

## Title: The King's Wedding Feast: Fractions- Parts of a Whole

**Grade level/course:** 4<sup>th</sup> Grade Mathematics

**Time Frame:** 1 Day (Continuation)/ 1 hour period

### Content Objectives:

- Students will identify and relate pictorial representations to fractions
- Students will use problem solving strategies
- Students will compare fractions
- CMT Correlations: 2a, 3a, 25a;

### Language Objectives:

- Students will use comparison vocabulary (e.g. greater than, less than) to discuss the value of fractions
- Students will work individually, in small groups, and with the whole group to use mathematical vocabulary appropriately to defend their problem solving (language frames)
- Essential Vocabulary: greater than, less than, numerator, denominator, part, whole, equivalent, fraction, cup

### Higher Order Thinking:

- There are multiple answers to this problem.
- Students will work independently and in groups to determine independent values of fractions and then their values in relation to one another.
- Justification piece: Why did you choose to use that particular amount...? How did you show the total number of ingredients? How did you show the fraction of \_\_\_\_ in your mix? Is there any other way you could solve ...? Do any of the amounts look similar (equivalent)...? What do you notice about fractions whose numerator is equal to the denominator? Unit fraction discussion during monitoring to discuss method for ordering (i.e. larger denominator equals the smaller fraction) (Think Deeply and Hint Cards)
- Critical Component: Students will be using recipes from their homes to complete the second part of the lesson (if students don't bring them there are recipe cards provided in this lesson)
- Connection between math and their experience (Theme: Real "Hartford")

### Materials:

- In H.O.T. kit: (see KingFractionHandouts for file for first few activity sheets) Initial Question, "You're Invited to the King's Feast", Differentiated Question with cup broken up into equal parts, Step 2 with blank measuring cups, Recipes, Think Deeply (KingFractionThinkDeeply1 file), Think/ Hint Cards (KingFractionThink-Hint file), Exit Slip (KingFractionExitSlip file)
- Skittles, M&Ms, Goldfish, Marshmallows, Froot loops
- Measuring cups (make them and make sure they are marked with  $\frac{1}{2}$ ,  $\frac{1}{3}$ ,  $\frac{1}{4}$ ,  $\frac{1}{5}$ ,  $\frac{1}{6}$ )

**Initiation:** Read Aloud: "The King's Equal" by Katherine Paterson. Explain that we have been invited to attend the wedding feast. Use the initial question sheet. Model how to make a trail mix. "I have all of these ingredients (discuss ingredients above), these are my favorites. I want my mix to have 5 parts. How would I show this on my organizer? ..." Allow students to use crayons to complete organizer as they represent the different ingredients. (There is a leveled organizer for struggling students)

### Procedures:

1. At check in present food for trail mix to student work groups. Allow them to use measuring cups to make their mix!
2. Next, students can work with their own recipes and use blank measuring cups to represent the ingredient quantities.
3. Students should be comparing the recipes and the fractional representations. Monitor students

and ask students questions that promote understanding equivalence (i.e. that fraction is  $\frac{3}{6}$  it looks like about how much of that measuring cup? I wonder if those fractions are equal? What is the relationship between the numerator and the denominator?) Also, students should be able to justify why they chose to break up different cups in the many different ways, using the new vocabulary.

4. Students who complete the activity or who need enrichment can complete the Think Deeply. There are Think and Hint cards provided.

**Closure:** Students will reflect in their student outline sheets- “What have you learned from completing this problem? Please discuss problem solving strategies, mathematical content, mathematical vocabulary, or real life connections that you struggled with but now may feel more comfortable with.”  
Group Share/ Exit Slip

**Student Work Products:**

- Problem Sheets/ Trail Mix
- Exit Slip

**Assessment:** Monitor Notes, Individual Work Packs, Exit Slips

**Differentiation:** Leveled Organizers, Multiple Solutions, Think Deeply Extension, Think/ Hint Cards