### Curriculum and Assessment Map 2019-2020

**Subject: Mathematics**

**Subject Leader:** Mrs L Osborne  
**email:** losborne@kingedwardvi.bham.sch.uk

**Second in Department (KS3):** Mrs S Wolstenholme  
**email:** swolstenholme@kingedwardvi.bham.sch.uk

#### Year 9

<table>
<thead>
<tr>
<th>Key Learning Constructs to be developed over the academic year</th>
<th>Scheme of Learning Autumn Term</th>
<th>Scheme of Learning Spring Term</th>
<th>Scheme of Learning Summer Term</th>
</tr>
</thead>
</table>
| **Number** – to become fluent in a range of numerical methods. | **Part 1**  
1: Number and Problem Solving  
2: Expressions  
3: Statistics  
4: Linear Equations  
**Part 2**  
5: Ratio  
6: Statistics 2  
7: Geometry (Pythagoras) | **Part 3**  
8: Algebra- Function Notation, Rearranging formulas  
9: Measures, Constructions and Loci  
10: Trigonometry  
**Part 4**  
11: Statistics – histograms, box plots and presenting data  
12: Planning and Collecting data  
11: Properties of shapes  
12: Fractions, decimals and percentages | **Part 4**  
13: Indices, decimals and surds  
14: Straight-line Graphs  
15: Revision for Year 9 Tests |
| **Algebra** – to become fluent in a range of algebra techniques. | | | |
| **Geometry** – To become fluent in their knowledge of a range of shape and space topics. | | | |
| **Probability and Statistics** – To become fluent in data and probability. | | | |
| Can solve problems by applying their mathematics to a variety of routine and non-routine problems, including breaking down problems into a series of simpler steps. | | | |

#### Assessment Pieces

- **Part 1 Test**: Tubes Investigation  
- **Part 2 Test**: Functional Skills Investigation

- **Part 3 Test**: Data Handling Investigation

#### Assessment Pieces

- **Year 9 Maths exams - 2 papers**:  
- 1 Calculator  
- 1 non-calculator  
- Large Data Sets Investigation

#### Key vocabulary

Outside the taught curriculum: Dr Frost Maths website, Maths Support, UKMT Maths challenge and Puzzles club

#### Suggested reading

- Mathematics, Magic and Mystery by Martin Gardner (Age 12+)
- The Math Book by Clifford A Pickover (Age 12+)
- Why do Buses Come in Threes? by Rob Eastaway and Jeremy Wyndham (Age 13+)
Curriculum and Assessment Map 2019-2020