Foxford Learning Plan

YEAR 10

Topic: Geometric proofs, Similar shapes, Transformations, Constructions, Loci

Key Vocabulary

Congruence	When two shapes are the same shape and size
Scale factor	How much the shape has been enlarged by
Translation	When a shape moves position without rotation or reflection
Reflection	When a shape is flipped in a given line
Rotation	The circular motion of an object around a centre point
Enlargement	When a shape gets larger or **smaller**
Bisector	Splitting something into two equal parts, usually an angle
Perpendicular	When two lines meet at 90 degrees

Key Skills

Over the course of the topic, I will be able to: -
Construct a triangle using a protractor and/or a pair of compasses
Describe a transformation, including a combination of transformations, including the key vocabulary
Translate, reflect, rotate and enlarge a shape
Identify patterns with area and volume with similar shapes
Prove why mathematical concepts in relation to geometry are true



I will Understand

1. How to apply my knowledge of scale factors to solve complex similar shape problems that involve area and volume
2. How to construct an equilateral triangle using a pair of compasses
3. How to carry out and describe an enlargement which has a negative scale factor
4. How to shade regions that satisfy several different loci statements