

Lesson Title: Spreadsheets and recipes
Unit: Proportions
Grade Level: 6th grade
Estimated time requirement: 45 minutes
Summary (25-50 words): Students will use a spreadsheet to modify the ingredients needed in a recipe dependent upon the number of servings needed.
Objectives:
<ul style="list-style-type: none"> • Students use spreadsheets to solve problems involving proportions.
Texas Essential Knowledge and Skills:
1B, 3B, 3C, 4A, 11D, 12A
Assessment:
<ul style="list-style-type: none"> • Successful completion of spreadsheet. • Questions answered.
Materials:
<ul style="list-style-type: none"> • Computer • Spreadsheet software • Recipe Handout • TI-73 calculator • Questions
Resources:
<ul style="list-style-type: none"> • Text: <i>Glencoe Mathematics Applications and Connections Course 1</i> (page 321)
Prior Knowledge/Skills: basic computer skills, proportions
Procedures:
Students will work with a partner to create a spreadsheet used to modify the amounts of each ingredient in a recipe. The student handout explains how to set up the formulas within the spreadsheet. Once the formulas are set up, the students can copy and paste the recipe twice on the spreadsheet. Then the number of people the recipe serves can then be changed and the ingredients will change proportionally. After completing the spreadsheet, students can use the $F \leftrightarrow D$ to change the decimals to fractions and then use the SIMP key to reduce the fractions to lowest terms.
Modifications:
<ul style="list-style-type: none"> • Work in partners. (Groups can be set up to help all groups be successful)
Technology Infusion:
<ul style="list-style-type: none"> • Use EXCEL spreadsheets. • Use TI-73 calculator to reduce fractions to lowest terms. • Internet research.
Cultural Connections: As an extension, students will use the internet to research the types of food served at various culturally based celebrations. (ex: Carnaval, Chinese New Year, Cinco de Mayo, Fourth of July, Juneteenth, Hanukkah, Mardi Gras, St. Patrick's Day, Ramadan, Rosh Hashanah).
Family Connection: Math Journal- Have students write a paragraph about how a spreadsheet could be helpful to their parents.

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