Knowledge organiser

Y7 Maths

Topic 15: Ratio	Key ideas
☐ Understand the relationship between ratios and fractions Mathswatch R3 ☐ Write equivalent ratios, and find the missing term in a pair of equivalent ratios Mathswatch R5a ☐ Express ratios involving rational numbers in their simplest form Mathswatch R5a ☐ Express ratios in the for 1:n and n:1 Mathswatch R5a ☐ Make pupils aware of the unitary method ☐ Interpret $a : b$ and $a : b : c$, where a, b and c are whole numbers Mathswatch R1a ☐ Compare two or more quantities by ratio Mathswatch R1a ☐ Divide a quantity in a given ratio Mathswatch R5b ☐ Find the whole/ one part when a whole is divided into parts in a given ratio Mathswatch R5b ☐ Solve word problems involving ratio Mathswatch R5b ☐ Work out which item is best value for money Mathswatch R4	I can simplify a ratio. I can express a ratio as a fraction. I can divide amounts into given ratios. I can complete calculations from a given ratio and partial information. I can compare prices of products to find the 'best buy'. I can use ratio to solve problems.

Key vocabulary	
Ratio	Numbers, separated by colons, that show how many of one thing there is compared to another. e.g. if a ratio of dogs to cats is 4:1, then there are four dogs for every one cat.
Equivalent	Two or more values that are equal to each other.
Fraction	Number that is not a whole number, written as a numerator over a denominator.
Compare	Describe what is similar and different.
Rational	A rational number can be written as an integer or a fraction.
Unitary	The unitary method is a technique which is used for solving a problem by finding the value of a single unit.
Value for money	Compare the price of the same amount of an item. The item that is cheaper for the same quantity is better value for money.