

FRACTIONS

3 rd Grade	4 th Grade	5 th Grade	6 th Grade
<ul style="list-style-type: none"> • Students develop an understanding of fractions as numbers, beginning with unit fractions. • Students view fractions in general as being built out of unit fractions, and they use fractions along with visual fraction models to represent parts of a whole. • Students understand that the size of a fractional part is relative to the size of the whole. • Students are able to use fractions to represent numbers equal to, less than, or greater than one. • They solve problems involving comparing fractions by using visual fraction models and strategies based on noticing equal numerators or denominators. 	<ul style="list-style-type: none"> • Students extend understanding of fraction equivalence and ordering. • Students build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers. • Students develop understanding of fraction equivalences and operations with fractions. They recognize that two different fractions can be equal and they develop methods for generating and recognizing equivalent fractions. • Students extend previous understandings about how fractions are built from unit fractions, composing and decomposing fractions around unit fractions, and using the meaning of fractions and the meaning of multiplication to multiply a fraction by a whole number. 	<ul style="list-style-type: none"> • Students use equivalent fractions as a strategy to add and subtract fractions. • Students apply and extend previous understandings of multiplication and division to multiply and divide fractions. • Students develop understanding of fractions and fraction models to represent the addition and subtraction of fractions with unlike denominators as equivalent calculations with like denominators. • Students develop fluency in calculating sums and differences of fractions and make reasonable estimates of them. • Students use the meaning of fractions, of multiplication and division, and the relationship between multiplication and division to understand and explain why the procedures for multiplying and dividing fractions makes sense. (Note: this is limited to the case of dividing unit fractions by whole numbers by whole numbers and whole numbers by unit fractions.) 	<ul style="list-style-type: none"> • Apply and extend previous understandings of multiplication and division to divide fractions by fractions. • Students use the meaning of fractions, the meanings of multiplication and division, and the relationship between multiplication and division to understand and explain why the procedures for dividing fractions make sense. • Students use these operations to solve problems.