

Chapitre 5 14 Calculer des volumes

Unités de volume

1 cm³ représente le volume d'un cube de 1cm de côté.

1 dm³ représente le volume d'un cube de 1dm de côté.

1 cube de 1 dm³ « contient » 1000 cubes de 1cm³ donc 1 dm³ = 1000 cm³ = 1 000 000mm³

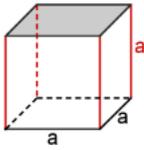
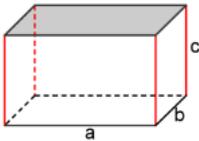
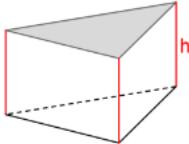
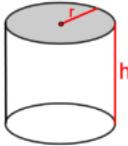
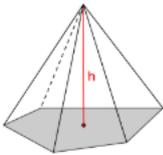
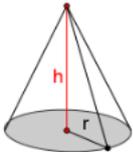
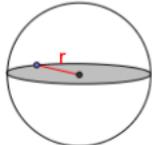
hm ³			dam ³			m ³		dm ³			cm ³			mm ³		
								hl	dal	l	dl	cl	ml			
					3	2		0	0	0	0	0	0			
										0	0	5	1	3		

32 m³ = 32 000 000 cm³

51,3 cm³ = 0,0513 dm³

Unités de capacité

1 litre = 1 dm³

Solides			
<p>Le cube</p>  <p>Volume = a³ Aire totale = 6 x a²</p>	<p>Le pavé droit</p>  <p>Volume = a x b x c</p>	<p>Le prisme</p>  <p>Volume = Aire de la base x h Aire latérale = périmètre de la base x h</p>	<p>Le cylindre</p>  <p>Volume = π r² h Aire latérale = 2 π r h</p>
<p>La pyramide</p>  <p>V = $\frac{\text{Aire de la base} \times h}{3}$</p>	<p>Le cône</p>  <p>V = $\frac{\pi r^2 h}{3}$</p>	<p>La boule</p>  <p>Volume = $\frac{4}{3} \pi r^3$ Aire de la sphère = 4 π r²</p>	