

WHAT DO WE ALREADY *know?*

- Calculate the area and circumference of a circle in terms of pi.
- Find the areas of basic 2d shapes and compound shapes.
- Find the surface areas of prisms and cylinders.
- Understand Pythagoras Theorem.
- Carry out an enlargement and understand scale factor.

Stage 10 Calculating Space



- Find the volume and surface area of spheres, cones and pyramids.
- Solve practical problems involving spheres, cones and pyramids.
- Understand how scale factors and enlargement impact on length, area, and volume.

KEYWORDS

- (Composite) solid
- Sphere, Pyramid, Cone
- Perpendicular (height), (slant height)
- Surface area
- Volume
- Congruent
- Similarity
- Similar shapes, similar figures
- Enlarge, enlargement
- Scale factor

Calculating Space - Targets

	Before Topic	After Topic	Teacher Mark
Use Pythagoras Theorem to find missing lengths in a pyramid or cone.			
Find the Surface Area of spheres, cones, and pyramids.			
Find the Volume of spheres, cones, and pyramids.			
Find the volume and surface area of a composite solid.			
Solve practical problems involving volume and surface area of solids.			
Understand the implications of scale factors on area.			
Understand the implications of scale factor on volume.			
Solve practical problems involving length, area, and volume in similar figures.			