



The Sutton Academy

# Knowledge Rich Curriculum Plan

Year 8 Core – Ratio and Proportion

Lesson Objective	Intended Knowledge: <i>Students will know that...</i>	Tiered Vocabulary	Prior Knowledge: <i>In order to know this, students need to already know that...</i>	Assessment
To learn how to write, simplify and compare ratio	<ul style="list-style-type: none"> <li>• Students will know how to express a situation in a ratio</li> <li>• Students will know how to write a ratio in its simplest form</li> <li>• Students will know how to simplify ratios in the form of 1 : n or n : 1.</li> <li>• Students will know how to convert fractions into ratios and vice versa.</li> <li>• Students will know how to compare ratios by converting to fractions.</li> </ul>	<p><b>Ratio</b> - the quantitative relation between two amounts showing the number of times one value contains or is contained within the other</p> <p><b>Simplify</b> – make (something) simpler or easier to do or understand.</p>	<ul style="list-style-type: none"> <li>• Students will need to know how to find common factors</li> </ul>	Mini-Assessment 7
To learn how to share an amount into a ratio	<ul style="list-style-type: none"> <li>• Students will know how to represent a ratio using boxes or bars</li> <li>• Students will know how to share a quantity into a two-part given ratio.</li> <li>• Students will know how to share a quantity into a three-part given ratio.</li> </ul> <p><b>Opportunities for challenge:</b></p> <ul style="list-style-type: none"> <li>• Students will know how to find quantities within a ratio when the value of one part is given.</li> <li>• Students will know how to find quantities within a ratio when the difference between two parts is given.</li> </ul>	<p><b>Share</b> – split up between parts</p>	<ul style="list-style-type: none"> <li>• Students need to know how to use the bus stop method</li> </ul>	Mini-Assessment 7
To learn how to scale up recipes	<ul style="list-style-type: none"> <li>• Students will know how to scale up simple recipes. For example, take a recipe for two people and make it for four people or take a recipe for 8 people and make it for 2 people etc.</li> </ul>	<p><b>Proportion</b> – a part, share or number considered in comparative relation to a whole</p> <p><b>Scale up/down</b> – Increase/decrease proportionally</p>	<ul style="list-style-type: none"> <li>• Students will need to know how to multiply and divide</li> </ul>	Mini-Assessment 7
To learn how to identify best buys	<ul style="list-style-type: none"> <li>• Students will know how to find the best buy by either finding the value of one item for each option or finding the value of a common multiple of each item.</li> </ul>	<p><b>Value</b> – how much money something is worth</p>	<ul style="list-style-type: none"> <li>• Students will need to know how to find the lowest common multiple of two numbers</li> </ul>	Mini-Assessment 7
To learn how to convert currencies	<ul style="list-style-type: none"> <li>• Students will know how to convert between different currencies.</li> </ul>	<p><b>Currency</b> – a system of money in general use in a particular country.</p> <p><b>Convert</b> – change/ swap to</p>	<ul style="list-style-type: none"> <li>• Students will need to know how to multiply and divide by decimals</li> </ul>	Mini-Assessment 7