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**Mathematics Faculty**

**Year 8 Summer Term - Delta Scheme**

**Unit 12 Overview - Probability**

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| **Topic** | **Key Ideas** | **Progress** |
| **R** | **A** | **G** |
| **Probability** | I can calculate the probability of an event occurring or not occurring |  |  |  |
| I can understand the terms mutually exclusive and exhaustive |  |  |  |
| I can list outcomes of two events systematically |  |  |  |
| I can use sample space diagrams |  |  |  |
| I can complete Venn diagrams and calculate simple probabilities |  |  |  |
| I can use frequency trees |  |  |  |
| I understand the difference between theoretical and experimental probability and can calculate experimental probabilities |  |  |  |
| I understand bias and understand that repeating an experiment gives more reliable results |  |  |  |
| I can calculate relative frequency |  |  |  |
| I can use the AND /OR rules |  |  |  |

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| **Lesson** | **Learning Focus** | **Assessment** | **Key Words** |
| **1** | **Calculating the probability of an event** occurring and **not occurring** (CM clips 245 & 250) | 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. | probability, likelihood, outcome, event |
| **2** | Understanding the terms mutually exclusive and exhaustive  | mutually exclusive, exhaustive |
| **3** | Listing outcomes of two events systematically (CM clip 253) | outcome, list, systematic |
| **4** | Using sample space diagrams (CM clip 246) | sample space, outcome, event, probability |
| **5** | Completing Venn diagrams and calculating simple probabilities (CM clip 380) | Venn diagram, union, intersection, element, probability  |
| **6** | Constructing and using frequency trees (CM clip 376) | probability, frequency |
| **7** | Understanding the difference between theoretical and experimental probability. **Calculating experimental probabilities.** | probability, theoretical, experimental, likelihood |
| **8** | Investigating bias. **Understanding that repeating an experiment gives more reliable results.** | probability, experimental, outcome, bias, reliability, repetition |
| **9** | Calculating relative frequency (CM clip 248) | relative frequency, experimental, event, outcome, observation |
| **10** | Using the AND /OR rules (CM clip 244) | probability, either, or, and, both |