Curriculum Map: Maths

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| **Term 1** | **Term 2** | **Term 3** | **Term 4** | **Term 5** | **Term 6** |
| **Algebraic Thinking** | **Place value and proportion** | **Applications of number** | **Directed number and fractional thinking** | **Lines and angles** | **Reasoning with number** |
| During this unit we will start by exploring sequences in detail, using diagrams, graphs and lists of numbers. We will use these representations to recognise the difference between linear and non-linear sequences. We then begin to understand and use algebra notation, developing a deep understanding of basic algebraic forms and substituting into expressions. Finally, we will start to focus on the meaning of equality and equivalence when it comes to forming and solving equations.  | Within this unit we will develop our place value knowledge with integers up to one billion and decimals to hundredths. We will use number lines, as well as other representations to ensure conceptual understanding. Building on this work with decimals, we will start to develop a deep understanding of the links between fractions, decimals and percentages so that they can convert fluently between those most commonly seen in real-life. | The first part of this unit is focused on solving problems with addition, subtraction, multiplication and division; extending and building on the formal methods students have developing in KS2. Problems will be drawn from the contexts of perimeter, money, charts and tables, frequency tree, area and mean, allowing students to apply their knowledge to range of problems. The second part of this unit focuses on the key concept of working out fractions and percentages of quantities and the links between the two. | The first part of this unit is designed to extend and deepen the student’s understanding of directed number. Multiple representations and contexts will be used to enable students to appreciate the meaning behind operations with negative integers. This block also provides valuable opportunities for revising and extending earlier topics, notably algebraic areas such as substitution and the solution of equations. The second part of this unit builds on early work in term 2. It will provide more experience of equivalence of fractions, which we will use to addition and subtraction of fractions. | Students will start to measure increasingly complex diagrams using correct mathematical notation. This will include three letter notation for angles, the use of hatch marks to indicate equality and the use of arrows to indicate parallel lines. They will also start to learn and use new geometric language, learn the names and properties of a range of polygons. Angle rules will be introduced and used to form short chains of reasoning, including investigation work with parallel line rules.  | During this unit students will review and extend their mental strategies with a focus on using a known fact to find other facts. They will also be introduced to probability and learn about sets, set notation and systematic listing strategies. This block will provide students with the opportunity to revisit work with fractions, decimals and percentages. They will be encouraged to develop their reasoning skills by started making conjectures and following lines of inquiry.  |