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**Mathematics Faculty**

**Year 8 Autumn Term 2 – Delta Scheme**

**Unit 3 Overview - Area and Volume**

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| **Topic** | **Key Ideas** | **Progress** |
| **R** | **A** | **G** |
| **Area and Volume** | I can solve problems involving the area of rectangles, parallelograms, triangles, and trapezia. |  |  |  |
| I can calculate the area of compound shapes. |  |  |  |
| I can identify and name parts of a circle. |  |  |  |
| I can calculate the circumference and area of a circle. |  |  |  |
| I can calculate the volume of cubes, cuboids, triangular and compound prisms. |  |  |  |
| I can calculate the surface area of cubes, cuboids and triangular prisms. |  |  |  |

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| **Lesson** | **Learning Focus** | **Assessment** | **Key Words** |
| **1** | Solving problems involving the area and perimeter of squares, rectangles, parallelograms and triangles (CM clips 44, 45 & 49) | Formative assessment strategies e.g. MWBs, whole class questioning, Diagnostic Questions, SLOP time with self-assessment, Live Marking etc.Assessment is also supported with our use of ILOs, set through Century Learning and Corbettmaths.Finally, units are assessed through skills checks and half termly assessments, as part of our Assessment Calendar in Mathematics. | perimeter, area, square, rectangle, length, width, parallelogram, triangle, base, height, unit, cm² |
| **2** | **Calculating the area of trapezia** (CM clip 48) | area, trapezium, trapezia, parallel, height, unit, cm² |
| **3** | **Calculating the area of compound shapes** (CM clip 41) | area, square, rectangle, length, width, parallelogram, triangle, base, height, trapezium, parallel, unit, cm² |
| **4** | **Recognising and naming the parts of a circle** (CM clip 61) | circle, radius, diameter, chord, circumference, arc, sector, segment, tangent |
| **5** | Calculating the circumference of a circle (CM clip 60)  | circle, radius, diameter, circumference, unit, cm |
| **6** | Calculating the area of a circle (CM clip 40) | circle, radius, diameter, area, unit, cm² |
| **7** | Calculating the volume of cubes, cuboids and triangular prisms (CM clips 355 & 356) | volume, capacity, cube, cuboid, triangular prism, length, width, depth, cm3 |
| **8** | Calculating the volume of compound prisms (CM clips 355, 356 & 358) | volume, cube, cuboid, triangular prism, length, width, depth, area, cross-section, cm3 |
| **9** | **Calculating the surface area of cubes and cuboids** (CM clip 310) | surface area, face, square, rectangle, cube, cuboid, length, unit, cm² |
| **10** | Calculating the surface area of triangular prisms (CM clip 312) | surface area, prism, triangular, face, triangle, rectangle, length, height, unit, cm² |