RATIO

Keywords:	Ratio, Sharing, Denominator / Unit form			
Definition / Description:	Ratio: A ratio gives a part – to – part comparison.	Sharing: To share is to equally divide an amount into parts.	Denominator: The bottom number in a fraction, it shows what we are dividing by	Unit form:
Knowledge points:	Sharing in a Ratio	Simplifying a Ratio	Writing a Ratio as a Fraction	Write a Ratio in the for of 1 : n
Knowledge point examples:	A ratio tells us how many equal parts an amount has been split into, and how many equal parts are given to each person. £100 is split into the ratio 2 : 3 and given to John and Hannah. There are 5 equal parts in the ratio (2 + 3), John will get 2 parts and Hannah will get 3. £100 ÷ 5 = £20 (Each part is worth £20) John gets 2 parts (£20 x 2) £40 Hannah gets 3 parts (£20 x 3) £60	To simplify a ratio, all parts in the ratio must be divided by the same amount, so we look for the Highest Common Factor. Simplify the Ratio 33 : 72 The HCF of 33 and 72 is 3, so we can divide both by 3. 33 ÷ 3 = 11 72 ÷ 3 = 24 So the ratio becomes 11 : 24	To write a ratio as a fraction, we need to find out how many parts the ratio contains, this will be the denominator of our fraction. The part of the ratio we look at will be the denominator. Ratio of Circles to Triangles is 1 : 3 We have 4 shapes, so our denominator will be 4. What fraction of the shapes are triangles? We have 4 shapes, 3 of which are triangles so the fraction would be $\frac{3}{4}$	To write a Fraction in the for of 1 : n or n : 1, we must make the correct part of the ratio equal to 1. To do this we can divide that part of the ratio by itself. We also need to remember if we divide part of the ratio by a number, all parts much be divided by the same number. Write the ratio 6 : 18 in the for 1 : n Here, the first part of the ratio must equal 1, so we can divide both parts by 6. 6 ÷ 6 = 1 18 ÷ 6 = 3 So the ratio becomes 1 : 3
Linked Knowledge Maps	Fractions, Factors , Scale			