

U.S. Navy Submarines

USSCLF STEAM Stars Student Worksheet

Name: _____

Date: _____

Cookie Calculations

As a submarine chef, you have been tasked with making cookies for your hungry crew. The dilemma? Your recipe is for 100 portions and you have 150 mouths on board! Put your chef hat on and get ready to do some math!

Your instructor will provide you with your recipe card. Fill in the ingredient amounts from the original recipe in the left hand column, then rewrite the recipe with the adjusted amounts for 150 portions in the column on the right. Show your work and explain your strategies.

	<u>Original Recipe Amount:</u>	<u>Adjusted Recipe Amount:</u>
FLOUR	_____	_____
BAKING SODA	_____	_____
SALT	_____	_____
SHORTENING	_____	_____
BROWN SUGAR	_____	_____
SUGAR	_____	_____
EGGS	_____	_____
WATER	_____	_____
VANILLA EXTRACT	_____	_____
CHOCOLATE CHIPS	_____	_____

Work:


Explain how you found your answers [what did you do to multiply? Divide? Reduce?]:

GO DEEPER


Additional Activities & Resources

- Search online for more recipes from the Armed Forces Recipe Service. You can find them here <https://www.marines.mil/Portals/1/Publications/MCO%20P10110.42B.pdf> or by searching online (be sure to search safe sites ending in .mil or .gov). Think of some of your favorite foods and see if they are included. Did you find them? Are the ingredients similar or different from other recipes you may find online or in cookbooks you have at home? Does anything surprise you?
- With permission, find a recipe to make at home for your family. You may use a recipe from the Armed Forces Recipe Service directory or choose any recipe you like. Look at the portion (serving) size of your recipe, and if you need to adjust it for the number of people in your home, use the strategies you learned from the Cookie Calculations activity. Make your grocery list and shop for your ingredients. Prepare the recipe according to the directions. Do you have all the necessary tools? Will you have to make any accommodations? What did you learn? How did it go?
- Common kitchen measurements and conversion chart:

KITCHEN CONVERSIONS




Spoons & Cups




Teaspoon	Tablespoon	Fluid Ounces	Cup	Pint	Quart	Gallon
3	1	$\frac{1}{2}$	$\frac{1}{16}$	$\frac{1}{32}$	-	-
6	2	1	$\frac{1}{8}$	$\frac{1}{16}$	$\frac{1}{32}$	-
12	4	2	$\frac{1}{4}$	$\frac{1}{8}$	$\frac{1}{16}$	-
18	6	3	$\frac{3}{8}$	-	-	-
24	8	4	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{8}$	$\frac{1}{32}$
36	12	6	$\frac{3}{4}$	-	-	-
48	16	8	1	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{16}$
96	32	16	2	1	$\frac{1}{2}$	$\frac{1}{8}$
-	64	32	4	2	1	$\frac{1}{4}$
-	256	128	16	8	4	1


Common Conversions




1 Gallon:
4 Quarts
8 Pints
16 Cups
128 Ounces




1 Quart:
2 Pints
4 Cups
32 Ounces




1 Pint:
2 Cups
16 Ounces



1 Cup:
16 tbsp
48 tsp
8 oz



1/2 Cup:
8 tbsp
24 tsp
4 oz



1 tbsp:
3 tsp
1/2 oz