

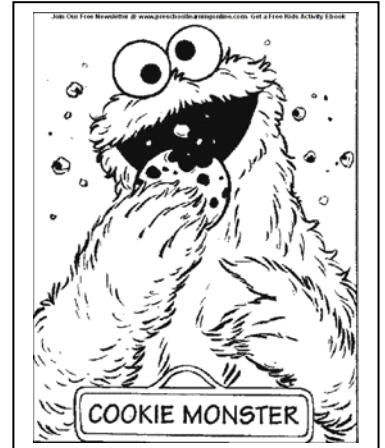
Due date:

The inCredible Cookie number Crunch

WHAT: In this project, you will be increasing and reducing a cookie recipe (See, there's math in the real world, and this one tastes good!).

SUMMARY

- ♣ STEP 1: The Word Problem
- ♦ STEP 2: The Recipe Worksheet
- ♠ STEP 3: Project Format
- ♥ STEP 4: Scoring Rubric



♣ STEP 1: The Word Problem (10 points)

Tips

- Find the information given to you.
- Find out what you need to do.
- Show math evidence. Answer questions in complete sentences.
- Be creative with the theme of "friends" (e.g. X-MEN, musical artists, your friends, etc.)

WORD PROBLEM:

Four friends buy 36 cookies for \$12. Each person contributes the following amount of money:

Friend #1--\$2
Friend #2--\$3
Friend #3--\$4
Friend #4--\$3

Questions:

- Each person gets the number of cookies proportional to the money paid. How much does each person get?
- If friend #3 gives half of his cookies to friend #2, how many cookies does friend #3 have?

♦ STEP 2: The Recipe Worksheet (15 points)

Below is the recipe for Mr. Eng's favorite cookies! After the recipe, answer the questions below.

Double Tree Hotel Chocolate Chip Cookies (About 2 dozen cookies = 24 cookies)

1 1/2 C. butter -- softened
1 1/2 C. granulated sugar
3/4 C. firmly packed brown sugar
4 eggs
2 1/2 tsp. Vanilla
1 tsp. lemon juice
3 C. all-purpose flour

3/4 C. old-fashioned oatmeal -- uncooked
3/4 tsp. Baking Soda
1 tsp. Salt
3 C. Semi-Sweet Chocolate Chips
1 1/2 C. chopped walnuts

Cooking Measurement Equivalents

16 tablespoons (tbs) = 1 cup (c)
12 tablespoons = 3/4 cup
10 tablespoons + 2 teaspoons = 2/3 cup
8 tablespoon (tsp) = 1/2 cup
6 tablespoons = 3/8 cup
5 tablespoons + 1 teaspoon = 1/3 cup
4 tablespoons = 1/4 cup
2 tablespoons = 1/8 cup
2 tablespoons + 2 teaspoons = 1/6 cup
1 tablespoon = 1/16 cup
2 cups = 1 pint (pt)
2 pints = 1 quart (qt)
3 teaspoons = 1 tablespoon
48 teaspoons = 1 cup

Step 2, Task #1 (6pts): You have been asked to make cookies for South East high school. You are told that there are approximately 3000 hungry jaguars. If each student is to have 1 cookie, by how much will the cookie recipe need to be increased? _____

Now let's determine the amount of each ingredient we will need (Convert and show your work!).

- 1 1/2 C. butter – softened
- 1 1/2 C. granulated sugar
- 3/4 C. firmly packed brown sugar
- 4 eggs
- 2 1/2 tsp. Vanilla
- 1 tsp. lemon juice
- 3 C. all-purpose flour
- 3/4 C. old-fashioned oatmeal – uncooked
- 3/4 tsp. Baking Soda
- 1 tsp. Salt
- 3 C. Semi-Sweet Chocolate Chips
- 1 1/2 C. chopped walnuts

Step 2, Task #2 (6pts.):

It is important to make certain that there is plenty of each ingredient before beginning a recipe. Otherwise, your recipe will not make great tasting cookies! Using the original ingredient amounts listed on the first page, let's suppose we have plenty of every ingredient. However, there are only 2 eggs in the refrigerator.

By how much do we need to reduce the original recipe? _____

Now let's determine the amount of each ingredient we will need. (Convert and show your work!).

- 1 1/2 C. butter – softened
- 1 1/2 C. granulated sugar
- 3/4 C. firmly packed brown sugar
- 4 eggs



- 2 1/2 tsp. Vanilla
- 1 tsp. lemon juice
- 3 C. all-purpose flour
- 3/4 C. old-fashioned oatmeal – uncooked
- 1 tsp. Salt
- 3 C. Semi-Sweet Chocolate Chips
- 1 1/2 C. chopped walnuts

Step 2, Task #3 (2pt.): Personal Evaluation(Write in complete sentences):

- 3/4 tsp. Baking Soda
- How confident are you in your ability to increase and reduce a recipe?
- What I really want to know is: would you eat any of your modified recipe cookies?
- How do you feel about your culinary skills?
- What did you apply your basic math skills to the real world?

♠ STEP 3: Project Format (1pt)

- Be creative with your project format.
- Your project *MUST* incorporate the academy theme of Technology and Media.
- Be sure to include the questions and answers along with evidence!
- Think outside the box!

BAKING INSTRUCTIONS (Use adult supervision!):

- Step #1 Cream butter in large bowl.
- Step #2 Add both sugars & beat on medium for 2 mins.
- Step #3 Add eggs one at a time, beating well after each addition.
- Step #4 Add lemon juice & vanilla; mix well.
- Step #5 In a separate bowl, stir this together dry ingredients.
- Step #6 Add to creamed mixture & stir well to mix.

- Step #7 Add chips & nuts; stir this to mix.
- Step #8 Drop by 1/4 c or 2 oz scoop on parchment-lined baking pans, 2 to 3 inches apart.
- Step #9 Bake at 350 degrees F (175 degrees C) for 13 to 15 mins or until lightly browned around the edges.
- Step #10 Cool; remove this from paper & cool completely on wire racks.
- Step #11 .
- Enjoy the Doubletree Hotel's Cookies recipe

♥ STEP 4: Scoring Rubric (1pt)

This checklist is to help you!

WHAT	MAX Score	Yes	No	YOUR Score	Comments
♣ STEP 1: The Word Problem	8				
Math Evidence	6				
Creativity	2				
♦ STEP 2: The Recipe Worksheet	14				
Task 1 with math evidence	6				
Task 2 with math evidence	6				
Task 3: Personal Reflection in complete sentences	2				
♠ STEP 3: Project Format	1				
Incorporate Academy Theme (Technology and Media)	1				
Baked the cookies!	+5 exc.				
SCIENCE: For each paragraph written, receive +3 exc. For discussing the connection between science and baking cookies: <ul style="list-style-type: none"> ▪ 3 states of matter (solid, liquid, gas). ▪ Nutrients (Carbohydrates, proteins, and lipids). ▪ Chemical bonds 	+3 exc. For each paragraph.				
♥ STEP 4: Scoring Rubric	1				
SUBTOTAL					
LATE (any time after due date is LATE!)	-10				
GRAND TOTAL	25				