Hillcrest School and Sixth Form

**KEY WORDS and INFORMATION**

**Ratio:** Relationship between two numbers.

**Part:** This is the numeric value ‘1’ of, would be equivalent to, by compared to the whole.

**Simplify:** Divide both parts of a ratio by the same number.

**Equivalent:** Equal in value.

**Simplest form:** Divide each ratio by the highest common factor, so it cannot reduce further.

**Divide into a given ratio:** Divide an amount so the ratio of the final values simplifies into the given ratio.

**Convert:** Change from one form to another.

**Share:** Splitting into parts not necessarily equally but in a predefined ratio

**Unit Ratio:** Used to compare ratios, one of the parts is 1. This is the only time you are allowed a decimal in a ratio.

**Scale:** The ratio of the length in a drawing to the length of the real thing, or comparison of something drawn to its actual size.

**Proportion:** A name we give to a statement that two ratios are equal.

**Exchange rate:** The value of one currency for the purpose of conversion to another.

**Percentage:** Is a proportion that shows a number as parts per hundred.

**Percentage Increase:** Calculate the percentage and add it on to the original

**Percentage Decrease:** Calculate the percentage and subtract it from the original

**Multiplier:** A quantity by which a given number is to be multiplied.

**Simple Interest:** Interest is calculated as a percent of an original loan.

**Compound Interest:** When interest is calculated on both the amount borrowed AND any previous interest.

**Reverse Percentages:** To find out the original price after an increase or decrease.

Department of Mathematics

KNOWLEDGE ORGANISER

YEAR 7 TERM 3B – Ratio and Percentages

**OUTCOMES**

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| --- |
| • Ratio notation |
| • Understand the relationship between ratio  and fractions |
| • Working with ratios and quantities |
| • Equivalence to fractions and decimal  fractions |
| • Percentage of an amount |
| • Percentage increase and decrease |
| • Finding the original amount |
| • Using percentages, fractions and decimals  in different contexts including probability |

**RESOURCES**

**Hegarty Maths clips**

Ratio 328 - 338

Percentages 81 - 98