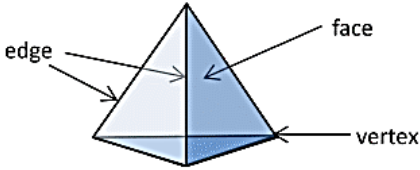
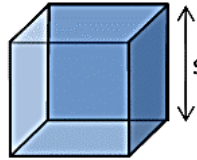
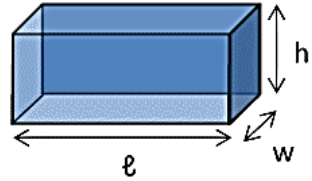
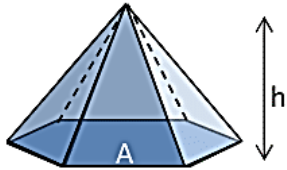
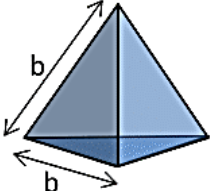
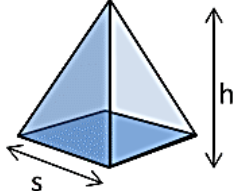
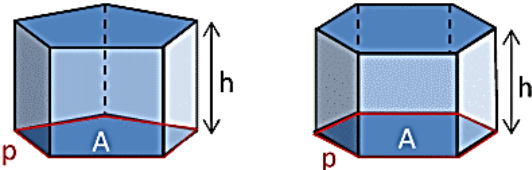
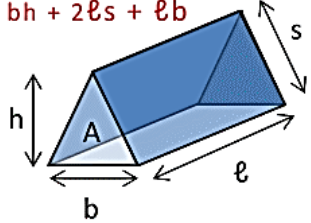
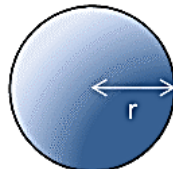
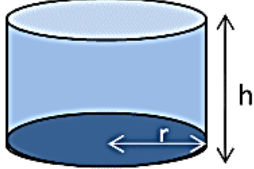


# Formulas Cheat Sheet

<p><b>3D SHAPES</b> All 3d shapes can be described in terms of their faces, vertices and edges. Face - a flat or curved surface Edge - line where 2 faces meet Vertex - point where 3 or more edges meet</p> 	<p><b>CUBE</b> Volume = <math>s^3</math> Surface area = <math>6s^2</math> where <math>s</math> is the length of one side</p> 	<p><b>CUBOID (RECTANGULAR PRISM)</b> Volume = <math>\ell \times w \times h</math> Surface area = <math>2\ell h + 2\ell w + 2wh</math> where <math>\ell</math> = length, <math>w</math> = width, <math>h</math> = height</p> 
<p><b>PYRAMIDS</b> Volume of a general pyramid = <math>\frac{1}{3} Ah</math> where <math>A</math> = base area and <math>h</math> = height</p> 	<p><b>REGULAR TETRAHEDRON</b> Volume = <math>\frac{b^3}{6\sqrt{2}}</math> Surface area = <math>\sqrt{3}b^2</math></p> 	<p><b>SQUARE PYRAMID</b> Volume = <math>\frac{1}{3} s^2 h</math> Surface area = <math>s^2 + 2sh</math></p> 
<p><b>PRISMS</b> Volume of any prism = <math>Ah</math> Surface area of a closed prism = <math>2A + (h \times p)</math> where <math>A</math> = base area, <math>h</math> = height, <math>p</math> = base perimeter</p> 	<p><b>TRIANGULAR PRISM</b> Volume = <math>A\ell</math> or <math>\frac{1}{2}bh\ell</math> Surface area = <math>bh + 2\ell s + \ell b</math></p> 	
<p><b>SPHERES</b> Volume = <math>\frac{4}{3} \pi r^3</math> Surface area = <math>4\pi r^2</math></p> 	<p><b>RIGHT CYLINDER</b> Volume = <math>\pi r^2 h</math> Surface area = <math>2\pi r (r + h)</math></p> 	<p><b>RIGHT CIRCULAR CONE</b> Volume = <math>\frac{1}{3} \pi r^2 h</math> Surface area = <math>\pi r (r + s)</math></p> 