

2 Na 2

4 H 4

2 O 2



2 K 2

2 Cl 2

5 O 5

06/05/2021

BALANCEO POR REDOX

Número de oxidación

-7 -6 -5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5 +6 +7

Oxidación

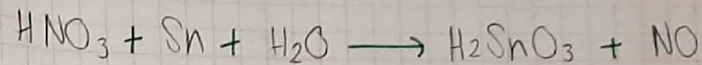
Aumenta el número de oxidación

(Pérdida de electrones)

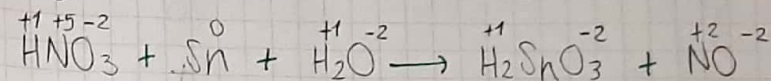
Reducción

Disminuye el número de oxidación

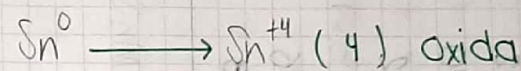
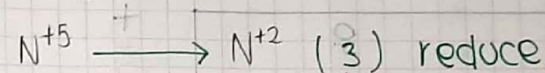
(ganancia de electrones)



① Asignar estados de oxidación:



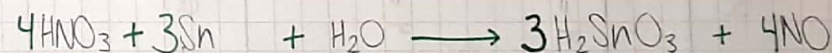
② Identificar que elemento se oxidó y cual se redujo y en cuanto:



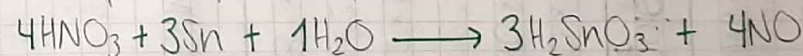
③ Cambie la diferencia entre ellos:



④ Ubique estos números en la ecuación:



⑤ Verifique que este balanceada

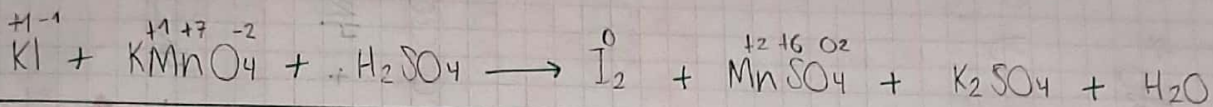
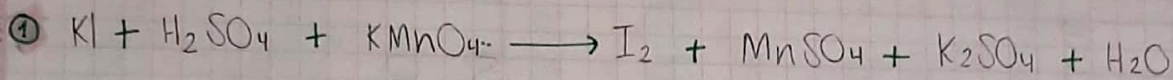


4 N 4

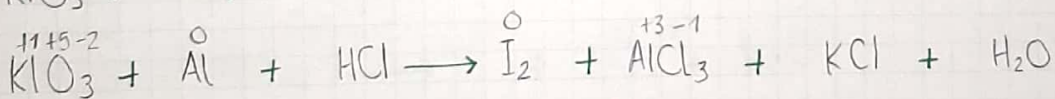
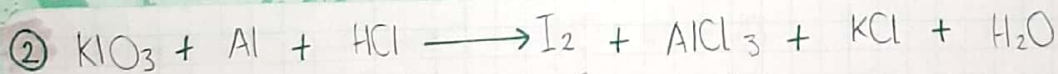
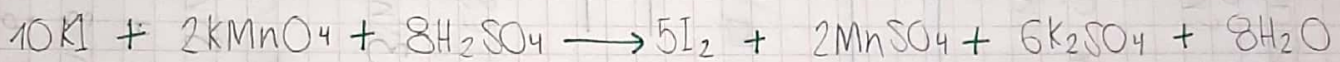
3 Sn 3

6 H 6

ACTIVIDAD:



Izquierda:	Derecha:
$K = 10 \times 1 + 2 \times 1 = 12$	$K = 6 \times 2 = 12$
$I = 10 \times 1 = 10$	$I = 5 \times 2 = 10$
$Mn = 2 \times 1 = 2$	$Mn = 2 \times 1 = 2$
$O = 2 \times 4 + 8 \times 4 = 40$	$O = 2 \times 4 + 6 \times 4 + 8 \times 1 = 40$
$H = 8 \times 2 = 16$	$H = 8 \times 2 = 16$
$S = 8 \times 1 = 8$	$S = 8 \times 1 = 8$



Izquierda

$Al = 10 \times 1 = 10$

$K = 6 \times 1 = 6$

$I = 6 \times 1 = 6$

$O = 6 \times 3 = 18$

$H = 36 \times 1 = 36$

$Cl = 36 \times 1 = 36$

Derecha

$Al = 10 \times 1 = 10$

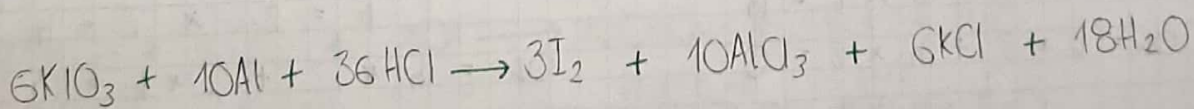
$K = 6 \times 1 = 6$

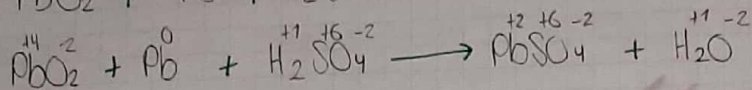
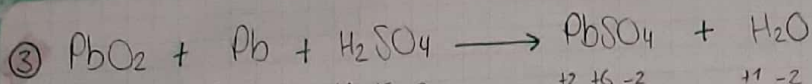
$I = 3 \times 2 = 6$

$O = 18 \times 1 = 18$

$H = 18 \times 2 = 36$

$Cl = 10 \times 3 + 6 \times 1 = 36$





Izquierda

$$\text{Pb} = 1 \times 1 + 1 \times 1 = 2$$

$$\text{O} = 1 \times 2 + 2 \times 4 = 10$$

$$\text{H} = 2 \times 2 = 4$$

$$\text{S} = 2 \times 1 = 2$$

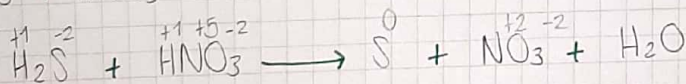
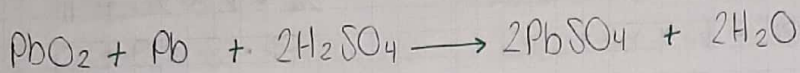
Derecha

$$\text{Pb} = 2 \times 1 = 2$$

$$\text{O} = 2 \times 4 + 2 \times 1 = 10$$

$$\text{H} = 2 \times 2 = 4$$

$$\text{S} = 2 \times 1 = 2$$



Izquierda

$$\text{H} = 3 \times 2 + 2 \times 1 = 8$$

$$\text{S} = 3 \times 1 = 3$$

$$\text{N} = 2 \times 1 = 2$$

$$\text{O} = 2 \times 3 = 6$$

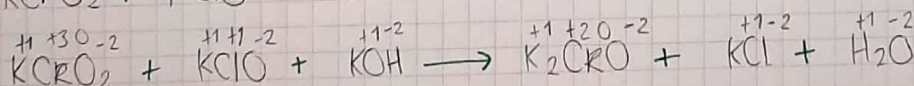
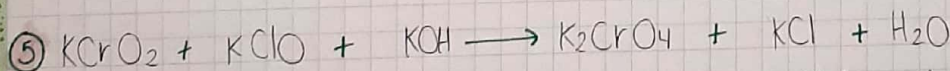
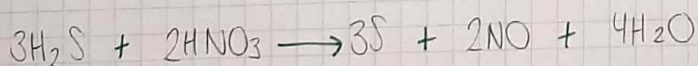
Derecha

$$\text{H} = 4 \times 2 = 8$$

$$\text{S} = 3 \times 1 = 3$$

$$\text{N} = 2 \times 1 = 2$$

$$\text{O} = 2 \times 1 + 4 \times 1 = 6$$



Izquierda

$$\text{K} = 2 \times 1 + 3 \times 1 + 2 \times 1 = 7$$

$$\text{Cr} = 2 \times 1 = 2$$

$$\text{Cl} = 2 \times 1 = 2$$

Derecha

$$\text{K} = 2 \times 2 + 3 \times 1 = 7$$

$$\text{Cr} = 2 \times 1 = 2$$

$$\text{Cl} = 2 \times 1 = 2$$

$$0 = 2 \times 2 + 3 \times 1 + 2 \times 1 = 9$$

$$01 = 3 \times 1 = 3$$

$$0 = 2 \times 4 + 1 \times 1 = 9$$

$$01 = 3 \times 1 = 3$$