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| Teachers: Ms. Harty, Ms. Phillips, and Ms. Moore |
| **Date: 4/28/16** |
| **Subject / grade level: 5th Grade Math** |
| **Materials:**   1. Cheerios 2. Pretzels 3. Goldfish 4. Marshmallows 5. ½, 1 cup measuring cups (one for each group of four students) 6. Small plastic baggies 7. One bowl per group 8. Student worksheet |
| TEKS: 6.4B   |  | | --- | | (4)  Proportionality. The student applies mathematical process standards to develop an understanding of proportional relationships in problem situations. The student is expected to:  (B)  apply qualitative and quantitative reasoning to solve prediction and comparison of real-world problems involving ratios and rates; | |
| **ENGAGEMENT: Ratey, the Math Cat (5 minutes)**   1. Tell students that they are going to watch a short video, “Ratey, the Math Cat.” Today’s lesson is going to be about exploring relationships between different ingredients in a recipe, Shamrock Snack Mix.. 2. After showing the video, ask the students the question, “What kind of relationships did Ratey explore?” |
| **EXPLORATION: (30 minutes)**   1. Today we are making a simple recipe, Scholars Snack Mix 2. Pass out student worksheet. 3. Students will first make the snack mix. 4. The students then order the ingredients from the least to greatest. 5. The students determine the total amount of mix one batch makes. 6. The students will then answer the following questions: What is the relationship between the amount of goldfish and marshmallows? 7. What is the relationship between the amount of pretzels and marshmallows? 8. What is the relationship between the amount of marshmallows and the total amount of Shamrock Snack Mix? |
| **EXPLAIN: Writing Ratios (15 minutes)**   1. **The SMARTBOARD PP** will be used to explain to the students the meaning of the word ratio. 2. Students will learn the three ways to write a ratio. 3. The students will be shown how to write a ratio as a fraction, being careful to label the numerator and denominator. |
| **ELABORATION: Making Snack Mix for the Class (15 minutes)**  1. The whole class will together complete the first ratio in order to make 5 batches.  2. Students will complete the next three ratios independently.  3. Students will then calculate the total amount of snack mix to serve 20 students.. |
| **EVALUATION: Questions and Eat (20 minutes)**  1) Students will answer multiple choice questions applying what they learned today about ratios.  2) Students will divide up their snack mix and eat! |