Knowledge Rich Curriculum Plan

Year 10 Foundation – Ratio and Proportion

Lesson/Learning Sequence	Intended Knowledge: *Students will know that…*	Tiered Vocabulary	Prior Knowledge: *In order to know this, students need to already know that…*	Assessment
To learn how to write and simplify ratio	• Students will know that a ratio describes and represents the relationship between two or more quantities. • Students will know how to represent the division of a quantity in the form of a ratio. • Students will know how to interpret and express a situation in the form of a ratio. • Students will know how to simplify ratios in their simplest form. • Students will know how to simplify ratios in the form of 1 : n or n : 1. • Students will know how to convert fractions into ratios and vice versa. • Students will know how to understand and express the multiplicative relationship between two quantities as a ratio or a fraction.	Ratio - in mathematics, a ratio indicates how many times one number contains another. Simplify – make (something) simpler or easier to do or understand.	• Students should already know how to find common factors	
To learn how to share in a ratio	• Students will know how to share a quantity into a two-part given ratio. • Students will know how to share a quantity into a three-part given ratio. • Students will know how to find quantities within a ratio when one part is given • Students will know how to find quantities within a ratio when the difference between two parts is given. • Students will know how to solve ratio problems with context.	Share – split up between parts	• Students need to know how to use the bus stop method	
To learn how to scale up recipes	• Students will know how to scale up recipes. Students will know that to scale up recipes they should find the recipe for one person and then scale up; or they will find the recipe for a common factor of people and then scale up.	Proportion – a part, share, or number considered in comparative relation to a whole Direct Proportion – If two things are directly proportional then if one increases, so does the other, if one decreases, then so does the other	• Students will need to know how to multiply and divide	
To learn how to identify the best buy	• 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. • Students will know how to find the best buy in more complex scenarios where percentage discounts or fractions are also involved	Value – how much money something is worth	• Students will need to know how to find the lowest common multiple of two numbers	
To learn how to convert between different currencies	• Students will know how to convert between different currencies.	Currency – a system of money in general use in a particular country. Convert – change/ swap to	• Students will need to know how to multiply decimals • Students will need to know how to divide decimals	