

“Math: Multiplying fractions” | OSEU 7: Way of Life & Development

Compelling Question	How can you find the fractional part of another fraction?		
Standards and Practices	South Dakota Common Core State Standards for Mathematics. Practice 1: Make sense of problems and persevere in solving them. Practice 2: Reason abstractly and quantitatively. Practice 4: Model with mathematics. Practice 6: Attend to precision. Practice 7: Look for and make use of structure. Practice 8: Look for and express regularity in repeated reasoning.		
Staging the Question	How can we find the fractional amount of each nationality for a person?		
Supporting Question 1	Supporting Question 2	Supporting Question 3	
What is the meaning of “a fraction of another fraction”?	What are the steps to solve multiplying a fraction times a fraction?	How can we check to make sure we calculated the problem correctly?	
Formative Performance Task	Formative Performance Task	Formative Performance Task	
Steps for solving multiplying a fraction by a fraction problem: 1. If there is a mixed number then convert to an improper fraction. 2. Multiply the numerators times each other. 3. Multiply the denominators times each other. 4. Simplify if the numerator and denominator are each divisible by a number other than one. 5. Change from an improper fraction to a mixed number if the numerator is larger than the denominator.	If my mother is $\frac{1}{2}$ Irish and my father is $\frac{1}{8}$ Irish. What fraction Irish am I? 1. What fraction of Irish do I get from my mother? $\frac{1}{2}$ of $\frac{1}{2}$ so multiply $\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$. 2. What fraction of Irish do I get from my father? $\frac{1}{2} \times \frac{1}{8} = \frac{1}{16}$. 3. Now add the fractions together. $\frac{1}{4} + \frac{1}{16} = \frac{5}{16}$	If my mother is $\frac{3}{4}$ Native American and my father is $\frac{1}{8}$ Native American then what fraction of Native American am I? 1. $\frac{1}{2}$ times $\frac{3}{4}$ from my mother = $\frac{3}{8}$ 2. $\frac{1}{2}$ times $\frac{1}{8}$ from my father = $\frac{1}{16}$ 3. Add $\frac{3}{8} + \frac{1}{16} = \frac{6}{16} + \frac{1}{16} = \frac{7}{16}$	
Featured Sources	Featured Sources	Featured Sources	
GO MATH Grade 6 (2015) , by Houghton Mifflin Harcourt Publishing Company. Authors: Juli K. Dixon, Matthew R. Larson, Edward B. Burger, Martha E. Sandoval-Martinez, Steven J.			

Leinwand (ISBN 987-0-544-43281-9).				
Summative Performance Task	Argument	State the steps to multiply a fraction by a fraction.		
	Extension	Calculate the fractional nationality of one of your nationalities.		
Taking Informed Action	Find the fractional part of nationalities of your grandparents and parents.			