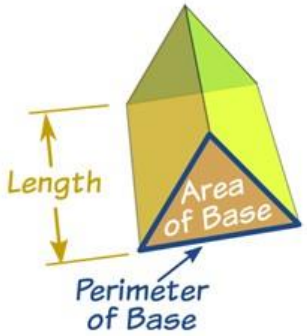
Hillcrest Mathematics Knowledge Organiser

61 - Surface Area

Surface Area

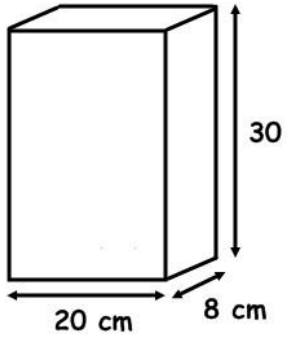
SURFACE AREA only applies to 3D objects — it's just the total area of all the faces added together.
SURFACE AREA OF SOLID = AREA OF NET (remember that a net is just a 3D shape folded out flat).

Surface Area of a Prism

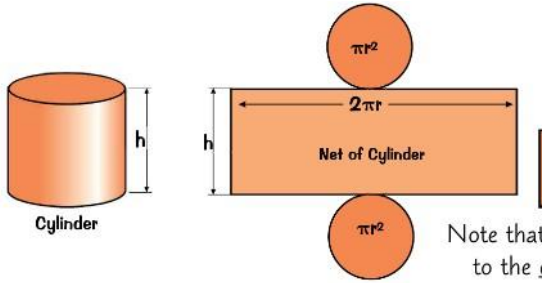


Surface Area = 2 × Base Area
+ Base Perimeter × Length

Surface area of a cuboid



The area of the front face is 20 x 30 = 600 cm^2.
The area of the top face is 20 x 8 = 160 cm^2.
The area of the side face is 8 x 30 = 240 cm^2.
600 + 160 + 240 = 1000 cm^2
Cuboids have 6 faces in total.
we need to double our answer to get 1000 x 2 = 2000 cm^2.



Surface area of a CYLINDER = $2\pi rh + 2\pi r^2$

Note that the length of the rectangle is equal to the circumference of the circular ends.

Linked Prior Topics		Vocabulary			Linked Future Topics
Area	Circles	Area	Prism	Faces	Volume
Perimeter	Faces/Edge/Vertices	Net	Cylinder	Edges	Similarity & Congruence
Units		Perimeter	Circumference		Dimensions
Nets		Cuboid	Pi		Compound Surface Area