



# PERIMETER, AREA & VOLUME 100% SHEET

DEFINITIONS OF KEYWORDS	NUMERACY SKILLS	PRIOR KNOWLEDGE
<p><b>Perimeter</b> – The total length of the outside of shape</p> <p><b>Average</b> – The total surface of a shape</p> <p><b>Volume</b> – The amount of space that a substance or object occupies</p> <p><b>Capacity</b> – Related to volume, the amount of space the something can contain</p> <p><b>Prism</b> – A 3D shape with the same cross-sectional area across at least one length</p> <p><b>Compound</b> – A shape that is made up of 2 or more basic shapes</p>	<p><b>Addition</b></p> $\begin{array}{r} 38 \\ 93 \\ \hline 131 \\ 1 \end{array}$ <p><b>Subtraction</b></p> $\begin{array}{r} 67 \\ 12 \\ - 56 \\ \hline 16 \end{array}$ <p><b>Multiplication</b></p> $\begin{array}{r} 237 \\ \times 4 \\ \hline 948 \\ 12 \end{array}$ <p><b>Division</b></p> $186 \div 6 = 31$ <p style="font-size: small; color: red;">no groups of 6 can be made      3 x 6 = 18</p>	<p><b>Perimeter:</b></p> <p style="text-align: right; color: blue;"><b>7 + 3 + 7 + 3 = 20</b></p> <p><b>Area of Rectangle</b>  <span style="color: red;">length/height x width</span>  <b>7cm x 3cm = 21cm<sup>2</sup></b></p> <p><b>Rounding to decimal places</b>  <b>2.4684 to 2 Decimal Places is 2.47</b></p>
Finding the VOLUME	Finding the AREA	Compound Shapes
<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> <p><b>V = L x W x H</b> or <b>V = LWH</b></p> </div> <div style="width: 30%;"> <p><b>Volume of Sphere</b></p> <math display="block">= \frac{4}{3} \pi r^3</math> </div> <div style="width: 30%;"> <p><b>V = ½ x b x h x H</b> or <b>V = ½bhH</b></p> </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="width: 30%;"> <p><b>V = π x R x R x H</b> or <b>V = πR<sup>2</sup>H</b></p> </div> <div style="width: 30%;"> <div style="border: 1px solid red; padding: 5px; width: fit-content; margin: 10px auto;"> <math display="block">V = \frac{Ah}{3}</math> </div> </div> </div>	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>radius area <b>A = π x r<sup>2</sup></b></p> </div> <div style="text-align: center;"> <p>Area of Trapezium = <math>\frac{1}{2}h(a+b)</math></p> </div> </div> <div style="text-align: center; margin-top: 20px;"> <p><b>Area = <math>\frac{1}{2}</math> base • height</b></p> </div>	<p style="color: blue; font-weight: bold;">Area of a compound Shape:</p> <p style="text-align: right; font-weight: bold; color: black;"> <b>30 + 8 + 8</b>  <b>= 46 cm<sup>2</sup></b> </p>