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| **Key Topics and Learning Sequence** | | | | | |
| **= = First Steps** | **= Moving On** | | **= Stretch** | | **= Challenge** |
| **1. Angles**   1. Can define what an **angle** is. 2. Can define **acute**, **obtuse**, **reflex** and **right angles**. 3. Label an angle correctly **using notation**. 4. Know what the **angle sum** on a straight line is. 5. Know the angle sum **around a point**. 6. Know the history of the measurement of an angle. | **2) Measuring lengths and angles**   1. Use a **protractor** to measure and draw an acute angle. 2. Measure and draw obtuse angles. 3. Measure and draw reflex angles. 4. Measure a **line segment**. | **3) Understanding what lines are**   1. Know what we mean by a **point**.      1. Can define a **line**, line segment and **ray**. 2. Understand the links between line segments and an angle in terms of a **rotation**. 3. Know the history of the language in geometry. | **4) Understanding what parallel means**   1. Can define and draw parallel lines 2. Draw and identify a **transversal line**      1. Can reason to find **corresponding** and **alternate** angles 2. Can reason to find **opposite** angles 3. Can reason to find **supplementary** angle | **5) Reasoning with angle facts**   1. Can find missing angles on a straight line 2. Can find missing angles around a point 3. Use the angle sum in a triangle 4. Prove the angle sum in a triangle 5. Can **apply** angle facts to other geometric shapes 6. Can find the angle between clock hands | |
| **How does this unit fit into your mathematical learning journey?** | | | **Further Exploration, Enrichment and Cultural Capital** | | |
| **Reasoning** in mathematics is an especially important skill and one which is applied in many areas. You first developed this skill during your **proportional reasoning** unit in **Year 7** and later will reason when working on further algebraic and geometric topics you meet in **Year 9** and **Year 10.** | | | **Reading:**  [**https://nrich.maths.org/6352**](https://nrich.maths.org/6352)article on the development of geometry  **Enrichment**: Visit the Tate and go view artwork by the artist Piet Mondrian. How does this connect to this unit of work? | | |

**LPS Mathematics: Year 7 Unit 7 – Geometric Reasoning 1**

**Enquiry Question:** **Why are there 360o in a full turn?**

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**Date: Initial Thoughts:**

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**Date: New Thoughts:**

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**Date: Final Thoughts:**

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