

Numbers & Thinking - Proficient 2 - Unit 6

Surface Area of Solids

 **Sessions:** 6 sessions  **Subject:** Numbers & Thinking

TOPICS

- Prisms and cylinders
- Net method

KNOWLEDGE

- Surface area sum of all face areas.
- Drawing net helps organise faces.
- Cylinder area uses circumference times height.

SKILLS

- Find surface of cuboid $4 \times 3 \times 2$.
- Draw net of triangular prism and calculate.
- Calculate cylinder area with pi.

INCLUSION (DIFFERENTIATION)

- Stretch: composite solid separate parts.
- Support: build net from card first.

KEYWORDS

surface area, net, cylinder

TEACHING IDEAS

Cut out net from paper fold into box.
Label each face area and add.
Wrap string round can to measure circumference.
Make two card strips with a split pin to form an angle; measure with a protractor..
Draw shapes on squared paper and work out perimeter and area..

BOOK RESOURCES

CGP GCSE Maths Higher - Section 5: Geometry and Measures - 3D Shapes and Surface Area (Page 42)