

## Adding and Subtracting Fractions

- Students will understand addition and subtraction of fractions as joining and separating parts referring to the same whole. 4.NF.3 (comprehension)
- Students will decompose a fraction into a sum of fractions with the same denominator. 4.NF.3 (application)
- Students will add and subtract mixed numbers with like denominators. 4.NF.3 (application)
- Students will solve word problems involving addition and subtraction of fractions with like denominators. 4.NF.3 (application, analysis)
- Students will compare two fractions with different numerators and different denominators by creating common denominators or numerators or by comparing them to a benchmark fraction like one-half. 4.NF.2 (comprehension, memory/recall)

## Mixed Numbers and Improper Fractions

- Students will recognize that comparisons of fractions are valid only when the two fractions refer to the same whole. 4.NF.2 (analysis)
- Students will be able to compare fractions using symbols and justify the comparison by using models. 4.NF.2 (comprehension)
- Students will understand that improper fractions have a greater numerator than denominator. 4.NF.3 (memory/recall)

## Multiplying Fractions

- Students will be able to multiply a fraction by a whole number. 4.NF.4 (application)
- Students will be able to solve word problems involving multiplication of a fraction by a whole number. 4.NF.4 (application, analysis)
- Students will be able to explain (and show models for) why multiplying a numerator and a denominator by the same number does not change the value of a fraction. 4.NF.1 (analysis, synthesis)