|  |  |  |  |
| --- | --- | --- | --- |
| **Core Knowledge Map** | | | |
| Subject: Mathematics | Year: 10 | | Term: Autumn 1 |
| What are we learning? | | | |
|  | | | |
| How will I be assessed | | | |
| Retrieval Tasks, Exit Tickets, End of term test. | | | |
| Big questions: | | | |
| Can You….?   * Define an irrational number? * Simplify √8 and * Rationalise: and | | | |
| How does this build on previous learning? | | How will this link to my future learning? | |
| * Calculating powers and roots * Knowing square and cube numbers * Using basic index rules | | * Surds will appear in many future topics in GCSE such as in area and volume problems so you will need to be fluent in using them in calculations. * Both surds and indices are used extensively at A Level | |
| Core knowledge: | | Key vocabulary: | |
| An **irrational** number is a number that cannot be written in the form where a and b are integers.  A **surd** is an irrational number.  **Rules** of indices:  **Know that**, n0 = 1 and for positive integers n as well as, and for any positive number n | | Index (Indice)  Surd  Factor  Multiple  Lowest Common Multiple (LCM)  Highest Common Factor (HCF)  Simplify  Irrational  Rationalise  Standard Form  Square root  Root | |
| Need more help? Use the Sparx Independent Learning Codes above | | | |