

6th Grade Unit 3: Division of Fractions
Real World Experience
Summary

Situation and Role: You work for a company that makes food items that are sold in a grocery store. The research team has created a few new items. Your boss hands you a list of the items, how big the packages will be, and the total amount of nutritional components in each package.

Challenge: Your job is to create the nutrition label for each new item. You will need to figure out how many servings are in each package. Then, use that information to complete the nutrition label. Create a portfolio presentation (**product**) for your boss (**audience**) that shows how the new labels meet FDA guidelines.

Task 1: Divide whole numbers to create a nutrition label for the new powdered cream your company has created.

Task 2: Divide a whole number by a fraction to create a nutrition label for the new pie crust your company has created.

Task 3: Divide a mixed number by a fraction to create a nutrition label for the new ice cream your company has created.

FDA Website:

<http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfcfr/CFRSearch.cfm?fr=101.12>

Nutrition Label Maker:

<http://www.onlinelabels.com/label-generator-tools/Nutrition-label-generator.aspx>

List of New Items

<p>Powdered Cream</p> <p>Container Size: 26g</p> <p>Calories 143</p> <p>Calories from fat 78</p> <p>Total fat 13g</p> <p>Saturated fat 13g</p> <p>Trans fat 0g</p> <p>Cholesterol 0g</p> <p>Sodium 52mg</p> <p>Total Carbohydrates 13g</p> <p>Dietary Fiber 0g</p> <p>Sugars 13g</p> <p>Protein 0g</p>	<p>4-Pack Pie Crust (9 inch)</p> <p>Container Size: 4 crusts</p> <p>Calories 2560</p> <p>Calories from fat 1152</p> <p>Total fat 128g</p> <p>Saturated fat 48g</p> <p>Trans Fat 0g</p> <p>Cholesterol 96mg</p> <p>Sodium 2240mg</p> <p>Total Carbohydrates 288g</p> <p>Dietary Fiber 0g</p> <p>Sugars 32g</p> <p>Protein 32g</p>
<p>Ice Cream</p> <p>Container Size: 5 ⁵/₈ cups</p> <p>Calories 1575</p> <p>Calories from fat 787 ¹/₂</p> <p>Total fat 78 ³/₄ g</p> <p>Saturated fat 45g</p> <p>Trans Fat 0g</p> <p>Cholesterol 281 ¹/₄ mg</p> <p>Sodium 393 ³/₄ mg</p> <p>Total Carbohydrates 180g</p> <p>Dietary Fiber 0g</p> <p>Sugars 146 ¹/₄ g</p> <p>Protein 22 ¹/₂ g</p>	

Task 1:

- Find powdered cream in the list of items from your boss and the FDA regulations website. Use the information to complete the first three cells in your table.
- Find how many servings are in the package. To do this, use the numbers you found in the first step. Represent the problem using a visual fraction model, then explain in words what you did and why. Represent the problem using an equation, solve it, then explain in words what you did and why.
- Enter the number of servings in the fourth cell.
- Use the information from your boss and the number of servings per package to find the amount of nutritional components per serving. Add these to the table titled Powdered Cream.
- Use the information from your tables and the Nutrition Label Generator to create a nutrition label.
- Once your label is complete, save your label according to your teacher's directions.

Product	Amount per Package	FDA Serving Size	Servings per Container

Powdered Cream	
Serving Size Qty (FDA Serving Size)	
Serving Size	LEAVE BLANK
Serving Size Unit	
Servings Per Container	
Calories	
Calories from Fat	
Total Fat (g)	
Saturated Fat (g)	
Trans Fat (g)	
Cholesterol (mg)	
Sodium (mg)	
Total Carbohydrates (g)	
Dietary Fiber (g)	
Sugars (g)	
Protein (g)	

Represent the problem using a visual model.

[illegible]

Represent the problem using an equation. Solve.

Explain your visual model.

[illegible]

Task 2:**FDA Website:**

<http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfcr/CFRSearch.cfm?fr=101.12>

Nutrition Label Maker:

<http://www.onlinelabels.com/label-generator-tools/Nutrition-label-generator.aspx>

- Find 4-pack pie crust in the list of items from your boss and the FDA regulations website. Use the information to complete the first three cells in your table.
- Find how many servings are in the package. To do this, use the numbers you found in the first step. Represent the problem using a visual fraction model, then explain in words what you did and why. Represent the problem using an equation, solve it, then explain in words what you did and why.
- Enter the number of servings in the fourth cell.
- Use the information from your boss and the number of servings per package to find the amount of nutritional components per serving. Add these to the table titled 4-Pack 9 inch Pie Crust.
- Use the information from your tables and the Nutrition Label Generator to create a nutrition label.
- Once your label is complete, save your label according to your teacher's directions.

Product	Amount per Package	FDA Serving Size	Servings per Container

4-Pack Pie Crust	
Serving Size Qty (FDA Serving Size)	
Serving Size	LEAVE BLANK
Serving Size Unit	
Servings Per Container	
Calories	
Calories from Fat	
Total Fat (g)	
Saturated Fat (g)	
Trans Fat (g)	
Cholesterol (mg)	
Sodium (mg)	
Total Carbohydrates (g)	
Dietary Fiber (g)	
Sugars (g)	
Protein (g)	

Enter this amount as a decimal in the label generator

Represent the problem using a visual model.

Explain your visual model.

This image shows a single sheet of white paper with horizontal blue ruling lines. The lines are evenly spaced and run across the width of the page. There is a margin at the top, followed by several rows of writing space. The bottom of the page has a small section with more lines, possibly for a footer or additional notes. The paper appears to be from a notebook or a standard sheet of stationery.

Represent the problem using an equation. Solve.

Explain your visual model.

[illegible]

Task 3:

- Find ice cream in the list of items from your boss and the FDA regulations website. Use the information to complete the first three cells in your table.
- Find how many servings are in the package. To do this, use the numbers you found in the first step. Represent the problem using a visual fraction model, then explain in words what you did and why. Represent the problem using an equation, solve it, then explain in words what you did and why.
- Enter the number of servings in the fourth cell.
- Use the information from your boss and the number of servings per package to find the amount of nutritional components per serving. Add these to the table titled Ice Cream.
- Use the information from your tables and the Nutrition Label Generator to create a nutrition label.
- Once your label is complete, save your label according to your teacher's directions.

Product	Amount per Package	FDA Serving Size	Servings per Container

Ice Cream	
Serving Size Qty (FDA Serving Size)	
Serving Size	LEAVE BLANK
Serving Size Unit	
Servings Per Container	
Calories	
Calories from Fat	
Total Fat (g)	
Saturated Fat (g)	
Trans Fat (g)	
Cholesterol (mg)	
Sodium (mg)	
Total Carbohydrates (g)	
Dietary Fiber (g)	
Sugars (g)	
Protein (g)	

Represent the problem using a visual model.

[illegible]

Represent the problem using an equation. Solve.

Explain how you set up and solved your equation.
