

Volume L2 Mark Scheme		
1	$4 \text{ cm} = 40 \text{ mm}$ $5.2 \text{ cm} = 52 \text{ mm}$ $8.5 \text{ cm} = 85 \text{ mm}$	[1]
	$40 \times 52 \times 85$	[1]
	$= 176800 \text{ mm}^3$	[1]
2	$250 \text{ cm} = 2.5 \text{ m}$ $640 \text{ cm} = 6.4 \text{ m}$ $860 \text{ cm} = 8.6 \text{ m}$	[1]
	$2.5 \times 6.4 \times 8.6$	[1]
	$= 137.6 \text{ m}^3$	[1]
3	$47 \text{ mm} = 4.7 \text{ cm}$	[1]
	$\text{Volume} = 4.7 \times 4.7 \times 4.7$	[1]
	$= 103.823 \text{ cm}^3$	[1]
4	$\text{Area of triangle} = \frac{1}{2} \times 5.2 \times 6 = 15.6 \text{ cm}^2$	[1]
	$\text{Volume} = 15.6 \times 10$	[1]
	$= 156 \text{ cm}^3$	[1]
5	$\text{Area of triangle} = \frac{1}{2} \times 9 \times 14 = 63 \text{ mm}^2$	[1]
	$\text{Volume} = 63 \times 16$	[1]
	$= 1008 \text{ mm}^3$	[1]
6	$\text{Area of circle} = \pi r^2 = 3.14 \times 3^2 = 28.26 \text{ m}^2$	[1]
	$\text{Volume} = 10 \times 28.26$	[1]
	$= 282.6 \text{ m}^3$	[1]

7	Base: $51 \times 85 \times 40 = 173400 \text{ cm}^2$ Doorway (gap): $17 \times 17 \times 85 = 24565 \text{ cm}^2$	[1]
	Roof: $\frac{1}{2} \times 20 \times 54 \times 85 = 45900 \text{ cm}^2$	[1]
	Volume of plastic = $173400 + 45900 - 24565$	[1]
	= 194735 cm^3	[1]

8	Volume of block = $30 \times 30 \times 30 = 27000 \text{ cm}^3$	[1]
	Volume of wine holder = $30 \times 3.14 \times 4^2 = 1507.2 \text{ cm}^3$ Volume of wine holders = $6 \times 1507.2 = 9043.2 \text{ cm}^3$	[1]
	Volume of wood = $27000 - 9043.2$	[1]
	= 17956.8 cm^3	[1]