Problem Type

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| **Standards** | **Problem Type** | **Example Problem** | **Number Sentence** | **Focus** | **Discussion Points** |
| 5. NF. 15. NF. 2 | **Equal Sharing** | *Pg. 30 H*. At the school carnival, Daniel won 6 chocolate cream pies. He plans to share them with his 7 friends. If all 8 people get to the same amount of pie, how much pie can each person have? | *Possible outcomes*1/2+1/4½+2/8 |  | So how much pie do they get?How could we combine these fractions? |
| 5. NF. 15. NF. 25. NF. 4b (area)5. NF. 6\*5. NF. 7c Whole # and unit fractions | **Multiple Groups** | Multiplication: pg. 66 *F*. Bernice used 2/3 yard of ribbon for each bow she makes. How much ribbon would she use if she made 7 bows?Area: Find the area of a flower bed with the width of 3 yards and a length 2/3 of a yard.Measurement division: pg. 66 *J*. Emma drinks 2/3 cup of water for every mild she hikes. Her water bottle holds 4 cups of water. How many miles can she hike before her water runs out.5. NF. 7c How much chocolate will each person get if 3 people share ½ Ib of chocolate equally?How many 1/3- cup servings are in 2 cups of raisins? | F. 7 X 2/3= 3 X 2/3=J. \_\_ X 2/3 = 4\* If the focus is to meet 5. NF. 7c you will want the amount per group to be a **unit fraction**.½ ÷ 3=2÷1/3= | Multiplication problems include whole #s and mixed # with fractions (not just unit fractions)*This is not fraction times a fraction* | Review multiplication of fractions…focus on mathematical practices and number notation. Discuss why the product is smaller yet we are multiplying. (5. NF. 5b) Could continue conversations through # talksPull out visual models and equations |

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| **Standards** | **Problem Type** | **Example Problem** | **Number Sentence**Depending on which unit the students chose. | **Focus** | **Discussion Points** |
| 5. NF. 15. NF. 2 | **Adding and Subtracting fractions** | Introduction: pg. 180 Aisha has 25 pennies. Imani has 2 dimes. How much money do they have altogether?*A*.Lupita has 2 5/6 packages of clay. She used 1/3 packages to make a model of a mountain. How much clad does Lupita have left? (2, ¾) (1 ½, ¾) (2 1/6, ½) (3 1/8, ½) (2 2/3, 5/6)Additions and Subtraction Equations pg. 210-211 | 25 +202 ½ + 2Subtractionpossible*Fraction times a fraction is the focus* | Hope for students to chose a common unit. # talks: 1- 1/6= 2-1/9=In context using story problemsEquations without context using naked number sentences | Pg. 180Pg. 183 visual and relational thinkingWhat common unit (denominator) could help us solve this problem-combining fractions and developing an understanding of how to group fractions to make whole-understanding of equivalent fractions |
| 5. NF. 4a5. NF. 4b5. NF. 65. NF. 7a5. NF. 7c | **Partial Groups** | Multiplication: I have \_\_bags of candy. A bag of candy weighs \_\_ pound. How many pounds of candy do I have? (5, 2) (2 ½, ½) (3/4, ½)*Pg. 212 F*. Myra was watching a video online that was 4 minutes long. The progress bar showed that she had watched 2/3 of the video. How many minutes had she watched? | 5 x 22 ½ X ½¾ of ½2/3 X 4= | These problems involve part of parts-it may be helpful to begin with whole # sets so students to able the # number of groups and the amount per groupMany students will want to use the communicative property here…it is important for students to understand 2/3 X 4 versus 4 X 2/3. | How does the way you solve the first number set relate to the way you solve the second and third number set?How important is the denominator when you are taking a part of a part?5. NF. 4a |
| **Standards** | **Problem Type** | **Example Problem** | **Number Sentence** | **Focus** | **Discussion Points** |
|  | **Partial Groups (continued)** | Measurement Division: Pg. 212Modified B. It takes 1/8 cup of seeds to fill a bird feeder. How many birdfeeders can you fill with \_\_\_cups of seeds?4 3 ¼ 5 ½ Partitive division: pg 213Modify A. Mom used ½ pound of cheese to make 3 pans of mac and cheese. How much cheese did she need for each pan?Multiplication and division equations without context using naked number sentences\* 2 additional area/array multiplication and division problems are on page 214 | 4÷1/8= \_\_\_X 1/8 = 4 ½ ÷3= 3 X \_\_=1/2Pg. 214-216 | Here we are focusing on the division of a unit fraction Whole numbers and unit fractions onlyOn the division- our standards focus on unit fraction and whole numbers only | 5. NF. 7(fifth grade standards only call for whole number and unit fractions…the third number set is leading students toward the 6th grade standard/progression.) |