Mossfield Primary School Knowledge Organiser

Year 5 - Mathematics **Geometry , Measures and Statistics**

Key Learning

Property of shapes

- Identify 3-D shapes, including cubes and other cuboids, from 2-D representations
- Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles draw given angles, and measure them in degrees (o)

identify:

◊ angles at a point and one whole turn (total 360o)
◊ angles at a point on a straight line and 2 1 a turn (total 180o)
◊ other multiples of 90o

- Use the properties of rectangles to deduce related facts and find
- missing lengths and angles
- Distinguish between regular and irregular polygons based on reasoning about equal sides and angles.

Position and Direction

- Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed.

Translate / Translation

A shape is translated when it is moved without rotating or resizing.

Every point of the shape moves the same distance in the same direction.

Reflect / Reflection

A shape is reflected about a line when it is flipped over a mirror line.

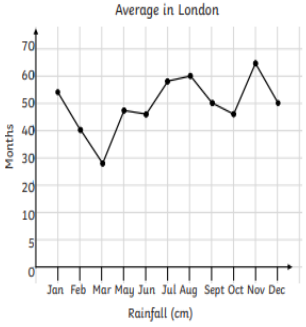
Every point of the shape is the same distance from the mirror line as the same point on the reflected shape.

Measures

- Convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre)
- Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints
- Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres
- Calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm2) and square metres (m2) and estimate the area of irregular shapes
- Estimate volume [for example, using 1 cm3 blocks to build cuboids (including cubes)] and capacity [for example, using water]
- Solve problems involving converting between units of time
- Use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling.

Statistics

- Solve comparison, sum and difference problems using information presented in a line graph
- Complete, read and interpret information in tables, including timetables.



Month	Rainfall (mm)
January	54
February	40
March	28
April	38
May	48
June	46
July	58
August	60
September	50
October	57
November	65
December	50