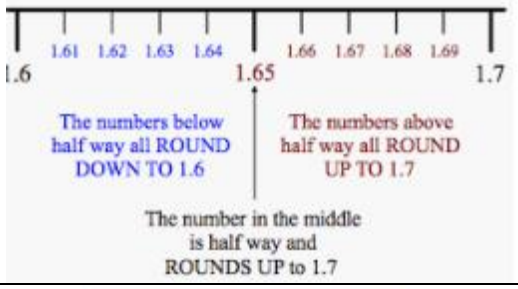
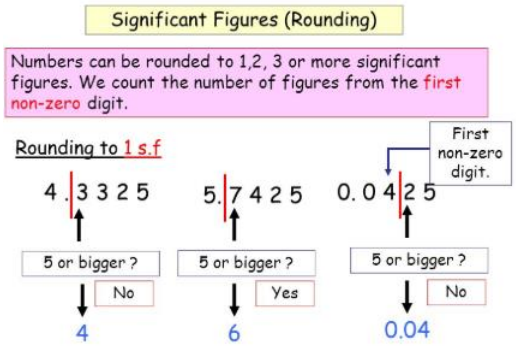
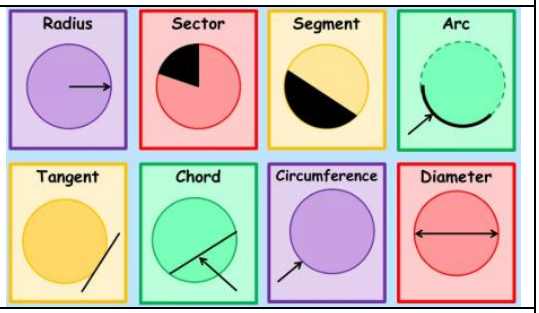
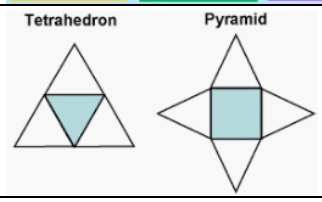
Year 8 Strand 5

Topic/Skill	Definition/Tips	Example
Rounding to a given decimal place	Pi is 3.14159265358979323846264338327950288419716939937510582097494459230781640628620899862803482534211706798214808651328230664709384460955058223172535940812848111…. this carries on forever	
Rounding to a given significant figure	£13, 679.29 The first (and most) significant figure here is 1. So 1 is the first significant figure. 3 is the 2nd significant and 6 is the 3rd.	
Error intervals	An **error interval** is the range of values that a number could have taken before being rounded or truncated. **Error intervals** are usually written as a range using inequalities, with a lower bound and an upper bound.	20000 is rounded to 1 significant figure. State the error interval. The smallest value it could be is 15000 and the largest is 24999.99999…. we write 15000 <= x < 25000
Estimation	Estimation is used in everyday life to help us make calculations more simple	To estimate you round all the numbers in the calculation to 1sf and then perform the calculation. Estimate 1.95 x 312.89 Rounding we get 2 x 300 = 600 so 600 is the approximate value of this calculation
Circumference of a circle	This is the perimeter of the circle – i.e. the distance around the circle	Use c = π x d where d is the diameter of the circle
Area of a circle	The area of a circle is the number of square units inside that circle	Use Area = π x r^2 where r is the radius of the circle
Parts of a circle	A circle has many different parts that have special names	
Nets	A "Geometry **Net**" is a flattened out three dimensional solid (a three dimensional shape) -- like a cube, a prism or a pyramid. A net can be folded to make a 3D object.	

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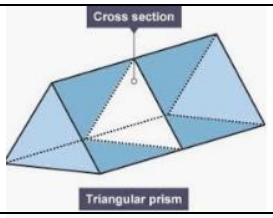
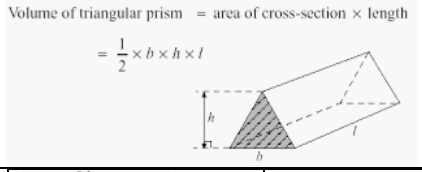
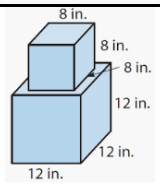
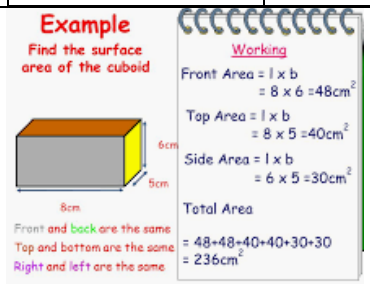
Prism	A **prism** is a solid object with: identical ends; flat faces; and the same cross section all along its length	
Volume of a prism	The volume can be calculated by working out the area of the cross-section and multiplying this by the length of the prism	
Composite solid	**composite solid**. A **solid** that is composed, or made up of, two or more **solids**	 Volume of large cube = 12x12 12 = 1728in^3. The volume of the small cube = 8x8x8 = 512in^3. Adding we get a total volume of 2240in^3
Surface area	the area of an outer part or uppermost layer of something.	
Convert between m^3 and cm^3	To convert from one unit of volume to another	Convert 3m^3 to cm3. To convert from m to cm you multiply by 100. For the volume you multiply by 100^3. 3 x 100^3 = 3,000,000cm^3