

≠ entre \bar{x} et $-x$?
 ...

Remarques sur la notation: $\frac{m}{m} \equiv C_m \otimes \sigma_h$

$\frac{2}{m} \rightarrow \exists \bar{1}(x)$ en fait s'il existe deux elt parmi " $2, m, \bar{1}$ " alors le 3^e existe.

$$\begin{aligned} \bar{3} &= 3+i \\ \bar{4} &= \bar{4} \\ \bar{6} &= 3 + \bar{m} = \frac{3}{m} \end{aligned}$$

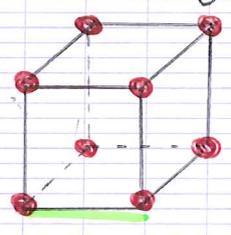
$$\frac{2}{m} \frac{2}{m} \frac{2}{m} = mmm$$

$$\frac{4}{m} \frac{2}{m} \frac{2}{m} = \frac{4}{m} mmm$$

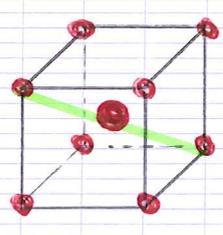
$$\bar{3} \frac{2}{m} = \bar{3} m$$

$$\frac{4}{m} \bar{3} \frac{2}{m} = m \bar{3} m$$

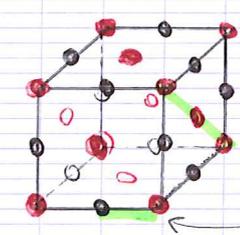
Rappels : convergence dans un cube



Primitif



Centré



Faces centrées

site octaédrique
 $N_A + N_B = \frac{a}{2}$

longueurs sur :

l'arête

la 1^{re} diagonale

diagonale d'une face

$2r = a$

$4r = a\sqrt{3}$

$4r = a\sqrt{2}$

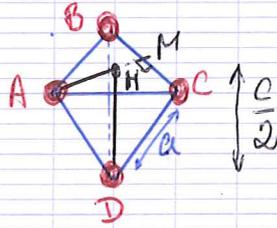
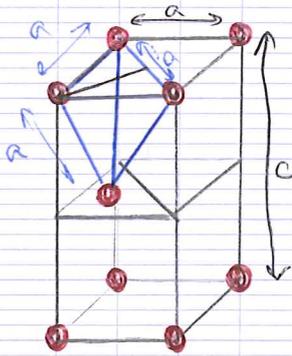
Compacité = $\frac{N \times V_{atome}}{V_{maille}} = \frac{\frac{4}{3} \pi r^3 \times N}{a^3}$

Masse Volumique = $\rho = \frac{NM}{V_{cell}}$

N = nb d'atomes en propre dans la maille

$\rho = \frac{m(\text{maille})}{V(\text{maille})} = \frac{mM}{V} = \frac{NM}{V_{cell}}$

Rappels Démonstration $c = 2\sqrt{\frac{2}{3}}a$



* Volume de la maille
 $V = a \times c \times AM$

* Triangle AMC : $AC^2 = AM^2 + MC^2$
 $a^2 = AM^2 + \frac{a^2}{4}$
 $AM^2 = \frac{3}{4}a^2$

* Propriété du projeté : $AH = \frac{2}{3}AM = \frac{a}{\sqrt{3}}$

* Triangle AHD : $AD^2 = AH^2 + HD^2$
 $a^2 = \frac{a^2}{3} + \frac{c^2}{4}$

D'où $\frac{2}{3}a^2 = \frac{c^2}{4} \rightarrow \boxed{2\sqrt{\frac{2}{3}}a = c}$

Rappels : Coordination

CFC = 12 = Hexagonal compact

Cubique centrée = 8