OP F Use models to recognize that any fraction is a multiple of its unit fraction	
Grade	Curriculum Expectation
2	• regroup fractional parts into wholes, using concrete materials (e.g., combine nine fourths to form two wholes and one fourth);
4	• represent fractions using concrete materials, words, and standard fractional notation, and explain the meaning of the denominator as the number of the fractional parts of a whole or a set, and the numerator as the number of fractional parts being considered;
6	• represent, compare, and order fractional amounts with unlike denominators, including proper and improper fractions and mixed numbers, using a variety of tools and using standard fractional notation;
6	• determine and explain, through investigation using concrete materials, drawings, and calculators, the relationships among fractions, decimal numbers, and percents.
7	• divide whole numbers by simple fractions and by decimal numbers to hundredths, using concrete materials;
7	• use a variety of mental strategies to solve problems involving the addition and subtraction of fractions and decimals;
7	• add and subtract fractions with simple like and unlike denominators, using a variety of tools and algorithms;
7	• demonstrate, using concrete materials, the relationship between the repeated addition of fractions and the multiplication of that fraction by a whole number;
7	• determine, through investigation, the relationships among fractions, decimals, percents, and ratios;
8	• represent, compare, and order rational numbers;
8	• translate between equivalent forms of a number;
8	• use estimation when solving problems involving operations with whole numbers, decimals, percents, integers, and fractions, to help judge the reasonableness of a solution;
8	• represent the multiplication and division of fractions, using a variety of tools and strategies;
8	• solve problems involving addition, subtraction, multiplication, and division with simple fractions.
9D	• simplify numerical expressions involving integers and rational numbers, with and without the use of technology;
9D	• solve problems requiring the manipulation of expressions arising from applications of percent, ratio, rate, and proportion;
9P	• solve problems requiring the expression of percents, fractions, and decimals in their equivalent forms