

NUMBER SENSE AND ALGEBRA – COMPARING UNITS (RATIOS, RATES & PROPORTION)

CoU1 – BUILDING RATIOS

- I can use fractions to divide and compare quantities
- I can model ratios using diagrams or objects, e.g. in a ratio of 1:4 of red to blue counters, for each red counter there are four blue counters or ●●●●●

CoU2 – RATIOS & RATES

- I can use ratios to make comparisons, e.g. the number of students to teachers in a school is 20:1
- I can represent a ratio as an equivalent fraction or percentage, e.g. the ratio 1:1 is $\frac{1}{2}$ or 50%
- I can use a ratio to increase or decrease quantities to maintain consistency, e.g. doubling a recipe

CoU2 – RATES

- I can interpret rates as a relationship between two different types of quantities, e.g. money per unit of fuel or \$1.26 per litre
- I can use rates to determine how quantities change

CoU3 – APPLYING PROPORTION

- I can interpret proportion as the equality of two ratios or rates
- I can use common fractions and decimals for proportional division
- I can demonstrate how increasing one quantity in a ratio will affect the total proportion
- I can perform operations with negative integers involving rates, e.g. rates of decent or cooling
- I can explain and apply the difference between direct and indirect proportion, e.g. direct proportion – working more hours will result in earning more money; indirect – travelling at a greater speed will mean the journey will take less time