

ONLY USE PENCIL TO COMPLETE THIS ASSIGNMENT!!

We balance chemical equations so that the equations will follow the law of conservation of mass. Balancing chemical equations can be trial and error because just when you fix one element, others are thrown off by the changes you make. All correctly written chemical reactions can be balanced by adding coefficients.

Balancing Synthesis Reactions

1. ____ Fe + ____ O₂ → ____ Fe₃O₄
2. ____ Pt + ____ S₈ → ____ PtS₂
3. ____ Be + ____ N₂ → ____ Be₃N₂
4. ____ NO + ____ O₂ → ____ NO₂
5. ____ N₂ + ____ H₂ → ____ NH₃
6. ____ Na + ____ I₂ → ____ NaI
7. ____ Mg + ____ O₂ → ____ MgO
8. ____ Mg + ____ P → ____ Mg₃P₂
9. ____ CO + ____ O₂ → ____ CO₂
10. ____ H₂ + ____ Cl₂ → ____ HCl
11. ____ CaO + ____ H₂O → ____ Ca(OH)₂
12. ____ Na₂O + ____ H₂O → ____ NaOH
13. ____ Cu₂S + ____ S → ____ CuS
14. ____ Na + ____ S → ____ Na₂S
15. ____ Mg + ____ Cl₂ → ____ MgCl₂
16. ____ P + ____ O₂ → ____ P₄O₁₀
17. ____ Cu + ____ O₂ → ____ Cu₂O

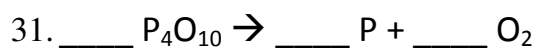
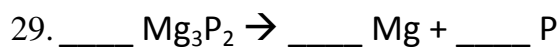
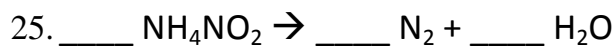
Balancing Order:

M	-	I	-	N	-	O	-	H
e		o		o		x		y
t		n		n		y		d
a		s		m		g		r
l				e		e		o
s				t		n		g
				a				e
				l				n
				s				

← **Hint:** When you see hydroxide (OH) on one side and not on the other side, but you see water, make water **H(OH)** and not **H₂O**.

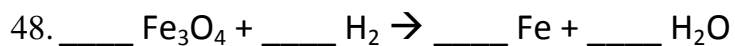
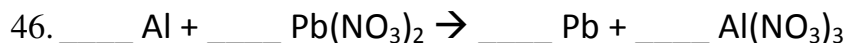
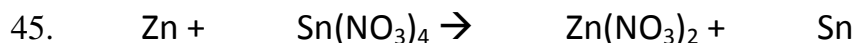
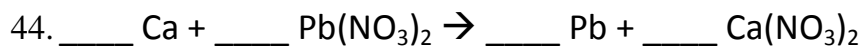
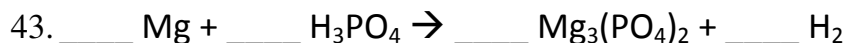
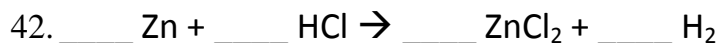
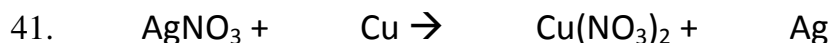
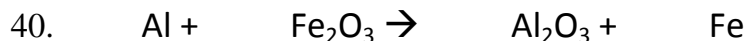
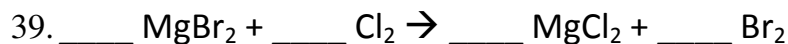
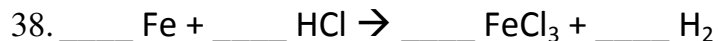


Balancing Decomposition Reactions

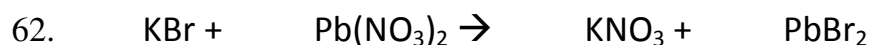
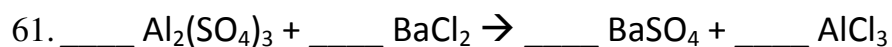
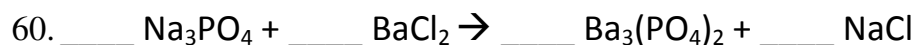
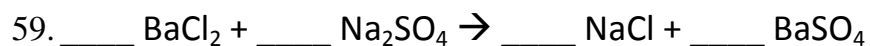
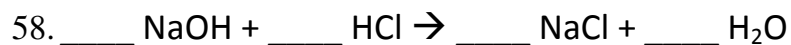
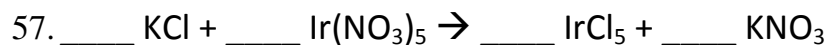
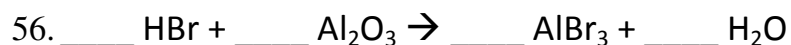
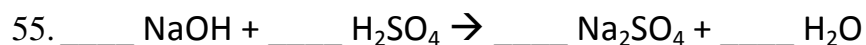
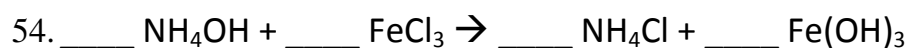
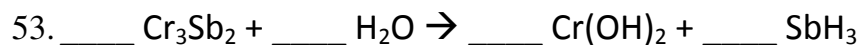
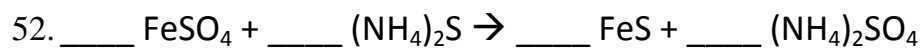
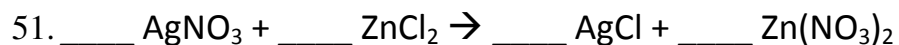
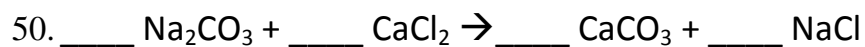
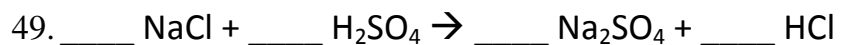


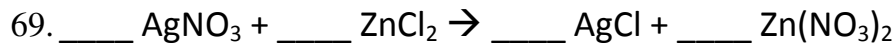
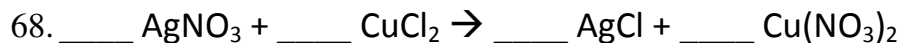
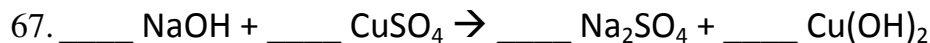
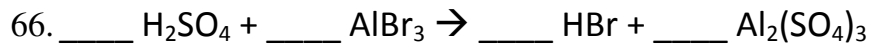
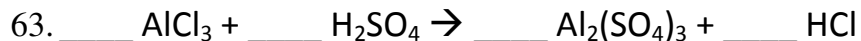


Balancing Single-Replacement Reactions

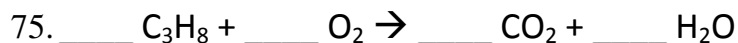
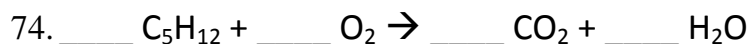
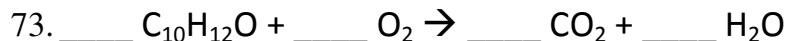
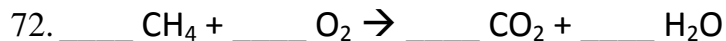
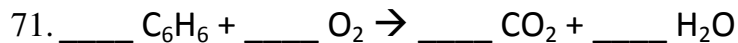
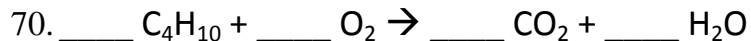


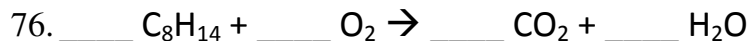
Balancing Double-Replacement Reactions





Balancing Combustion Reactions





Balancing Misc. and Mixed Reactions

