**LESSON PLAN FORMAT**

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1. **LESSON FOUNDATION**

**Lesson Title: Comparing Fractions and Beginning Mixed Numbers Lesson Number w/in Unit: 9**

**Unit Title: Fractions**

**Grade Level(s): 4th Grade Time Allotted: 90 Min**

**Subject Area(s)/Subject Content Explanation: Mathematics**

**Standard(s)/Anchors:**

**M04.A-F:** Numbers and Operations - Fractions

**Assessment Anchor M04.A-F.1:** Extend understanding of fraction equivalence and ordering.

**M04.A-F.1.1:** Find equivalencies and compare fractions.

**M04.A-F.1.1.2:** Compare two fractions with different numerators and different denominators (denominators limited to 2,3,4,5,6,8,10,12, and 100) using the symbols >,=,< and justify the conclusions.

**Assessment Anchor M04.A-F.2.1:** Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.

**A04.A-F.2.1:** Solve problems involving fractions and whole numbers (straight computation or word problems.

**M04.A-F.2.1.2:** Decompose a fraction or mixed number into a sum of fractions with the same denominators (denominators limited to 2,3,4,5,6,8,10,12, and 100), recording the decomposition by an equation. Justify the decompositions (e.g., by using a visual fraction model).

**Essential Question(s):**

1. How can different fractions name the same amount?

**Instructional Objective(s):**

1. Given practice problems, 1-7 in the “My Math” textbook onpage 539, students will identify (write) the mixed number based on the model with no more than two errors.
2. Given practice problems, 8-11 in the “My Math textbook on page 539, students will decompose and write each mixed number as the sum of whole numbers with no more than two errors.

**Formative Assessment:**

1. I will be walking around answering individual student questions during their independent practice time.
2. Students will collaborate to check answers for textbook work.
3. Students will complete a *Splash Math* quiz at the end of the lesson.

**Summative Assessment:**

1. Quiz/Test will be given at the end of the unit of study.
2. **LESSON BODY**

**INTRODUCTION: (20 Min)**

1. Students will come into the classroom and promptly begin completing the “Comparing Fractions” worksheet. This worksheet will be collected for a grade and to observe individual student progress.
2. Upon completion of the graded sheet, students will complete their morning routine. This routine consists of their *Math Maintenance* worksheet, check my progress in their *My Math* text on page 529.
3. *Anticipatory Set*: On the board, I will show students a photo of one and a half pizzas. Students will think-pair-share to create a way to describe the amount of pizza.
   1. Possible answers include:
      1. One and a Half
      2. 1 + ½
      3. 1 ½
   2. Students will start to recognize that fractions can be represented as more than one whole.

**TEACHING PROCEDURES:**

1. Slide One:
   1. I will ask students the questions:
      1. What do whole numbers represent?
      2. What are fractions used to represent compared to whole numbers?
      3. Do you think we can use both numbers at the same time? What situations would we use both?
         1. Example answer: “Yes, if we need one and a part of an apple to make a dessert.”
2. Slide Two:
   1. Work through the *Investigate the Math* Slide with students.
3. Slide Three:
   1. Work through the second *Investigate the Math* Slide.
   2. Ask students what they believe would happen if the numerator became larger than the denominator when finding the sum of the parts of the pies.
      1. Example answer: “The fractions of pies could be combined to make one whole pie and maybe more!”
4. **Guided Practice -** Slide Four and Five:
   1. I will work through these two slides as students follow along in their book on pages 537-538.
      1. “What is the word *decompose*? What does it mean and how do we do it?”
5. Students will talk with their neighbors about the *Talk Math* question written in their book: “How are fractions and mixed numbers alike? How are they different?”
   1. Two students will share their answers with the class. Sample answer:
      1. “Mixed numbers show fractions that are greater than one whole. Fractions represent less than a whole. They both represent parts of a whole.”
6. **Independent Practice -** Students will work on textbook practice problems 2-11 on their own. Upon completion, they will check their answers with their shoulder partner. If students have an answer that does not match, they should raise their hands and ask for help. We will review all of these problems as a class with students coming to the board to write their answers.
7. **Independent Practice -** Students will then work on problems 12-16. We will review the solutions to these problems upon completion.

**CLOSURE:**

1. Students will practice on Splash Learn under the *Mixed Numbers* section to check for overall student understanding of the lesson.
2. If students complete Splash Learn they will work on the equivalent fractions and comparing fractions sections of StudyIsland.com
3. Students will complete page 541-542 in their textbook for homework.

1. **LESSON ESSENTIALS**

**DIFFERENTIATED LEARNING ACTIVITIES:**

1. Students will have fraction circles and tiles available to solve problems if they need them.
2. Students will be allowed to choose where they work within the classroom. Options include their desk, the carpet in the back of the room, and the back table.
3. Students will be given an alternative worksheet if they need extra practice or wish to extend their thinking.

**INSTRUCTIONAL RESOURCES, MATERIALS, AND TECHNOLOGY:**

1. Computer
2. Smartboard
3. PowerPoint Slides
4. My Math Textbook
5. Student Chromebooks
6. **POST-LESSON REFLECTION:**

**ANALYSIS OF STUDENT LEARNING**:

1. How could I have approached this lesson differently?
2. Did students learn what was expected of them?

**ANALYSIS OF TEACHING: Include modifications/recommendations of current instruction for future application on 1) planning and preparation, 2) classroom environment, 3) instruction, and 4) professional responsibilities as related to instructional objectives or standards.**

\*Approved by COE Assessment Committee 5-8-13