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| **F Unit 2: Transformations** | | **Year 10 Road Map** | | | | |
| In this unit you will learn about geometry. The aims are as follows:  **LG1**: Knowledge **LG2**: Application **LG3**: Skills  Assessment Grades: | | | | | | |
| **S/N** | **Learning Goals/Outcomes/Content** | | Video Clips | R A G |  |  | |
| 1 | Identify congruent shapes by eye; | | 12b |  |  |  | |
| 2 | Understand clockwise and anticlockwise; | | 49 |  |  |  | |
| 3 | Understand that rotations are specified by a centre, an angle and a direction of rotation; | | 49 |  |  |  | |
| 4 | Find the centre of rotation, angle and direction of rotation and describe rotations; | | 49 |  |  |  | |
| 5 | Rotate a shape about the origin or any other point on a coordinate grid; | | 49 |  |  |  | |
| 6 | Identify correct rotations from a choice of diagrams; | | 49 |  |  |  | |
| 7 | Understand that translations are specified by a distance and direction using a vector; | | 50 |  |  |  | |
| 8 | Translate a given shape by a vector; | | 50 |  |  |  | |
| 9 | Describe and transform 2D shapes using single translations on a coordinate grid; | | 50 |  |  |  | |
| 10 | Use column vectors to describe translations; | | 50 |  |  |  | |
| 11 | Understand that distances and angles are preserved under rotations and translations, so that any figure is congruent under either of these transformations. | | 49, 50 |  |  |  | |
| 12 | Understand that reflections are specified by a mirror line; | | 48 |  |  |  | |
| 13 | Identify correct reflections from a choice of diagrams; | | 48 |  |  |  | |
| 14 | Identify the equation of a line of symmetry; | | 48 |  |  |  | |
| 15 | Transform 2D shapes using single reflections (including those not on coordinate grids) with vertical, horizontal and diagonal mirror lines; | | 48 |  |  |  | |
| 16 | Describe reflections on a coordinate grid; | | 48 |  |  |  | |
| 17 | Scale a shape on a grid (without a centre specified); | | 148 |  |  |  | |
| 18 | Understand that an enlargement is specified by a centre and a scale factor; | | 148 |  |  |  | |
| 19 | Enlarge a given shape using (0, 0) as the centre of enlargement, and enlarge shapes with a centre other than (0, 0); | | 148 |  |  |  | |
| 20 | Find the centre of enlargement by drawing; | | 148 |  |  |  | |
| 21 | Describe and transform 2D shapes using enlargements by: a positive integer scale factor; | | 148 |  |  |  | |
| 22 | Describe and transform 2D shapes using enlargements by: a fractional scale factor; | | 148 |  |  |  | |
| 23 | Identify the scale factor of an enlargement of a shape as the ratio of the lengths of two corresponding sides, simple integer scale factors, or simple fractions; | | 148 |  |  |  | |
| 24 | Understand that similar shapes are enlargements of each other and angles are preserved – define similar in this unit; | | 148 |  |  |  | |
| 25 | Describe and transform 2D shapes using combined rotations, reflections, translations, or enlargements. | | 182 |  |  |  | |

Student’s comments or questions