

## MATHEMATICAL VOCABULARY: FRACTIONS

Word	What does it mean?	Example	Visual prompt
Fraction	A way to represent a part of a whole. It has a numerator (top number) and a denominator (bottom number).	$\frac{1}{2}$	$\frac{1}{2}$ $\frac{1}{2}$ Make it: Get a strip of paper. Foldit exactly in half. Shade one-half.
Numerator	The top number in a fraction, showing how many parts are taken or shaded.	$\frac{3}{5} = \frac{Numerator}{Denominator}$ $\frac{How many parts are taken}{Total number of parts}$	$\frac{1}{5}$ $\frac{1}{5}$ $\frac{1}{5}$ $\frac{1}{5}$ Make it real: Imagine a chocolate bar that has five squares. You eat three of those squares. As a fraction of the total bar, how much have you eaten?
Denominator	The bottom number in a fraction, showing how many equal parts the whole is divided into.	$\frac{3}{5} = \frac{Numerator}{Denominator}$ $\frac{How many parts are taken}{Total number of parts}$	$\frac{1}{5}$ $\frac{1}{5}$ $\frac{1}{5}$ $\frac{1}{5}$ $\frac{1}{5}$
Proper Fraction	A fraction where the numerator is smaller than the denominator.	$\frac{3}{4}$	$\frac{1}{4} \qquad \frac{1}{4} \qquad \frac{1}{4} \qquad \frac{1}{4}$
Improper Fraction	A fraction where the numerator is larger than or equal to the denominator.	$\frac{7}{4}$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$

Mixed Number	A number made up of a whole number and a fraction.	$2\frac{1}{3}$	$\frac{1}{1}$ $\frac{1}{3}$ $\frac{1}{3}$ $\frac{1}{3}$ $\frac{1}{3}$ $\frac{1}{3}$ Make it real: You drink two wholeglasses of milk. You fill anotherglass but only drink a third of it.
Equivalent Fractions	Fractions that have the same value but different numerators and denominators.	$\frac{1}{2} = \frac{2}{4} = \frac{4}{8}$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
Factor	A number that divides exactly into another.	Factors of 8 are 1, 2, 4, 8.	8 1 4 2 Visualise it: How many rectangular arrays can you make with 8 counters. The numbers on the side of the arrays are factors.
Common Factor	When we compare the factors of two or more numbers, any factors that divide equally into both numbers are common factors.	Common factors of 8 and 12 are 1, 2 and 4.	

Highest Common Factor	When we compare the factors of	The highest common factor of 8	Factors of 8: 1, 2, 4, 8
	two or more numbers, the highest	and 12 is 4.	Factors of 12: 1, 2, 3, 4, 6, 12
	number that divides exactly into		Highest common factors: 4
	two or more numbers is the		
	highest common factor.		
Simplified Fraction	A simplified fraction is a fraction	$\frac{6}{2} = \frac{2}{2}$	$\begin{array}{c c c c c c c c c c c c c c c c c c c $
	that has been reduced to the	$\overline{9} = \overline{3}$	$\frac{1}{3}$ $\frac{1}{3}$ $\frac{1}{3}$
	smallest numbers possible.		
Common Denominator	A shared denominator for two or	$\frac{1}{4}$ and $\frac{1}{2}$ both have a common	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
	more fractions, used for		
	comparing or adding.	denominator of 4	

Images created using free virtual manipulatives available at MathsBot.com: factor and common factor. All other images made using the free virtual manipulatives available at Polypad, by Amplify.