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| **Core Knowledge Map** | | | |
| Subject: **Mathematics** | Year: 10 | | Term: Autumn 1 |
| What are we learning? | | | |
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| How will I be assessed | | | |
| Retrieval Tasks, Exit tickets, end of half-term test. | | | |
| Big questions: | | | |
| Can You….?   * Write down the value of 25 * Prove that the square root of 45 lies between 6 and 7 * Evaluate (23 × 25) ÷ 24 * Work out the value of n in 40 = 5 × 2n * Write 365,000,000,000 and 0.0000004653 in standard form. * Calculate (1.6 x 106) ÷ (6.4 x 10-8) giving your answer in standard form * Write any number as a unique produce of its prime factors * Use a Venn diagram to sort information to find HCF and LCM * Recall prime numbers up to 100 | | | |
| How does this build on previous learning? | | How will this link to my future learning? | |
| * Calculating powers and roots * Finding factors and prime factors of a number. * Finding HCF and LCM of a number * Using basic index rules * Convert large and small numbers to standard form. | | * Numbers written in standard form can appear elsewhere in the curriculum. * Index numbers appear in many topics and in standard formulae. * Indices are used extensively at A Level | |
| Core knowledge: | | Key vocabulary: | |
| **factor** of a number or algebraic expression divides that number or expression evenly with no remainder.  A **multiple** is the product result of one number multiplied by another number.  A **prime** number only has two factors, itself and one.  **Rules** of indices:  **Know that**, n0 = 1 and for positive integers n as well as, and for any positive number. | | Index (Indice)  Factor  Multiple  Lowest Common Multiple (LCM)  Highest Common Factor (HCF)  Simplify  Standard Form  Square root  Root | |
| Need more help? Use the Sparx Independent Learning Codes above | | | |