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| **Key Topics and Learning Sequence** | | | | | |
| **= = First Steps** | **= Moving On** | | **= Stretch** | | **= Challenge** |
| **1. Understanding Perimeter and Area**   1. Understand what is meant by **perimeter** 2. Find perimeter by counting squares 3. Find **perimeter** by measuring the **distance** 4. Understand what is meant by area 5. Find area by counting and estimating squares | **2. Calculating Perimeter**   1. Can find the **perimeter** of a shape when all **lengths are given** 2. Calculate **perimeter** when you need to apply your knowledge of shape to work out. **missing length** 3. Problem solve to find **missing sides** to enable you to calculate the **perimeter** of a shape | **3. Calculating Area**   1. Apply the **formulae** to find the **area** of a **rectangle**   and a **parallelogram**   1. Apply the **formulae** to find the **area** of a **triangle** 2. Apply the **formulae** to find the **area** of **trapezium** 3. Find **areas** of **compound shapes** using a range of **formulae** | **4. Investigating Perimeter**   1. Can **maximise area** of a quadrilateral. 2. Can **maximise area** for any **polygon.** 3. Can see the relationship as the number of sides tends to infinity and extend these ideas to **3D.** | **5. Shapes and symmetries**  a) Know what we mean by **symmetry.**  b) Can identify **lines of symmetry** in a polygon.    c) Can identify **rotationa**l symmetry.  d) Can identify **reflective** symmetry.  e) Identify **translational** and **glide** symmetry. | |
| **How does this unit fit into your mathematical learning journey?** | | | **Further Exploration, Enrichment and Cultural Capital** | | |
| This unit will build on the knowledge that you have from **Primary.**  You will focus now on properties and definitions. This will prepare you for **reasoning, algebraic thinking** and other work on geometry which we look at in more detail in **geometric reasoning** in **Year 8** and **circles** in **Year 9.** | | | **Reading:** read **Flatland** – a funny short story imagining a world of only 2 dimensions  **Enrichment:** workshops from on the **LEGOLAND Windsor Resort** website that help develop students problem solving skills, <https://www.legoland.co.uk/> | | |

**LPS Mathematics: Year 7 Unit 6 – Introduction to Shape**

**Enquiry Question:** **What shape contains the biggest area?**

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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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