EnVision Math Unit Lesson Plan		Common Core Standards:
Grade Level: Fourth Grade	**Topic 12:** Adding and Subtracting Fractions and Mixed Numbers with Like Denominators	4.NF.3; 4.NF.3.a; 4.NF.3.b; 3.NF.3.c; 4.NF.3.d

Instructional Emphasis: Number and Operations-Fractions	Essential Questions:
Big Ideas: 12-1: A model can be used to add or subtract two or more fractions. 12-2, 12-3, 12-4: When adding or subtracting fractions with like denominators, you are adding or subtracting portions of the same size. So, you can add or subtract the numerators without changing the denominators. 12-5: Positive fractions can be added or subtracted by locating a fraction on the number line and then moving to the right to add or to the left to subtract. 12-6: Fractional amounts greater than 1 can be represented using a whole number and a fraction. Whole number amounts can be represented as fractions. When the numerator and denominator are equal, the fraction equals 1. 12-7: Models can be used to show different ways of adding and subtracting mixed numbers. 12-8: One way to add mixed numbers is to add the fractional parts and then add the whole number parts. Sometimes whole numbers or fractions need to be renamed. 12-9: One way to subtract mixed numbers is to subtract the fractional parts and then subtract the whole number parts. Sometimes whole numbers or fractions need to be renamed. 12-10: A fractional amount can be decomposed into a sum of fractions in more than one way. 12-11: Information in a problem can often be shown using a diagram and used to solve the problem. Some problems can be solved by writing and completing a number sentence or equation.	- How can you use fraction strips to add fractions? (12-1) - How can you add fractions with like denominators? (12-2) - How can you use fraction strips to subtract fractions? (12-3) - How do you subtract fractions with like denominators? (12-4) - How can you use a number line to add and subtract fractions? (12-5) - How are mixed numbers and improper fractions related? (12-6) - How do you use models to add mixed numbers? (12-7) - How can you add mixed numbers? (12-8) - How can you subtract mixed numbers? (12-9) - How can we use addition to represent a fraction in a variety of ways? (12-10) - What operation is needed to solve a problem with fractions? (12-11)

Lesson 1: Modeling Addition of Fractions	Lesson 2: Adding Fractions with Like Denominators	Lesson 3: Modeling Subtraction of Fractions	Lesson 4: Subtracting Fractions with Like Denominators	Lesson 5: Adding and Subtracting on the Number Line
Vocabulary: Objective: Students will use models to add fractions with like denominators. Materials: Fraction Models: Strips (or Teaching Tool 15) Colored Pencils Scissors Content Reviewed: Generalize Patterns; Prime Numbers; Equivalent	Vocabulary: Objective: Students use computational procedures to add fractions with like denominators and solve problems. Materials: Content Reviewed: Add Fractions; Fractions in Simplest Form; Add Fractions; Algebra; Multiple-Step Problem	Vocabulary: Objective: Students will use models to subtract fractions with like denominators. Materials: Fraction Models: Strips (or Teaching Tool 15) (per pair) Scissors (per pair) Content Reviewed: Add Fractions; Algebra; Perimeter; Reasonable Estimates	Vocabulary: Objective: Students use computational procedures to subtract fractions with like denominators and solve problems. Materials: Content Reviewed: Subtract Fractions; Add Fractions; Write Expressions	Vocabulary: Objective: Students use the number line to add and subtract fractions with like denominators. Materials: Content Reviewed: Subtract Fractions; Compare Fractions; Fractions on a Number Line; Subtract Fractions; Number Patterns

Fractions; Multiple-Step Problem; Number Patterns with Fractions Standard: 4.NF.3; 4.NF.3.a	Standard: 4.NF.3.a; 4.NF.3.d	Standard: 4.NF.3.a; 4.NF.3.d	Standard: 4.NF.3.a; 4.NF.3.d	Standard: 4.NF.3.d; 4.NF.3.a
Assessment	Assessment	Assessment	Assessment	Assessment
Topic 12 Introduction Daily Common Core Review Problem-Based Interactive Learning Guided Practice Independent Practice Problem Solving Quick Check Master Center Activity Reteaching, Practice, and Enrichment Homework	Daily Common Core Review Problem-Based Interactive Learning Guided Practice Independent Practice Problem Solving Quick Check Master Center Activity Reteaching, Practice, and Enrichment Homework	Daily Common Core Review Problem-Based Interactive Learning Guided Practice Independent Practice Problem Solving Quick Check Master Center Activity Reteaching, Practice, and Enrichment Homework	Daily Common Core Review Problem-Based Interactive Learning Guided Practice Independent Practice Problem Solving Quick Check Master Center Activity Reteaching, Practice, and Enrichment Homework	Daily Common Core Review Problem-Based Interactive Learning Guided Practice Independent Practice Problem Solving Quick Check Master Center Activity Reteaching, Practice, and Enrichment Homework
Lesson 6: Improper Fractions and Mixed Numbers	Lesson 7: Modeling Addition and Subtraction of Mixed Numbers	Lesson 8: Adding Mixed Numbers	Lesson 9: Subtracting Mixed Numbers	Lesson 10: Decomposing and Composing Fractions
Vocabulary: mixed number; improper fraction Objective: Students will identify and write mixed numbers as improper fractions and improper fractions as mixed numbers. Materials: Fraction Models: Strips (Teaching Tool 15) Fraction Models: Circles (Teaching Tool 16) (per pair) Content Reviewed: Fraction Models; Estimation; Division; Subtraction; Place Value;	Vocabulary: Objective: Students will use models to add and subtract mixed numbers. Materials: Fraction Models: Strips (Teaching Tool 15) (per pair) Content Reviewed: Multiplying by Multiples of 10; Describe Division; Subtract Fractions on a Number Line; Addition of Fractions; Draw a Picture and Write an Equation Standard: 4.NF.3.c; 4.NF.3.b	Vocabulary: Objective: Students will use models and computational procedures to add mixed numbers. Materials: Fraction Models: Strips (Teaching Tool 15) Scissors (per pair) Content Reviewed: Subtract Fractions with Like Denominators; Subtract Fractions with Like Denominators; Multiple-Step Problem; Describe Fractions Standard: 4.NF.3.c	Vocabulary: Objective: Students will use models and computational procedures to subtract mixed numbers. Materials: Fraction Models: Strips (Teaching Tool 15) Scissors (per pair) Content Reviewed: Number Patterns; Add Mixed Numbers; Find Equivalent Fractions; Subtraction; Reasonableness Standard: 4.NF.3.c	Vocabulary: Objective: Students decompose fractions and represent them as compositions of fractions in a variety of ways. Materials: Fraction Models: Strips (Teaching Tool 15) Content Reviewed: Equivalent Fractions; Subtraction; Mixed Numbers; Compare and Order Fractions; Fraction Concepts; Multiplication Standard: 4.NF.3.b; 4.NF.3.d

Multiplication **Standard:** 4.NF.3.c; 4.NF.3.b				
Assessment	Assessment	Assessment	Assessment	Assessment
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Lesson 11: Problem Solving: Draw a Picture and Write an Equation				
Vocabulary: Objective: Students will draw a picture and write an equation to solve a problem. Materials: Content Reviewed: Division; Subtract Fractions with Like Denominators; Compare Fractions; Estimation; Multiplication Properties Standard: 4.NF.3.d; 4.NF.3.a				
Assessment				
Daily Common Core Review Problem-Based Interactive Learning Guided Practice Independent Practice Problem Solving				

Quick Check Master Center Activity Reteaching, Practice, and Enrichment Homework Topic 12 Assessment				