**Little Read 2013: *Rules* by Cynthia Lord**

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| **Title: Bake A Chocolate Cake** |
| **Content Area:**<br>**Mathematics** |
| **NC SCOS or Common Core Objective(s):**<br><br>**5.NF.1 Use equivalent fractions as a strategy to add and subtract fractions**<br>**5.NF.3 Apply and extend previous understandings of multiplication and division to multiply and divide fractions**<br>**5.MD.1 Convert like measurement units within a given measurement system**<br>**5.MD.2 Represent and interpret data**<br>**5.OA.2 Write and interpret numerical expressions** |
| **Rationale/Relationship to Text:**<br><br>**In the book Rules, Catherine was invited to Jason's birthday party. David loves chocolate cake. In the book it didn't specify if the cake was baked by Jason's Mom or was store bought. A cake must be baked whether it is store bought or homemade.** |
| **Instructions/Procedures:**<br><br>**1. Print out any of the available cake recipes**<br>**2. Divide your students into groups of 4 or less**<br>**3. Give each group a copy of a recipe with the word problems document. (attached)**<br>**4. Students work on the problems**<br>**5. Students create a bar graph to answer question number 4 on the worksheet. Directions are on the worksheet, but have students list as many ingredients as you feel appropriate based on ability of the students.** |
| **Materials:**<br><br>**Calculators** |

Pencils
Paper
Markers
crayons
colored pencils
poster paper
worksheet
ruler

**References:**

**Chocolate Cake Recipe**
http://allrecipes.com/recipe/chocolate-sheet-cake-ii/

http://allrecipes.com/recipe/ggs-chocolate-sheet-cake/

http://www.food.com/recipe/homemade-chocolate-sheet-cake-58134

http://busycooks.about.com/od/cakerecipes/r/chocolatecake.htm

**Name**_____

## BAKING A CAKE CHART

| Supplies Needed to Bake One Cake | Supplies Needed to Bake Five Cakes |
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**CHOCOLATE CAKE PROBLEMS**

Directions: Solve the following problems using the recipe. For question number 4b, you will make two bar graphs.

Problems for solving:

1. Jake is a baker at Coco's Bakery. Hickory's City Hall is having a birthday party on Sunday to celebrate the Mayor's birthday. They had asked Coco's Bakery to make the cakes. There will be 350 people coming to the meeting on Sunday. If one chocolate cake serves 20 people, how many cakes will Jake need to bake to serve 350 people?

2. All cakes must have icing. How much icing does Jake have to make to cover two cakes?

3. If one chocolate cake takes 15 minutes to mix all the ingredients together and 40 minutes to bake in the oven, how long will it take to bake all the cake that is needed for the meeting?

4 a. How much ingredients does Jake needs to bake 5 cakes? Use the recipe to help you find the answer for each ingredient.

How many cups of flour will Jake need?
How many cups of sugar?
How many cups of buttermilk?
How many cups of water?
How many cups of vegetable oil?

How many teaspoon of vanilla extract?
How many eggs?
How many teaspoons of baking soda?
How many teaspoons of unsweetened cocoa powder?
How many tablespoons of butter?

4 b. Now that you have the answers to question 4a create two bar graphs. One bar graph is for all the ingredients that is measured by cups. One bar graph is for the ingredients that is measured by teaspoons. ***Do not graph eggs and butter. You will need paper, crayons, markers, colored pencils, and poster paper.***