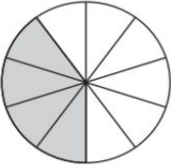


Building Background/SIOP Lesson Plan Exemplar

RED: Revisions or Additions from Previous Plans

Component	Monday
Standard	4.NFB.3b Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation. Justify decompositions, e.g., by using a visual fraction model. Examples: $\frac{3}{8} = \frac{1}{8} + \frac{1}{8} + \frac{1}{8}$; $\frac{3}{8} = \frac{1}{8} + \frac{2}{8}$; $2\frac{1}{8} = 1 + 1 + \frac{1}{8} = \frac{8}{8} + \frac{8}{8} + \frac{1}{8}$. (4.NF footnote: Grade 4 expectations in this domain are limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12 and 100.) 4.NFB.4a Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation. Justify decompositions, e.g., by using a visual fraction model. Examples: $\frac{3}{8} = \frac{1}{8} + \frac{1}{8} + \frac{1}{8}$; $\frac{3}{8} = \frac{1}{8} + \frac{2}{8}$; $2\frac{1}{8} = 1 + 1 + \frac{1}{8} = \frac{8}{8} + \frac{8}{8} + \frac{1}{8}$. (4.NF footnote: Grade 4 expectations in this domain are limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12 and 100.)
Aspect of Rigor	Conceptual
Content Objective	CO: SWBAT Deconstruct fractions as a sum of unit fractions using tape diagrams.
Language Objective	~~LO: SWBAT explain the steps to decomposing fractions to justify their answer.~~ LO: SWBAT justify why the fraction and the decomposed fractions are equivalent I.e.. "I decomposed $\frac{3}{8}$ into the expression $\frac{1}{8} + \frac{1}{8} + \frac{1}{8}$. $\frac{3}{8}$ and $\frac{1}{8} + \frac{1}{8} + \frac{1}{8}$ are equivalent because they have the same value. 3 sets of $\frac{1}{8}$ is the same value as $\frac{3}{8}$."
How will I revisit objectives mid-lesson and end of lesson?	Mid-Lesson: - I will have a student remind me at exactly mid-way for us to stop for 2 minutes, reread the objectives, and do a quick write on the following (1 min total writing) - Everything they have learned so far - Questions they still have - Number of times they have participated so far and their goal for how many times they will participate in the second half of lesson End of Lesson - We will reread the objective and students will pair-share about the 2 key points they learned in today's lesson - I will cold call on 3 students to share out their 2 key points
Activating Prior Knowledge	Turn to your partner, tell me everything you possibly know about fractions. Ok, who can tell me what we already know about fractions. <i>(Teacher writes on poster)</i> Potential knowledge: parts, whole, numerator, denominator, $\frac{1}{2}$
Building Background - Build schema - Linking to student background	Does anyone like to eat? Does anyone like to cook or helped their family cook? When you look at recipes, what kind of measurements do they tend to call for? (teaspoons, cups, etc.) Have you ever heard of a recipe that calls for $\frac{3}{4}$ cups of sugar or $2\frac{1}{8}$ cup of flour? Today we are going to learn why the recipes do not say "put $\frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8}$ cups of flour!"
Vocabulary Content Vocabulary (Bricks)	Decompose: I will show pictures of decomposing grass, compost bin, and we will analyze the meaning of "de" as a suffix. We will then define decompose in mathematics Expression: We will discuss the word expression with respect to how "math is a language".

General Academic Vocabulary	We will discuss different meaning of expression and then I will show them examples of expression in math. I will ask to hear them use the word expression throughout the lessons over the next couple of weeks. Equivalent: We will discover the meaning of equivalent by looking at the root “equi”. I will ask to hear them use the word expression throughout the lessons over the next couple of weeks.
Strategies for organizing and retaining information	GIST: (SIOP p. 134) Before students begin working independently, we will spend 4 minutes on this activity: (1 min) Individually, students write down the 5 words or phrases that they think are most important in this lesson. (2 min) With a partner, students write a one-sentence summary of the main point of the lesson. Teacher walks around and listens to conversations. (1 min) Teacher strategically chooses 3 students to share with the class. - Remind students that these are the words and phrases they should keep in mind and use when justifying their answer.
Interaction	Strategy #1: No opt out - Why: Many students are still uncertain when it comes to fractions - How: If a student doesn't know, I'll ask another student for the answer, then go back to the original student and ask him/her to explain <i>why</i> the answer is correct Strategy #2: Give one, get one - Why: The language objective is for students to justify equivalent expressions - How: I will create a class set of cards, each with one fraction and one decomposed fraction. Some pairs will be equivalent ($\frac{3}{8}$ and $\frac{1}{8} + \frac{1}{8} + \frac{1}{8}$) and others will not ($\frac{3}{8}$ and $\frac{1}{8} + \frac{1}{8} + \frac{1}{4}$). Students will find a partner and justify whether or not the expressions are equivalent. Then they will switch and find a new partner. Strategy #3: Purposeful grouping configurations - Why: In a unit heavy with vocab, I've noticed that native-English students have an easier time expressing themselves than the native-Spanish students - How: When students pair up for the GIST activity, I will color-code students' guided notes pages so that native-English students (yellow paper) must find a native-Spanish partner (blue paper)
Exit Ticket	The figure below is divided into equal sections.  Which expression represents the fraction of the figure that is shaded? Explain why you chose this answer using math vocabulary such as EQUIVALENT and EXPRESSION B. $\frac{1}{10} + \frac{1}{10} + \frac{2}{10}$

Exemplar	"I chose the expression $\frac{1}{10} + \frac{1}{10} + \frac{2}{10}$ because I saw that the figure shows the fraction $\frac{4}{10}$. I know that $\frac{4}{10}$ can be decomposed into smaller pieces as long as it has the same value. The expression $\frac{1}{10} + \frac{1}{10} + \frac{2}{10}$ is equivalent to $\frac{4}{10}$."
Lesson Plan Modifications (Grades 2&5 only)	https://www.engageny.org/resource/grade-4-mathematics-module-5-topic-lesson-1
Comments	

Component	Lesson plan
Standard	
Aspect of Rigor	
Content Objective	
Language Objective	
How will I revisit objectives mid-lesson and end of lesson?	
Activating Prior Knowledge	
Building Background • Build schema • Linking to student background	
Vocabulary • Content Vocabulary (Bricks) • General Academic Vocabulary	

Strategies for organizing and retaining information	
Interaction	
Exit Ticket	
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