****

**Mathematics Faculty**

**Year 8 Summer Term 2 - Sigma Scheme**

**Unit 12 Overview - Probability**

|  |  |  |
| --- | --- | --- |
| **Topic** | **Key Ideas** | **Progress** |
| **R** | **A** | **G** |
| **Probability** | I understand the terms mutually exclusive and exhaustive |  |  |  |
| I can use sample space diagrams |  |  |  |
| I can complete Venn diagrams and calculate probabilities |  |  |  |
| I can use frequency trees. |  |  |  |
| I can understand the difference between theoretical and experimental probability |  |  |  |
| I can calculate expected outcomes |  |  |  |
| I can calculate relative frequency |  |  |  |
| I can use the AND /OR rules |  |  |  |
| I can construct probability trees  |  |  |  |
| I can calculate probabilities from probability trees |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Lesson** | **Learning Focus** | **Assessment** | **Key Words** |
| **1** | Understanding the terms mutually exclusive and exhaustive | Formative assessment strategies e.g. MWBs, whole class questioning, Diagnostic Questions, SLOP time with self-assessment, Live Marking etc. Assessment is also supported with our use of ILOs, which alternate between Basic Skills Checks one week and then a more individual ILO the following set through Century and Corbettmaths (see learning focus). Finally, every unit is assessed half-termly as part of our Assessment Calendar in Mathematics. | mutually exclusive, exhaustive |
| **2** | Using sample space diagrams (CM clip 246) | sample space, outcome, event, probability |
| **3** | **Completing Venn diagrams and calculating probabilities** (CM clip 380) | Venn diagram, union, intersection, element, probability  |
| **4** | Constructing and using frequency trees (CM clip 376) | probability, frequency |
| **5** | Understanding the difference between theoretical and experimental probability. **Calculating expected outcomes.** | theoretical, experimental, probability, outcome, expectation |
| **6** | Calculating relative frequency (CM clip 248) | relative frequency, experimental, event, outcome, observation |
| **7** | **Using the AND /OR rules** (CM clip 244) | probability, either, or, and, both |
| **8** | **Constructing probability trees** (CM clip 252) | probability, tree, replacement |
| **9** | Calculating probabilities from probability trees (CM clip 252) | probability, tree, replacement, and, or |