

Apply Understanding of Division to Divide Fractions

Topic 9 Standards

5.NF.B.3, 5.NF.B.7a, 5.NF.B.7b, 5.NF.B.7c

See the front of the Student's Edition for complete standards.

Dear Family,

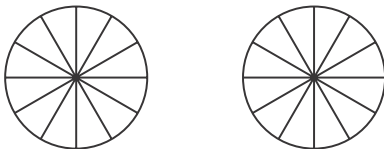
In this topic, your student will be learning how to interpret a fraction as division of the numerator by the denominator and show quotients as fractions and mixed numbers. He or she will solve real-world problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions. A fraction with a numerator of 1 is a unit fraction.

Here is an activity you can use to acquaint your student with the concept of fractions as division.

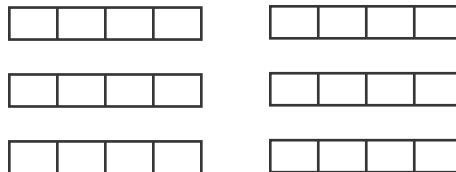
Taking a Part Apart

In the division problems below, your child will use a visual model to find each quotient in the form of a fraction or mixed number. One way to find the quotient is to show the problem using rectangles or circles to represent the whole. To represent $2 \div 12$ for example, show 2 wholes, or circles, divided into twelfths. One of the twelfths in each whole are then shaded. Together, the shaded sections are equal to the quotient, $\frac{2}{12}$ or $\frac{1}{6}$. After your child writes the quotient for $2 \div 12$, ask him or her to shade the other model and write the quotient for the remaining problem. Have your child shade one of the fourths in each of the wholes.

1. $2 \div 12 =$ _____



2. $6 \div 4 =$ _____



Observe Your Child

Focus on Mathematical Practice 4

Model with mathematics.

Help your child become proficient with Mathematical Practice 4. Write another division problem using whole numbers between 1 and 9. Have your child write the division problem as a fraction and then model the quotient using a diagram.