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| **Year 9 Term 6.2 - Maths** |  |
| **Enquiry Question:** **Which is more likely, winning the lottery or dealing the same 5 cards from a deck twice in a row?** |
| **Unit title: Probability****Why now? This unit of work builds on your understanding of Collecting and Representing Data in year 7, and of Probability in year 8. Probability will be built on and combined with ideas from data, and you will continue to learn more and apply this in your year 10 unit on Probability as well.** |
| **Knowledge**Students will know about… | **Application/Skills**Students will be able to… | **Vocabulary***(Tier 2 and 3)* | **Home** **Learning** | **Assessment** | **Extra Resources****Extended Reading** | **Cultural** **Capital** |
| 1. What is likelihood, chance and uncertainty?
2. Putting numbers on chance- probability
3. Probability and fractions and ratio
4. Probability and decimals and percentages
5. Calculating simple probabilities
6. Sample spaces and repeated events
7. Expected and relative frequency
8. Probability and data- charts, graphs, two way tables, Venn diagrams
9. Mutually exclusive and independent events
10. Laws of probability
11. Solving problems with probability?
12. From Al-Khalil to Pascal -the history of probability
 | 1. Work in a team
2. Communicate using mathematical language with others.
3. Having a mathematical Conversation with other students
4. Conjecturing and Justifying
 | ***Tier 2***LikelyUnlikelyEstimateInverseDataIdentify***Tier 3***ProbabilityDependentIndependentMutually ExclusiveVenn Diagram | **Pre-classroom:**Pre-lesson tasks on **google classroom** to get you thinking.Diagnostic questions**Post-Classroom:**Post lessons online tasks:* My Maths
* Google Form Quizzes
* Independent learning notes
 | Formative assessment at the end of the units in their LPS books. This will be a combination of students presenting what they know in a creative way followed by some differentiated questions. Summative Assessment at the end of T2.  | **Enrichment:** Read this article on Non-transitive Dice and learn about the concept of transitivity and probability and how the two connect![**https://plus.maths.org/content/non-transitiv-dice**](https://plus.maths.org/content/non-transitiv-dice) |   Look at the Royal Institution Website and enjoy a family fun day exploring some interactive maths or listening to some talks![**https://www.rigb.org/families/family-fun-days**](https://www.rigb.org/families/family-fun-days) |
| **Numeracy**ProductSum Total Difference |