**Maths Medium Term Planning**

**Year Six**

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| **WR Block: Number: Ratio** | **Spring Term** |
| **National Curriculum Objectives** | **Small Steps** | **Prior Learning** | **Future Progression** |
| * Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts.
* Solve problems involving the calculation of percentages [for example, of measures,and such as 15% of 360] and the use of percentages for comparison.
* Solve problems involving similar shapes where the scale factor is known or can befound.
* Solve problems involving unequal sharing and grouping using knowledge of fractionsand multiples.
 | * Add or multiply?
* Using ration language
* Introduction to the ratio symbol
* Ratio and fractions
* Scale drawing
* Using scale factors
* Similar shapes
* Ratio problems
* Proportion problems
* Recipes
 | **All of this block is based on new learning.** | **KS3:** * Change freely between related standard units [for example time, length, area, volume/capacity, mass].
* Use scale factors, scale diagrams and maps.
* Express one quantity as a fraction of another, where the fraction is less than 1 and greater than 1.
* Use ratio notation, including reduction to simplest form.
* Divide a given quantity into two parts in a given part:part or part:whole ratio; express the division of a quantity into two parts as a ratio.
* Understand that a multiplicative relationship between two quantities can be expressed as a ratio or a fraction.
* Relate the language of ratios and the associated calculations to the arithmetic of fractions and to linear functions.
* Solve problems involving percentage change, including: percentage increase, decrease and original value problems and simple interest in financial mathematics.
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| **Key Vocabulary****New Vocabulary:**Ratio | **Key Vocabulary:****Previous Year Group:**Factor pair | **Stem Sentences**\_\_\_ is \_\_\_\_ times the size of \_\_\_.For every \_\_\_, there are \_\_\_.If there were \_\_\_, there would be \_\_\_.The common factor of \_\_\_ and \_\_\_ is \_\_\_.The ratio of \_\_\_ to \_\_\_ is \_\_\_\_:\_\_\_\_.In the ratio \_\_\_:\_\_\_\_\_, the first number represents \_\_\_ and the second number represents.\_\_\_\_ squares represent \_\_\_, so each square represents \_\_\_\_.The shape is \_\_\_ times as big, so the scale factor of the enlargement is \_\_\_.If a shape has been enlarged by a scale factor of \_\_\_, I need to \_\_\_ by \_\_\_ to find the original dimensions.I know that the shapes are similar, because the corresponding sides have been enlarged by the same \_\_\_, and the corresponding angles are \_\_\_\_.The ratio of \_\_\_ to \_\_\_\_ is \_\_\_:\_\_\_\_.I know that \_\_\_ multiplied/ divided by \_\_\_ is equal to \_\_\_, so to find out how many \_\_\_ there are, I need to multiply/ divide by \_\_\_.If \_\_\_ costs \_\_\_, then \_\_\_\_ costs \_\_\_\_.There are \_\_\_ times as many people, so I need \_\_\_ times as much of each ingredient.  |
| **Concrete, Pictorial, Abstract Models/ Calculations**   |