Knowledge organiser

<u>Y7 Maths</u>

Topic 7: Fractions	Key ideas
☐ Represent fractions using area diagrams, bar models and number lines ☐ Recognise and name equivalent fractions Mathswatch video N23b ☐ Use equivalent fractions Mathswatch video N23b ☐ Compare and order numbers involving fractions Mathswatch videos N2a and N34 ☐ Express one quantity as a fraction of another Mathswatch video R3 ☐ Find a fraction of a set of objects or quantity ☐ Find the whole given a fraction ☐ Multiply a whole number or fraction by a whole number or fraction Mathswatch videos N37a and N42a ☐ Divide a whole number or proper fraction by a whole number or proper fraction Mathswatch videos N37b and N42b ☐ Add and subtract fractions with like and unlike denominators Mathswatch videos N36 and N41	I can cancel fractions to their simplest form. I can work out one quantity as a fraction of another. I can name equivalent fractions. I can compare and order numbers involving fractions. I can add, subtract, multiply and divide fractions, with and without a calculator.

Key vocabulary	
Fraction	A fraction is a part of a whole. It is also a ratio between two numbers separated by a vinculum (__). It is represented by the division of one number by another.
Numerator	The 'top' part of a fraction – it tells us how many parts we are dealing with.
Denominator	The 'bottom' part of a fraction – it tells us how many parts the whole is divided into.
Equivalent	Equivalent fractions represent the same value.
Order	Ordering fractions involves putting them arranged by size.
Reciprocal	The reciprocal of a number is 1 divided by the number.
Unit fraction	A fraction where the numerator is 1 and denominator is an positive integer.
Comparing fractions	To compare fractions you need a common denominator. Ascending means smallest to biggest while descending means biggest to smallest.