### **GRETCHEN SEIBEL**

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# Mathematics 3<sup>rd</sup> Grade Equal Shares (Fractions) Lesson Plan

#### 1. **Goal** –

The learning goal for this lesson is to understand that there are several possibilities for making equal shares. Sometimes there are more people than objects to be shared, sometimes more objects than people and sometimes there are the exactly the same number. Students will learn to divide a whole into the same number of parts as there are people and then distribute one part until all the parts are gone.

# 2. The **national and/or state standard** addressed is Mathematics Common Core State Standard:

A. 3.NF.1: Understand a fraction 1/b as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a parts of size 1/b.

# 3. Objective(s) -

- A. During this lesson, students will be able to divide models to make equal shares.
- B. Students will be able to explain and discuss the process used to divide a model into equal shares.

#### 4. Connections –

A. This lesson builds on previous lessons by having students divide a whole into equal shares. Students use their knowledge of equal parts to determine what an equal share of a whole would be. Solving problems that relate to real-world applications, such as sharing food, also help students develop a connection of why we need to divide into equal shares. This lesson scaffolds student learning toward the next lesson by allowing students to begin understanding how to share equally. In future lessons, students will understand that they might have to deal with mixed numbers when sharing. This lesson gives students a solid foundation in partitioning.

#### 5. Instructional Activities

*Introduction:* Ask students what it means to have equal parts. Draw a few examples of objects divided into parts, asking if they are equal and the names of the parts.

Read <u>And Then The Doorbell Rang</u> by Pat Hutchins. (If the book is not available, watch the video of the text being read). After reading/watching discuss how many cookies each person would get if there are 2, 4, 6, 12 and 24 people. Students should recognize that with more people, the number of cookies decreases.

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*Activity:* Show students some pizzas. Give them a few situations in which the students need to figure out how much each person would give if they had to share the following:

- 4 friends and 2 pizzas (each get 2 fourths, or 1 half)
- 6 friends and 3 pizzas (each get 3 sixths or 1 half)
- 2 friends and 3 pizzas (each get 3 halves or 1 whole and a half)

With each situation, have students try to identify if there is more than one way to share the pizzas.

*Book work:* Together as a class, go through pgs 325-326. With each problem, students should be able to divide the whole into equal shares more than one way.

Have students complete pg 327 on their own. Those students who are struggling readers, may require the text to be read to them, by either the teacher or a partner. Students may also choose to complete their work on a personal whiteboard. After they have completed the problems, have them discuss with a partner or their group to check over their answers. This allows students to share their answers in a non-threatening environment and work with peers. Call on students to share with the whole class.

Complete the problem solving problems on pg 328 as a class, calling on students to read and share what they think needs to be done to solve the problem.

Exit slip: In math packet, students should complete the Exit Slip for Lesson 8.2, where they must share 3 pies equally between 4 people.

#### 6. Instructional resources and materials –

Go Math 2015 Third Grade Workbook (pages 325-328)

Go Math 2015 Third Grade Standards Practice Book (pages P141-P142)

Vocabulary Word Worksheet (Define, Draw a Picture, Give an example)

Pizzas for activity

Exit Slip

Projector and Elmo to display workbook pages on board.

And Then The Doorbell Rang Reading on Youtube.

(https://www.youtube.com/watch?v=BXtu90JnDkM)

#### 7. Assessment–

The formal assessment for this lesson will be problems relating to equal shares of a whole on the Mid Chapter Checkpoint and Chapter 8 Test.

The formal formative assessment for this lesson will be an exit slip that students will complete to share three pies equally among four people. Students will need to provide an illustration to demonstrate their thinking.

While students are completing workbook pages, the teacher will walk around to do a quick check to see if students are correctly solving the problems as an informal assessment.