Correlation to the Math Standards

Standard	Activity No.
Grade 3	
Number and Operations – Fractions (3.NF)	
Develop understanding of fractions as numbers.	
Understand a fraction $1/b$ as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a parts of size $1/b$. **(3.NF.1)**	
Understand a fraction as a number on the number line; represent fractions on a number line diagram. **(3.NF.2)**	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size. **(3.NF.3)**	3, 6, 7, 8, 10,
Grade 4	
Number and Operations – Fractions (4.NF)	
Extend understanding of fraction equivalence and ordering.	
Explain why a fraction a/b is equivalent to a fraction $(n \times a)/(n \times b)$ by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions. **(4.NF.1)**	11–17, 23
Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as $1/2$. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols >, =, or <, and justify the conclusions, e.g., by using a visual fraction model. **(4.NF.2)**	12, 15, 18, 19
Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.	
Understand a fraction a/b with $a > 1$ as a sum of fractions $1/b$. **(4.NF.3)**	20, 21
Apply and extend previous understandings of multiplication to multiply a fraction by a whole number. **(4.NF.4)**	24
Understand decimal notation for fractions, and compare decimal fractions.	
Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100. **(4.NF.5)**	

Use decimal notation for fractions with denominators 10 or 100. **(4.NF.6)**	22, 23
Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual model. **(4.NF.7)**	23
Grade 5	
Number and Operations – Fractions (5.NF)	
Use equivalent fractions as a strategy to add and subtract fractions.	
Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. **(5.NF.1)**	25–28
Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. **(5.NF.2)**	29
Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	
Interpret a fraction as division of the numerator by the denominator ($a/b = a \div b$). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, e.g., by using visual fraction models or equations to represent the problem. **(5.NF.3)**	
Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction. **(5.NF.4)**	24
Interpret multiplication as scaling (resizing). **(5.NF.5)**	
Solve real-world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem. **(5.NF.6)**	
Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions. **(5.NF.7)**	30

For examples of fraction standards from non-Common Core states that are similar and specific to number line activities, see **www.didax.com/211207.** Examples from the Indiana Academic Standards, Minnesota Academic Standards, Oklahoma Priority Academic Student Skills, Texas Essential Knowledge and Skills, and Virginia Standards of Learning for Grades 3 through 5 are included.