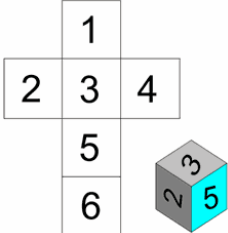
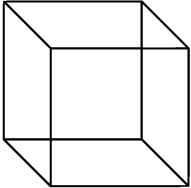
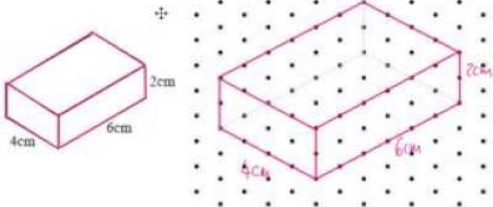
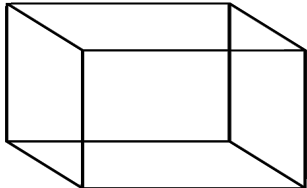
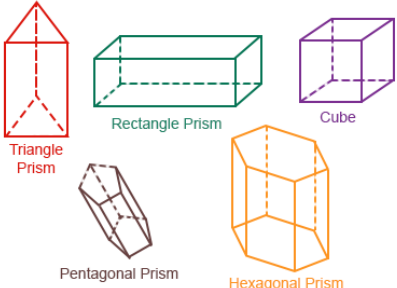
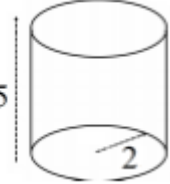
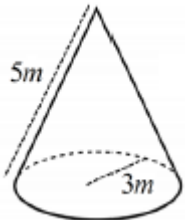


KS3 Unit 25 Nets & Surface Area

Topic/Skill	Definition/Tips	Example
1. Net	A pattern that you can cut and fold to make a model of a 3D shape.	
2. Properties of Solids	Faces = flat surfaces Edges = sides/lengths Vertices = corners	<p>A cube has 6 faces, 12 edges and 8 vertices.</p> 
3. Isometric Drawing	A method for visually representing 3D objects in 2D .	
4. Surface Area of a cube/cuboid	Surface Area = Area of each face (rectangles or squares) added together	 <p>6 faces – find the area of each and add together</p>
5. Surface Area of a Prism	Surface Area = Area of each face added together	
6. Surface Area of a Cylinder	Curved Surface Area = πdh or $2\pi rh$ Total SA = $2\pi r^2 + \pi dh$ or $2\pi r^2 + 2\pi rh$	 <p>$Total SA = 2\pi(2)^2 + \pi(4)(5) = 28\pi$</p>
7. Surface Area of a Cone	Curved Surface Area = πrl where $l = slant height$ Total SA = $\pi rl + \pi r^2$	

	You may need to use Pythagoras' Theorem to find the slant height	$Total SA = \pi(3)(5) + \pi(3)^2 = 24\pi$
8. Surface Area of a Sphere	$SA = 4\pi r^2$ Look out for hemispheres – halve the SA of a sphere and add on a circle (πr^2)	Find the surface area of a sphere with radius 3cm. $SA = 4\pi(3)^2 = 36\pi cm^2$