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| **Title of unit:** | Probability |
| **Overview of unit:** | Understand and use the vocabulary of probability.  Use and understand the probability scale  Express a probability as a fraction.  Mutually exclusive events  Understand relative frequency and use them to compare outcomes of experiments.  Use sample space diagrams to find probability  Draw tree diagrams. Draw tree diagrams and use them to find dependant and independent events |
| **Cross-curricular/ extra-curricular links:** | PE – likelihood of winning |
| **Literacy/ numeracy links:** | Worded problems/exam questions  Keywords displayed on all PPts – probability, likely, unlikely, certain, impossible, even chance, sample space diagram, relative frequency, mutually exclusive, and, or, independent, conditional  Written plenaries |

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| **Grade:** | **Learning objective:** | **Resources:** |
| **1** | Understand and use the vocabulary of probability.  Understand and use the probability scale.  List outcomes systematically | [Probability - scales, mutual exclusivity, exhaustive events and sample space diagrams](https://www.piximaths.co.uk/introduction-to-probability)  [Frequency trees and systematic listing](https://www.piximaths.co.uk/frequency-trees-and-systematic-list) |
| **2** | Express a probability as a fraction.  Use the fact that the probabilities of mutually exclusive events add up to 1.  Complete and use two-way tables. | [Probability - scales, mutual exclusivity, exhaustive events and sample space diagrams](https://www.piximaths.co.uk/introduction-to-probability)  [Two-way tables](https://www.piximaths.co.uk/two-way-tables) |
| **3** | Understand relative frequency as an estimate of probability.  Use relative frequency to compare outcomes of experiments.  Use a sample space diagram to find a probability. | [Relative frequency/ experimental probability](https://www.piximaths.co.uk/relative-frequency)  [Probability - scales, mutual exclusivity, exhaustive events and sample space diagrams](https://www.piximaths.co.uk/introduction-to-probability) |
| **4** | Use relative frequency to compare outcomes of experiments.  Draw probability tree diagrams | [Relative frequency/ experimental probability](https://www.piximaths.co.uk/relative-frequency)  [Probability trees](https://www.piximaths.co.uk/probability-trees) |
| **5** | Use probability trees to find probabilities of successive independent events  Representation probabilities with Venn diagrams. | [Probability trees](https://www.piximaths.co.uk/probability-trees)  [Set notation and theory (Venn diagrams and probability)](https://www.piximaths.co.uk/set-notation-and-theory) |
| **6** | Use probability trees to find probabilities of successive dependent events. | [Probability trees](https://www.piximaths.co.uk/probability-trees) |
| **7** | Calculate and interpret conditional probabilities through representation using expected frequencies with Venn diagrams and ∪/∩. | [Set notation and theory (Venn diagrams and probability)](https://www.piximaths.co.uk/set-notation-and-theory) |
| **8** |  |  |
| **9** |  |  |