

# Stage 8 - Visualising and Constructing

## KEYWORDS

### THE BIG PICTURE

#### WHAT DO WE ALREADY *know?*

- Find a multiplier in a situation involving proportion.
- Plot the graph of a linear function.
- Understand the meaning of a compound unit.
- Convert between units of length, capacity, mass and time

- Measure line segments & angles in geometric figures. Solve geometric problems
- Interpreting maps, scale drawings & bearings
- Identify & construct similar shapes, use enlargement; scale factors
- Interpret plans and elevations of 3D shapes

- Similarity-"having characteristics in common," 1610s from French *similaire*
- Enlargement-Meaning "act of increasing in size" is from 1560s
- Scaling
- Scale factor
- Centre of enlargement
- Object
- Image
- Scale drawing
- Bearing
- Plan
- Elevation

### Visualising and Constructing – Targets

	Before Topic	After Topic	Teacher Mark
Use scale factor to do an enlargement with a positive integer scale factor using a centre of enlargement			
Understand the effect that enlargement has on the lengths of a shape			
Be able to enlarge a shape when given a negative integer or fractional scale factor			
Find the centre of enlargement and the scale factor			
Be able to tessellate different quadrilaterals and simple polygons			
Be able to find the image of an object after 2 consecutive transformations (can be a mixture of reflection, rotation or translation)			
Be able to describe one or more transformations of an object			
Use and construct scale diagrams, including the use of maps and bearings			
Interpret plans and elevations			
Solve geometrical problems using bearings			