  | Kitchen Assistant <br> (1) | Line Cook <br> (2) | Sous Chef <br> (3) | Executive Chef <br> (4) |
| :--- | :--- | :--- | :--- | :--- |
| Using <br> Proportions | Fails to use <br> proportions to <br> increase a recipe | Set up proportions <br> that are incorrect <br> for increasing a <br> recipe | Correctly set up <br> proportions to <br> increase a recipe with <br> $1-2$ minor errors | Correctly set up <br> proportions to <br> increase a recipe |
| Using Cross <br> Products, Equal <br> Ratios, or "the <br> fish"" | Fails to use cross <br> products or equal <br> ratios to solve <br> proportions. <br> More than 5 errors <br> and/or missing work | Use of cross <br> products or equal <br> ratios to solve <br> proportions, <br> however contains <br> $3-5$ errors | Reasonably uses <br> cross products or <br> equal ratios to <br> solve proportions. <br> Only 1-2 minor errors | Demonstrates the <br> ability to use cross <br> products or equal <br> ratios efficiently and <br> accurately to solve <br> proportions. No <br> errors in calculations |
| Increasing the <br> recipe | Includes a <br> significantly flawed <br> calculation of the <br> amounts needed to <br> increase a recipe. <br> Does not round <br> correctly to the <br> nearest half | Includes a calculation <br> of the amounts <br> needed to increase a <br> recipe that contains <br> some errors. <br> Inaccurately rounded <br> some measurements | Includes a reasonable <br> calculation of the <br> amounts needed to <br> increase a recipe <br> rounded to nearest <br> half with only a <br> couple of minor <br> errors | Includes an accurate <br> and complete <br> calculation of the <br> amounts needed to <br> increase a recipe. <br> Correctly rounded <br> measurements to <br> the nearest half. |

$\qquad$ Orange Purple

## TABLE: Proportions to Increase a Recipe

Original Recipe serves: $\qquad$ New Recipe serves 36

| Original Recipe <br> Ingredients | Ratio for one <br> serving | Proportion used to <br> increase recipe to <br> serve classmates | Work to solve <br> proportion | Scaled Recipe- <br> Amount needed to <br> feed class |
| :---: | :--- | :--- | :--- | :--- |
| 1 Cup of Sugar <br> (serves 8) | $\frac{1}{8}$ | $\frac{1}{8}=\frac{x}{30}$ | "do the fish" <br> $30 \times 1 \div 8=\mathrm{x}$ | $\mathrm{x}=3 \frac{1}{4}$ cups of sugar |
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| Original Recipe <br> Ingredients | Ratio for one <br> serving | Proportion used to <br> increase recipe to <br> serve classmates | Work to solve <br> proportion | Scaled Recipe- <br> Amount needed to <br> feed class |
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