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| Year | **8** |
| Topic | **Constructing Measuring and using Geometric Notation** |
| **LO** | **Key aim/title/objective of the lesson?**  **These may stretch over a number of lessons as appropriate** |
| 1 | Understand and use letter and labelling conventions including those for geometric figures |
| 2 | Draw and measure line segments including geometric figures |
| 3 | Classify angles |
| 4 | Measure angles up to 180° |
| 5 | Draw angles up to 180° |
| 6 | Draw and measure angles between 180° and 360° |
| 7 | Identify perpendicular and parallel lines |
| 8 | Recognise types of triangle |
| 9 | Recognise types of quadrilateral |
| 10 | Identify polygons up to a decagon |
| 11 | Construct triangles using SSS |
| 12 | Construct triangles using SSS, SAS and ASA |
| 13 | Construct more complex polygons |
| 14 | Interpret simple pie charts using proportion |
| 15 | Interpret pie charts using a protractor |
| 16 | Draw pie charts |
| Key vocabulary and/or key reading - addressed in lessons through discussing definitions.  Line, Line segment, Geometric figure, Notation, Polygon, Length, Height, Width, Figure, Quarter/Half/Three Quarter/Full turn, Degrees, Angles, Rotation, Acute, Obtuse, Right-angle, Reflex, Interior, Exterior, Protractor, Sum, Measure, Construct, Parallel, Perpendicular, Intersect, Equilateral, Isosceles, Scalene, Square, Rectangle, Kite, Rhombus, Parallelogram, Trapezium, Polygon, Edges, Vertices, Equal, Triangle, Decagon, Pair of compasses, Side, Vertex, Point, Regular, Diagonals, Compound, Proportion, Frequency, Fraction, Total, Comparison, Sector,  Numeracy Opportunities | |

How does this topic build on ***prior*** learning?

* Revisiting and building upon KS2 National Curriculum requirements.
* Build on KS2 skills of using a ruler, protractors, and other measuring equipment to construct and measure increasingly complex diagrams using correct geometric notation
* Pie charts will be revisited here
* Revisit four operations

How does the work during this topic prepare for future learning?

* A good understanding of constructing and geometric notation is required across maths topics
* Angle facts
* Proving congruence in shapes
* Developing geometric reasoning

How will learning be **assessed** and **feedback** provided in this scheme?

* End of block White Rose assessments to RAG LO understanding
* Individualised feedback through marking and assessment next steps

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| **Personal Development** | |
| How is this topic developed beyond the classroom? | * Locating different angles around the school task. In groups classify and locate different angles around the school site |
| How are **Careers/ IAG** links built into this lesson sequence? | * Teachers to refer to x^p maths (if necessary) to find relevant careers that you this skill. * E.g. Construction industry. Commercial and residential builders use geometric formulas to make important calculations. They work with right angles – angles measuring 90 degrees – frequently. Builders also use geometric formulas to determine the best way to create building frames, walls and features that meet the specifications outlined in architectural plans * Teachers can then expand on this using their own experiences and interests |
| **Relationship Sex and Health Education.** | * Interpreting and analysing health data during lessons around pie charts |
| **Fundamental British Values** (democracy, the rule of law, individual liberty and respect and tolerance) | * Analysing pie charts that highlight the cultural diversity of Britain. Pupils will recognise that it is unacceptable to dismiss the beliefs and opinions of anyone |

