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| **Title of unit:** | Lines, Angles and Shapes |
| **Overview of unit:** | Types of anglesAngles around a point, on a straight line and in a trianglesAngles in parallel lines (alternate, corresponding and supplementary)Interior and exterior angles of polygonsGeometrical proofsCircle theorems |
| **Cross-curricular/ extra-curricular links:** |  |
| **Literacy/ numeracy links:** | Worded problems/exam questionsKeywords displayed on all PPts – angle, obtuse, acute, reflex, right angle, parallel, perpendicular, line, point, triangle, scalene, isosceles, equilateral, corresponding, alternate, supplementary, circle, tangent, radiusWritten plenaries |

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| **Grade:** | **Learning objective:** | **Resources:** |
| **1** | Identify isosceles, equilateral and right-angled trianglesRecognize acute, obtuse and reflex angles. | [Types of Shapes - 2D and 3D](https://www.piximaths.co.uk/types-of-shapes-2d-3d)[Types of lines and angles](https://www.piximaths.co.uk/types-of-lines-and-angles) |
| **2** | Understand the terms ‘parallel’ and ‘perpendicular’Know angles around a point add up to 360°Know angles on a straight line and angles in a triangle add up to 180° | [Types of lines and angles](https://www.piximaths.co.uk/types-of-lines-and-angles)[Angles – point, line, opposite, triangle](https://www.piximaths.co.uk/angles-point-line-opposite-triangle) |
| **3** | Solve problems involving corresponding, alternate and supplementary anglesUse angle facts to solve problems involving triangles | [Angles – parallel lines](https://www.piximaths.co.uk/angles-in-parallel-lines)[Angles – point, line, opposite, triangle](https://www.piximaths.co.uk/angles-point-line-opposite-triangle) |
| **4** | Calculate interior and exterior angles of a regular polygonRecognise tangents, arcs, sectors and segments of circles | [Interior and exterior angles of polygons](https://www.piximaths.co.uk/interior-and-exterior-angles)[Circle theorems](https://www.piximaths.co.uk/circle-theorems) |
| **5** | Recognise congruence and similarity | [Proving similarity and congruence](https://www.piximaths.co.uk/proving-similarity-and-congruence) |
| **6** | Use the tangent/radius properties of a circle | [Circle theorems](https://www.piximaths.co.uk/circle-theorems) |
| **7** | Apply circle theorems | [Circle theorems](https://www.piximaths.co.uk/circle-theorems) |
| **8** | Prove circle theoremsUse the conditions for congruent triangles in formal geometrical proofs | [Circle theorems](https://www.piximaths.co.uk/circle-theorems)[Proving similarity and congruence](https://www.piximaths.co.uk/proving-similarity-and-congruence) |
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