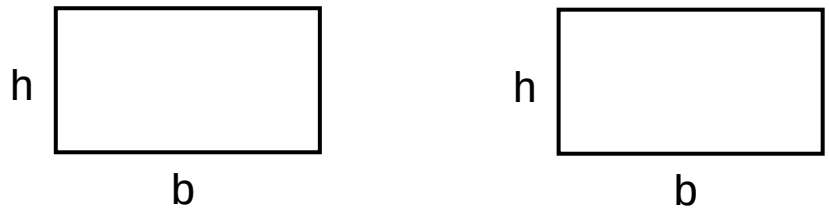
AREA AND VOLUME

Name:

Assessment Criteria: Deduce and use formulae for the area of a triangle and parallelogram, and the volume of a cuboid; calculate volumes and surface areas of cuboids.

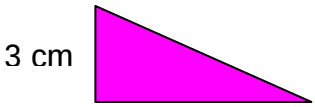
1. The area of a rectangle is given by $A = b \times h$. Use the diagrams below to show two different ways in which in can be demonstrated that the area of a triangle is given by $A = ½ \times b \times h$.



2. Again, knowing the formula for the area of a rectangle, show why the formula for the area of a parallelogram is also $A = b \times h$.

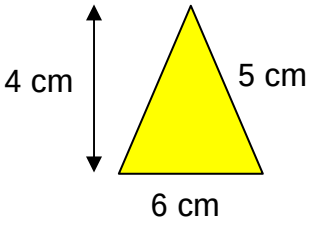
3. Find the areas of the following shapes:

a)



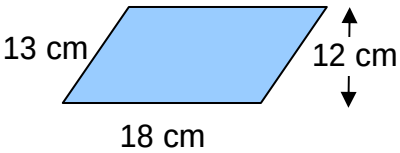
_____cm^2

b)



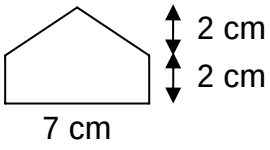
_____cm^2

c)



_____cm^2

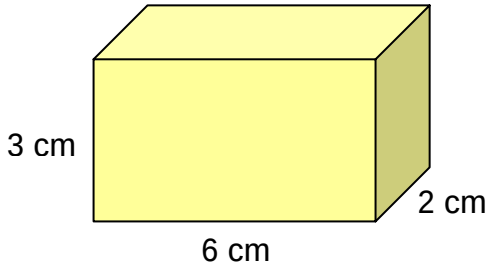
d)



_____cm^2

4. For each of the following cuboids, put a ring around its correct volume and surface area: (NO METHOD = NO MARKS!)

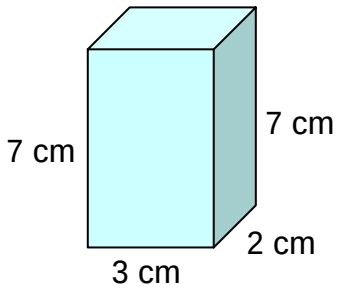
a)



Volume: 18 cm^3 36 cm^3 11 cm^3

Surface area: 18 cm^2 36 cm^2 72 cm^2

a)



Volume: 42 cm^3 12 cm^3 294 cm^3

Surface area: 18 cm^2 41 cm^2 82 cm^2

Overall, I think my success level is:	Low ○ ○ ○ ○ High

Q	AREA AND VOLUME	☺	☹
	I can deduce the area of a triangle from the area of a rectangle		
	I can deduce the area of a parallelogram from the area of a rectangle		
	I can calculate the area of a triangle		
	I can calculate the area of a parallelogram		
	I can calculate the volume of a cuboid		
	I can calculate the surface area of a cuboid		
	I can present a concise, reasoned argument, using symbols, diagrams, graphs and related explanatory texts		

I need to practise …