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| **Core Knowledge Map** | | | |
| Subject: **Mathematics** | Year: 10 | | Term: Autumn 2 |
| 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….?   * Convert 180 m3 to mm3 * Estimate 3850 0.56 * Describe the difference between rounding and truncating? * Find the side length of a cube if its volume is 330.38 cm3 * Calculate the length of the diagonal in a cuboid with dimensions 5cm, 8cm, 9 cm. * .   correct to 1 decimal place. correct to 2 decimal places. Work out the lower and upper bound of . | | | |
| How does this build on previous learning? | | How will this link to my future learning? | |
| * Recall how to find the volume of cube/cuboid/prism and cylinder * Use of Pythagoras’ theorem. * Use of trigonometry ratios. * Conversion of metric length units | | * GCSE synoptic and multi-step problem solving questions. * Volumes appear in A level maths where we look at optimisation problems and rate of change problems involving 3D shapes. | |
| Core knowledge: | | Key vocabulary: | |
| Volume of a cube or cuboid =  Volume of prism =  Volume of a pyramid = where A is the area of the base and h is the perpendicular height | | Volume  Surface area  Plane  Sphere, Hemisphere, Cone, Pyramid, Cylinder  Perpendicular  Frustum  Truncated  Upper bound and Lower bound  Similar | |
| Need more help? Use the Sparx Independent Learning Codes above | | | |