Epsilon
Objectives List

Math·U·See

The checkboxes on the right side below may be used to help you record student progress. For example, you can record quarterly grades, or you can indicate level of skill development (not yet begun, beginning, developing, mastered).

Lesson	Number	Objective	✔	✔	✔	✔
1	*EP.1.a*	Use models to represent fractions of whole numbers				
1	*EP.1.b*	Describe a simple proper fraction using the terms numerator and denominator				
1	*EP.1.c*	Identify a proper fraction, improper fraction, and mixed number				
1	*EP.1.d*	Calculate a fraction of a whole number				
2	*EP.2.a*	Model a proper fraction using manipulatives				
2	*EP.2.b*	Identify the fraction represented by a model				
2	*EP.2.c*	Name the fraction represented in a model using words				
2	*EP.2.d*	Name the fraction represented in a model using symbols				
3	*EP.3.a*	Use models to represent two fractions with common denominators				
3	*EP.3.b*	Represent the sum or difference of two fractions using fraction notation				
3	*EP.3.c*	Express the sum or difference of two fractions using words				
3	*EP.3.d*	Add or subtract two fractions with common denominators				
3	*EP.3.e*	Apply knowledge of adding and subtracting fractions with common denominators to solve word problems				
4	*EP.4.a*	Build equivalent fractions using manipulatives				
4	*EP.4.b*	Express fractions in words				
4	*EP.4.c*	Add or subtract fractions with common denominators				
4	*EP.4.d*	Use knowledge of equivalent fractions to solve word problems				
5	*EP.5.a*	Build models of equivalent fractions to find common denominators				

Lesson	Number	Objective	✔	✔	✔	✔
5	*EP.5.b*	Use models to add and subtract fractions with unequal denominators				
5	*EP.5.c*	Apply knowledge of adding and subtracting fractions to solve word problems				
6, 7	*EP.6*	Use the "Rule of Four" to add and subtract pairs of proper fractions with unlike denominators				
7	*EP.7.a*	Build models of fractions with unequal denominators to find a common denominator				
7	*EP.7.b*	Describe the relationship of two fractions using >, <, or =				
8	*EP.8.a*	Use the “Rule of Four” to add multiple proper fractions with unequal denominators				
8	*EP.8.b*	Add multiple fractions with unlike denominators				
8	*EP.8.c*	Apply knowledge of equivalent fractions to solve word problems				
9	*EP.9.a*	Explain that calculating a fraction of a fraction is equivalent to multiplication of a fraction by a fraction				
9	*EP.9.b*	Use manipulatives to model multiplication of fractions				
9	*EP.9.c*	Multiply a fraction by a whole number				
10	*EP.10.a*	Use the “Rule of Four” to divide pairs of proper fractions with unlike denominators				
10	*EP.10.b*	Divide a fraction by a fraction				
10	*EP.10.c*	Apply knowledge of dividing fractions to solve word problems				
11	*EP.11.a*	Apply rules of divisibility to find common factors for a pair or group of numbers				
11	*EP.11.b*	Determine the GCF for a number or pair of numbers				
12	*EP.12.a*	Use models to illustrate simplifying fractions by a common factor				
12	*EP.12.b*	Determine the GCF to simplify fractions to lowest terms				
12	*EP.12.c*	Simplify fractions to lowest terms				
13	*EP.13.a*	Use models to build rectangles to represent prime numbers from 1-24				
13	*EP.13.b*	Find the prime factors for given values by using a factor tree				
13	*EP.13.c*	Use prime factorization to simplify fractions				
13	*EP.13.d*	Explain why prime factorization is an effective method when the GCF is not obvious				
14	*EP.14.a*	Use fractional models to illustrate common fractional increments on a customary ruler				

Lesson	Number	Objective	✔	✔	✔	✔
14	*EP.14.b*	Demonstrate using a ruler as a practical application for simplifying fractions				
14	*EP.14.c*	Draw a line of a given fractional length				
14	*EP.14.d*	Simplify fractional measurements to lowest terms when measuring with a ruler				
15	*EP.15.a*	Define the terms mixed number, proper fraction, and improper fraction				
15	*EP.15.b*	Write fractions as mixed numbers, proper fractions, and improper fractions				
15	*EP.15.c*	Use models to illustrate how to convert a mixed number to an improper fraction and vice versa				
15	*EP.15.d*	Convert mixed numbers to improper fractions and vice versa				
16	*EP.16*	Apply knowledge of fractions, mixed numbers, and simplifying fractions to read measurements on a customary ruler				
17	*EP.17.a*	Use estimation when adding mixed numbers with common denominators, without regrouping, to determine if the answer is reasonable				
17	*EP.17.b*	Add and subtract mixed numbers with common denominators				
18	*EP.18.a*	Build models of mixed numbers with common denominators to illustrate how to add the fractional pieces by converting them to whole-number parts				
18	*EP.18.b*	Add mixed numbers with common denominators, using regrouping				
18	*EP.18.c*	Simplify answers to lowest terms when possible				
19	*EP.19.a*	Use models to demonstrate how to regroup when subtracting mixed numbers				
19	*EP.19.b*	Subtract mixed numbers with common denominators, using regrouping as necessary				
20	*EP.20*	Apply the "same difference theorem" to subtract mixed numbers with common denominators				
21	*EP.21.a*	Add mixed numbers with unlike denominators by using the “Rule of Four” to find a common denominator				
21	*EP.21.b*	Add fractions with unlike denominators with regrouping				
22	*EP.22.a*	Subtract mixed numbers with unlike denominators by finding a common denominator with the "Rule of Four"				
22	*EP.22.b*	Subtract fractions with unlike denominators using the "same difference theorem"				
22	*EP.22.c*	Subtract fractions with unequal denominators with regrouping				
23	*EP.23.a*	Define reciprocal				
23	*EP.23.b*	Explain why multiplying by the reciprocal of a number is the same as dividing by that number				

Lesson	Number	Objective	✔	✔	✔	✔
23	*EP.23.c*	Convert mixed numbers to improper fractions before dividing				
23	*EP.23.d*	Divide fractions by multiplying by the reciprocal				
24	*EP.24.a*	Define multiplicative inverse				
24	*EP.24.b*	Solve for an unknown in an equation by using the multiplicative inverse				
24, 26, 28	*EP.24.c*	Check work for accuracy by substituting the unknown with the solution				
24	*EP.24.d*	Apply knowledge of solving equations to solve word problems				
25	*EP.25.a*	Multiply mixed numbers				
25	*EP.25.b*	Multiply fractions, simplifying first by finding common factors				
25	*EP.25.c*	Multiply fractions and simplify the final product by finding common factors				
26	*EP.26.a*	Solve equations by using the additive inverse to isolate the unknown				
26	*EP.26.b*	Multiply by the multiplicative inverse to eliminate a coefficient				
27	*EP.27.a*	Define circumference of a circle				
27	*EP.27.b*	Define area of a circle				
27	*EP.27.c*	Calculate the area of a circle given the diameter or radius				
28	*EP.28.a*	Use the multiplicative inverse to isolate the unknown when the coefficient is a fraction				
28	*EP.28.b*	Solve simple equations with fractional coefficients				
29	*EP.29.a*	Define the terms place value, decimal, expanded notation, and percent				
29	*EP.29.b*	Use models to illustrate converting a denominator to a power of 10				
29	*EP.29.c*	Convert fractions to percentages				
29	*EP.29.d*	Convert decimals to percentages				
30	*EP.30.a*	Solve equations with rational numbers				
30	*EP.30.b*	Use the multiplicative inverse to find the unknown				
Appendix	*EP.A.1*	Find the area of a trapezoid				