

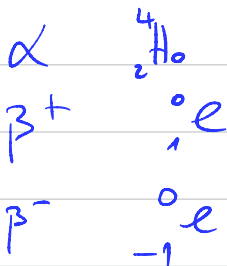
26/12/20:

Seconde: Physique - Chimie -
Transformat° nucléaires.

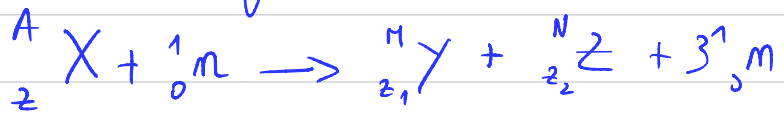
Transformations nucléaires.



Radioactivité



Fission ou fusion.



Loi de Soddy. $\begin{cases} M+N+3 = A+1 \\ Z_1+Z_2 = Z \end{cases}$



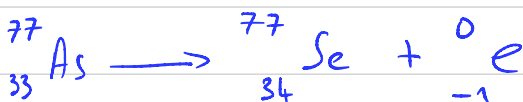
m°5: ${}^{24}_{12}\text{Mg}$: 12 protons et 12 neutrons (24-12=12)

${}^{25}_{12}\text{Mg}$: 12 protons et 13 neutrons (25-12=13)

m°6:



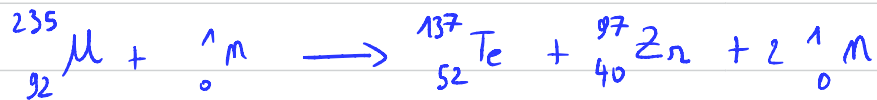
m°7:





n°9: Fusion thermonucléaire: deux noyaux légers s'assemblent pour former un noyau plus lourd. Conditions:
 ✦ plusieurs millions de degrés.

n°10:



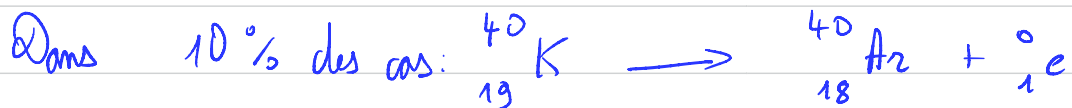
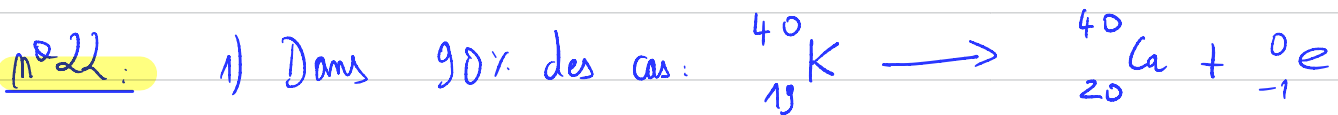
n°19: a) Chimique car il s'agit de la réorganisation des liaisons inter-atomiques.

b) $\text{H}_2\text{O}(\text{l}) \rightarrow \text{H}_2\text{O}(\text{g})$ physique (changement d'état).

c) Transformation nucléaire car pas de conservation des noyaux des atomes.

d) Physique (changement d'état).

e) Chimique.

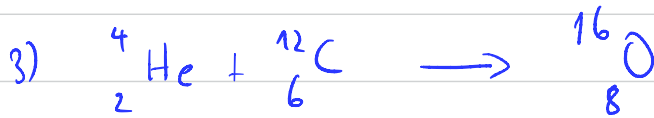
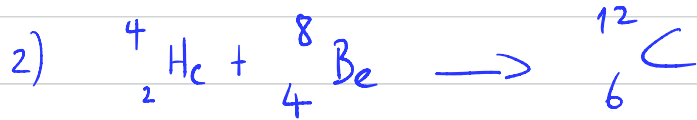
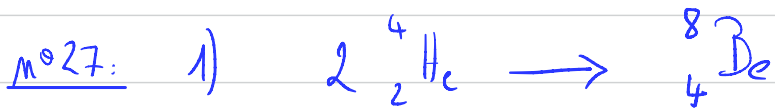


2) $A = 8000 \text{ Bq}$.

3)
$$E = 4000 \times 0,90 \times 2,1 \times 10^{-13} + 4000 \times 0,10 \times 2,4 \times 10^{-13}$$

$$E = 8,52 \times 10^{-10} \text{ J}$$

$$4) \quad \frac{0,7}{8,52 \times 10^{-10}} = 8,21 \times 10^8 \quad 0,7 \gg 8,52 \times 10^{-10}$$



n°28: 1) Conservat° de la charge et du nombre de masse.

