

Year 7 Unit 2 – Knowledge organiser – Understanding Fractions – Fractions and Percentages Equivalence, Place Value, Four Operations with Fractions, Inequalities

Understanding Fractions		
1	Fraction	The amount of parts of a whole.
2	Numerator	The top number in a fraction.
3	Denominator	The bottom number in a fraction.
4	Unit fraction	A fraction where the numerator is one.
5	Decimal	A number that uses a decimal point followed by digits that show a number less than a whole.
6	Terminating decimal	A decimal number that has a finite number of digits after the decimal point.
7	Recurring decimal	A decimal number, where a group of digits repeat infinitely.
8	Equivalent	Equal in value.
9	Dividend	The number that is being divided.
10	Divisor	The number you are dividing another number by.

Fractions and Percentages Equivalence			
1	Common fraction to percentage conversions.	$\frac{1}{1}$	100%
		$\frac{1}{2}$	50%
		$\frac{1}{4}$	25%
		$\frac{3}{4}$	75%
		$\frac{1}{5}$	20%
		$\frac{1}{8}$	12.5%
		2	Percentages to fractions
3	Fractions to percentages	Change the denominator to the equivalent fraction over 100.	

Place Value		
1	Place value	The value of a digit in a number.

2	Million	Hundred thousand	Ten thousand	Thousand	Hundred	Ten	Unit	.	Tenth	Hundredth	Thousandth	Ten-thousandth
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Four Operations with Fractions		
1	Mixed Number	A whole number and a fraction combined.
2	Improper	A fraction where the numerator is bigger than the denominator.
3	Simplify	Divide the numerator and denominator by the highest common factor.
4	Cancelling	Means to simplify a fraction.
5	Fraction of an amount	Divide by the denominator, multiply by the numerator.
6	Adding and subtracting fractions	Use equivalent fractions to change each fraction to the common denominator, then add or subtract the numerators, keeping the denominator the same.
7	Common Denominator	A common multiple of the denominators or two or more fractions.
8	Add and Subtract Fractions	Use equivalent fractions to change each fraction to the common denominator, then add or subtract the numerators, keeping the denominator the same.
9	Multiply Fractions	Multiply the numerators, multiply the denominators.
10	Divide Fractions	KFC – K - keep the first fraction the same, F – flip the second fraction, C- change the divide to a multiply

Inequalities		
1	Inequality	Comparing two values that are not equal to each other.
2	Does not equal	≠

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3	x is less than	$x <$	Represented by a ○ on a number line.
4	x is greater than	$x >$	
5	x is less than or equal to	$x \leq$	Represented by a ● on a number line.
6	x is greater than or equal to	$x \geq$	