

Stage 8 – Geometry: Calculating space



Know it!

Knowledge	
I know...	Circle definitions and properties, including: centre, radius, chord, diameter, circumference
I know...	How to calculate the circumference of a circle when radius or diameter is given
I know...	How to calculate the area of a circle when radius or diameter
I know...	How to calculate the area and perimeter of composite shapes that include sections of a circle
I know...	How to calculate the volume of right prisms and cylinders



Link it!

Backward	Forward
Area of triangles, parallelograms and trapeziums. Know how to find the area of compound shapes	Calculating volumes and surface areas of complex solids Arc, sector and segment areas



Prove it!

<p>Convince me $C = 2\pi r = \pi d$.</p> <p>What is wrong with this statement? How can you correct it?</p> <p>The area of a circle with radius 7 cm is approximately 441 cm^2 because $(3 \times 7)^2 = 441$.</p> <p>Convince me that a cylinder is not a prism.</p>

Say it!



Vocabulary	Definition
Circle	
Radius	
Diameter	
Chord	
Circumference	
Pi (π)	
Cross-section	
Prism	

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