

Review

Counting atoms



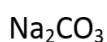
Type of atom	# of atoms
H	2
O	1
Total	3

Subscripts - affect only the element they are "attached to"

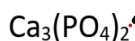


Type of atom	# of atoms
Mg 1×4	4
Br 2×4	8
Total	12

Coefficients affect every element in the chemical formula. Multiply it by the subscript if the element has one.

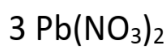


Type of atom	# of atoms
Na	2
C	1
O	3
Total	6



Type of atom	# of atoms
Ca 1×2	2
P 4×2	8
O 4×2	12
Total	22

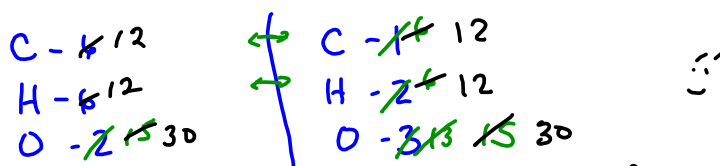
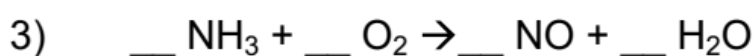
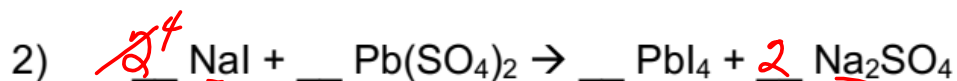
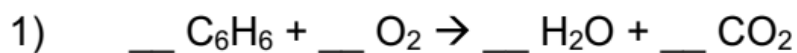
Subscript by a bracket affects every element in the bracket. Multiply it by the subscript if an element in the brackets has one.



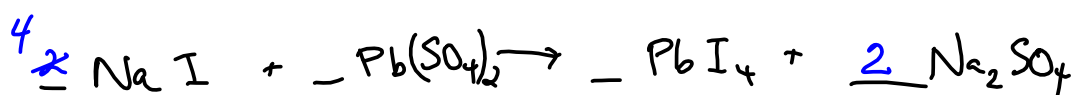
Type of atom	# of atoms
Pb 1×3	3
N $1 \times 2 \times 3$	6
O $3 \times 2 \times 3$	18
Total	27

Put it all together!

Balancing Equations

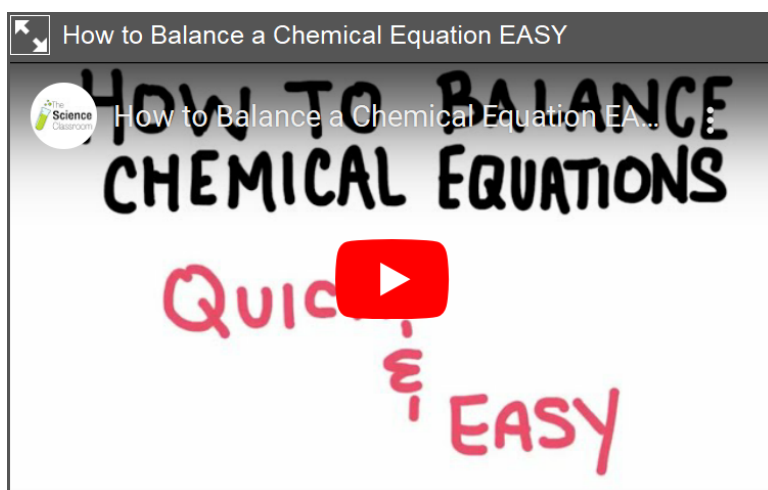


Double everything to get rid of the fraction



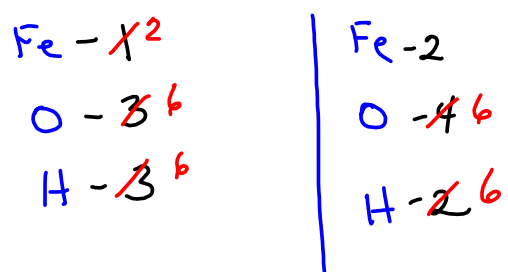
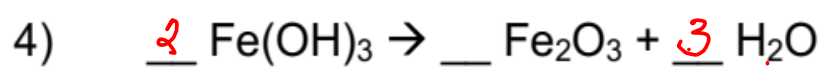
Double everything

An approach for the more complicated ones (it works for the simpler ones too!)

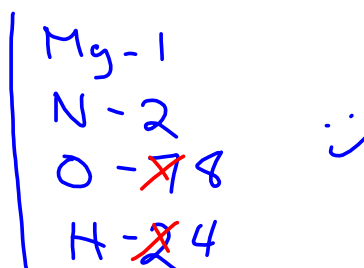
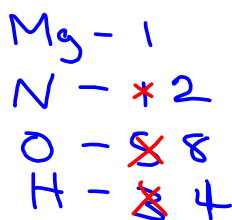
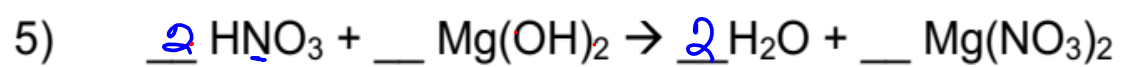


- 1) Balance the metals
- 2) Balance the non-metals (except H, O)
- 3) Balance H and O

Together



Your turn!



Try #6-9