

Cookie Fractions



This activity is a lot of fun for students because it gives them a chance to apply math to a real life situation!

Reading fractions, understanding how to convert a recipe to make it smaller or bigger, and being able to measure ingredients correctly are important skills to have both in and out of the classroom.

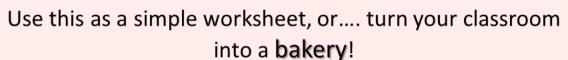
This would be a great resource to use toward the end of a unit on fractions, or even as a no-pressure formative assessment.

Students will feel successful in this activity because they will be working together with their groupmates, and there are multiple ways to solve the problems (repeated addition, multiplication, making models, etc.).



4th/5th Grade Math Skills:

- · Multiplying fractions by a whole number
- Adding fractions with like denominators
- · Using a model to represent a word problem



No oven or stove required. Just follow the steps on the next page to create a fun hands-on fractions activity!







Teacher Directions

Setup:

- Put students in **groups of 5** (if I had any groups of fewer students I would give the group a stuffed animal or imaginary friend as their extra person ©).
- Make sure you have enough supplies and ingredients for all the groups. Each group needs a bowl and spoon, and 1/2, 1/3, and 1/4 measuring cups and a teaspoon.
- For the **1/6** measurement I ask them how they could use the 1/3 cup to get an approximate measurement.
- I always put all the supplies and ingredients on my back table so students can see it all and get excited about what they're about to do, but won't be too distracted by it while they complete the math portion of the activity.

Part 1: The Math

- Pass out a copy of the worksheet to each student. Instruct students to work together with their groupmates to read the recipe and solve the problem.
- You can tell them which method(s) you would like them to use to answer the
 questions, or you can leave it open-ended and see what they come up with!
- When a group finishes, have one group member bring all of the group's worksheets to you to check. In order for them to start getting their supplies and ingredients, they need to all have the correct answers.
- Once a group successfully completes the math problems, they can start following the recipe to make enough cookies for everyone in their group.

Part 2: The Cookies

- Students in each group need to take turns coming to you to get their supplies and ingredients one item at a time.
- If a student comes to you and asks for the wrong amount of something, send them back to their group to figure out the correct amount.
- It is up to you to decide if you want to do the measuring or if you want your students to do it themselves.
- Label each cookie sheet with the group names and refrigerate the cookies
 for at least an hour. Then enjoy! ©



Cookie Fractions

Recipe

(for ONE student)



INGREDIENTS

- 1/15 cup Creamy Peanut Butter
- 1/20 cup Powdered Sugar
- 1/10 cup Quick Oats
- 1/20 cup Chocolate Chips
- 1/5 teaspoon Milk
- 1/30 cup Granola

SUPPLIES

- Bowl
- Spoon
- · Measuring Cups
- · Measuring Spoons
- · Cookie Sheet



<u>INSTRUCTIONS</u>: Add all ingredients to a bowl. Use the spoon to mix ingredients together and make a dough. Make small balls of dough and place on a cookie sheet. Refrigerate for approximately one hour.

Your Challenge: Work together to figure out how much of each ingredient you will need for each person in your group to have an equal number of cookies.

How many students are in your group?	
How many total cups of peanut butter will your group need?	
How many total cups of powdered sugar will your group need?	
How many total cups of quick oats will your group need?	
How many total cups of chocolate chips will your group need?	
How many total teaspoons of milk will your group need?	
How many total cups of granola will your group need?	
About how many total cups of cookie dough will you be making?	



Cookie Fractions

Recipe

(for ONE student)



INGREDIENTS

- 1/15 cup Sunflower Seed Butter
- 1/20 cup Powdered Sugar
- 1/10 cup Quick Oats
- 1/20 cup Chocolate Chips
- 1/5 teaspoon Milk
- 1/30 cup Granola

SUPPLIES

- Bowl
- Spoon
- · Measuring Cups
- · Measuring Spoons
- · Cookie Sheet



<u>INSTRUCTIONS</u>: Add all ingredients to a bowl. Use the spoon to mix ingredients together and make a dough. Make small balls of dough and place on a cookie sheet. Refrigerate for approximately one hour.

Your Challenge: Work together to figure out how much of each ingredient you will need for each person in your group to have an equal number of cookies.

How many students are in your group?	
• How many total cups of sunflower seed butter will your group need?	
How many total cups of powdered sugar will your group need?	
How many total cups of quick oats will your group need?	
How many total cups of chocolate chips will your group need?	
How many total teaspoons of milk will your group need?	
How many total cups of granola will your group need?	
About how many total cups of cookie dough will you be making?	

ANSWER KEY

Remember: There should be 5 people in each group for the recipe to work!

Recipe

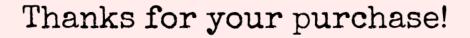
(for ONE student)

<u>INGREDIENTS</u>	<u>SUPPLIES</u>
 1/15 cup Creamy Peanut Butter 1/20 cup Powdered Sugar 1/10 cup Quick Oats 1/20 cup Chocolate Chips 1/5 teaspoon Milk 1/30 cup Granola 	• Bowl • Spoon • Measuring Cups • Measuring Spoons • Cookie Sheet

<u>INSTRUCTIONS</u>: Add all ingredients to a bowl. Use the spoon to mix ingredients together and make a dough. Make small balls of dough and place on a cookie sheet. Refrigerate for approximately one hour.

Your Challenge: Work together to figure out how much of each ingredient you will need for each person in your group to have an equal number of cookies.

How many students are in your group?	5
How many total cups of peanut butter will your group need?	1/3
How many total cups of powdered sugar will your group need?	1/4
How many total cups of quick oats will your group need?	1/2
How many total cups of chocolate chips will your group need?	1/4
How many total teaspoons of milk will your group need?	1
How many total cups of granola will your group need?	1/6
About how many total cups of cookie dough will you be making?	1 1/2



I hope your students enjoy it!



Created by:



Check out my Teachers PayTeachers Store for more fun resources!