**Fractional Parts and Their Relationship to Equivalent Fractions**

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| **Standards to Measure** | **Mathematical Practices** |
| **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. NF.3** Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.  a. Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line.  b. Recognize and generate simple equivalent fractions. Explain why the fractions are equivalent, by using a visual fraction model. | 2. Reason abstractly and quantitatively.  4. Model with mathematics.  7. Look for and make use of structure. |

**Student Objective:** I can identify fractional parts and find equivalent fractions using models.

**Materials:**

Smart Notebook “Fractional Parts and Their Relationship to Equivalent Fractions”

White Boards

Equal Fractions Match Game

Color Tiles

Pencils

*(The entire lesson is within the Smartboard presentation.)*

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| G  **Engage Students with the Goal** | State and Rate  Objective: “I can identify fractional parts and find equivalent fractions using models.”  Engage students in the goal by having them rate themselves (1, 2, 3, 4). | Setting Objectives and Providing Feedback |
| A  **Access Prior Knowledge** | Show pictures of things that make students think of fractions- ex. Pizza, cake, candy bar, tiles, flowers, etc.    What do all of these things have in common? | Nonlinguistic Representation  Identifying Similarities and Differences |
| N  **New Information** | **Fractional Parts:**  Discuss what a fractions/fractional parts are and have students pair-share as you go through each model depicting fractional parts. Encourage students to share more than one way to name fractional parts (when appropriate) to lead into a discussion about equivalent fractions.    **Equivalent Fractions:**  Ask students “Are these fractions equal?”  Have them discuss in groups and share their reasoning with the class. Discuss the meaning of the word “equivalent.”  Use the models to ask students about each set of equivalent fractions. Ask students to come up and manipulate the pieces themselves to see that certain parts are equivalent to other parts. As you ask each question, have students record their responses on white boards. | Similarities and Differences  Nonlinguistic Representation  Cues, Questions, and Advance Organizers |
| A  **Application** | Divide the class into partners, then into two groups. Half of the class will work with the “Fraction Bars Activity”, while the other half works on the “Equal Fractions Match Game.” Then, they will switch.  **Fraction Bars Activity:**  Give students a specific number and color of tiles in a bag. Have them work to find the fractional amounts of each color they have in relation to the whole. They will then create clues about their fraction bars and switch papers with another group to solve the mystery fraction bar. Encourage them to come up with equivalent fractions to challenge the partners that they switch bars with.  **Equal Fractions Match Game:**  Students will play the game according to the directions. They will be working to find matching equivalent fraction models. Have them play with the cards face up the first time and face down (similar to Memory) the second time.  Walk around asking students to explain why the fractions they chose are equivalent. | Cooperative Learning  Providing Feedback  Generating and Testing Hypotheses  Practice and Homework |
| G  **Revisit the Goal** | State and Rate  Objective: “I can identify fractional parts and find equivalent fractions using models.”  Engage students in the goal by having them rate themselves (1, 2, 3, 4).  Have students write down a statement of learning and share with a partner. | Setting Objectives and Providing Feedback |