Unit 6, Week 2: Week of 1/4/19 Kathy Caraway/RRISD

Weekly Lessons/Overview and Goals:

Focus TEKS:

- 4.3A represent a fraction a/b as a sum of fractions 1/b, where a and b are whole numbers and b > 0, including when a > b; – S RC1
- 4.3B decompose a fraction in more than one way into a sum of fractions with the same denominator using concrete and pictorial models and recording results with symbolic representations; – S RC1
- 4.3G represent fractions and decimals to the tenths or hundredths as distances from zero on a number line. – S RC1 [include measuring lengths to the nearest half, fourth, eighth, and tenth of a unit, as appropriate]
- 4.9A represent data on a frequency table, dot plot, or stem-and-leaf plot marked with whole numbers and fractions; – R RC4

<u>Equivalent Fractions</u>

4.3C determine if two given fractions are equivalent using a variety of methods; – S RC1
Compare Fractions with Like and Unlike Denominators

4.3D compare two fractions with different numerators and different denominators and represent the comparison using the symbols >, =, or <; – R RC1
Add and Subtract Fractions with Like Denominators

4.3E represent and solve addition and subtraction of fractions with equal denominators using objects and pictorial models that build to the number line and properties of operations; – R RC2
4.3F evaluate the reasonableness of sums and differences of fractions using benchmark fractions 0, 1/4, 1/2, 3/4, and 1, referring to the same whole; and – S RC2
Problem Solving (Some of the types of problems students should be solving during this unit)

4.8C solve problems that deal with measurements of length, intervals of time, liquid volumes, mass, and money using addition, subtraction, multiplication, or division as appropriate. – R RC3 [word problems using measurement contexts, focus on fractions in this unit, addition and subtraction only in this unit]
4.9B solve one- and two-step [addition and subtraction] problems using data in whole number, decimal, and fraction form in a frequency table, dot plot, or stem-and-leaf plot. – S RC4

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Vocabulary		
• add / sumar • addition / suma o adición • **benchmark fractions / fracción de referencia** • compare / comparar • comparison symbols (<, >, =) / símbolos de comparación • compose / componer	• denominator / denominador • difference / diferencia • equal parts / partes iguales • equal shares / partes iguales • equation / ecuación • equivalent / equivalente • **equivalent fractions**	• mixed number / número mixto • number line / recta numérica • numerator / numerador • one whole / un entero • representation / representación • sum / suma • **unit fraction / fracción unitaria** • whole number

Monday: Day 5- Representing Fractions

Fraction Talk 04

- Follow the same routine as yesterday using this new image.
- Then move on to today's lesson:

Stepping Stones Module 3, Lesson 11 Reviewing Equivalent Fractions

Step 2

- Facilitate as written.

Step 3

- Use this slide of a fraction chart since we do not have the Number Case. (Note: If you want to be able to shade parts as you work through the discussion, you will need to make a copy of the file and then you'll have editing rights. Alternatively, you could print the image and shade it under a document camera.)
- After the Step In Discussion, do the problems from page 1 of the Student Journal together, if needed. Then let students complete page 2 on their own.

Step 4

- Facilitate as written.

Tuesday: Day 6 Representing Fractions

Fraction Talk 05

- Follow the same routine as yesterday using this new image.
- Then move on to today's lesson:

Stepping Stones, Module 6, Lesson 7 - Exploring Whole Numbers and Common Fractions

Step 2

- Facilitate as written. It might seem like an odd skill, but students will be using multiplication and division as they relate whole numbers and their equivalent fractions.

Step 3

- Facilitate as written.
- After the Step In Discussion, let students work on page 2 of the Student Journal. The Step Ahead may be very challenging for students. Ask them, "What did we learn about today? Think about how that could help you answer these questions."
- As students finish, they can continue working on the Light Gray - Dark Gray problem started yesterday. Once students feel like they have an answer, they should focus on planning how to present their solution to convince others their answers are correct.

Step 4

- Facilitate bullet 1 as written.
- Talk about the Step Ahead, but don't ask the question shown in bullet 2. There's no reason students should even be thinking about common denominators.

Wednesday: Day 7 Representing Fractions

Fraction Talk 06

- Follow the same routine as yesterday using this new image.
- Then move on to today's lesson:

Stepping Stones, Module 6, Lesson 9 - Exploring Equivalence Between Mixed Numbers and Improper Fractions

Step 2

- Facilitate as written.

Step 3

- Facilitate as written.

- It might seem strange to be analyzing 2 7/5, but this is pre-teaching students how to handle sums and differences of mixed numbers later on in the unit. Students could very well end up with a sum of 2 7/5 and have to think about how to interpret it.
- After the Step In Discussion, let students work on page 2 of the Student Journal. The comparisons all involve the same denominator which is a skill from 3rd grade.
- As students finish, they can continue working on the Light Gray - Dark Gray problem started yesterday. Once students feel like they have an answer, they should focus on planning how to present their solution to convince others their answers are correct.

Step 4

- Facilitate as written. This line of questioning is to help students realize they can be flexible in how they think about mixed numbers and improper fractions. This will serve them well when computing and comparing fractions.

Thursday: Day 8 Representing Fractions

***Beyond Invert and Multiply*, Activity 1.3, Fractions Greater Than 1**, pages 15-19 (Note: This is not the book *Beyond Pizzas & Pies* but it is by the same author and it is available in your campus library.)

- Reproducibles - I modified the number lines so that students only have to cut and tape two number lines together to make a 0 to 4 number line. The original version had students cutting and taping 4 separate number lines together.

At the end of the lesson, bring students together to discuss solutions to Light Gray - Dark Gray.

Friday: Day 9 Addition and Subtraction

Which One Doesn't Belong?

Stepping Stones, Module 5, Lesson 6 - Adding Common Fractions (Area Model)

Step 2

- Facilitate as written.

Step 3

- Facilitate as written.
- After the Step In Discussion, let students work on page 2 of the Student Journal.

Step 4

- Facilitate as written.

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Differentiation: A variety of activities (application, concrete, and kinesthetic) will be incorporated into both days to engage all learners. Kagan Structures

ARRC Unit 6 Suggested Lesson Plan