

Balancing Equations Handout name:

Balance perfectly, name the Reaction Type (Synth, Decomp, SR, DR, or Comb.)

Many of these dashes will be “ones” – we don’t write ones in chem, we are number 1!

Page 1	Reaction Type
$\text{___ H}_{2(\text{G})} + \text{___ O}_{2(\text{G})} \rightarrow \text{___ H}_2\text{O}_{(\text{G})}$	
$\text{___ Sr(OH)}_{2(\text{AQ})} + \text{___ Li}_2\text{CrO}_{4(\text{AQ})} \rightarrow \text{___ SrCrO}_{4(\text{S})} + \text{___ LiOH}_{(\text{AQ})}$	
$\text{___ ZnBr}_{2(\text{AQ})} + \text{___ Al}_{(\text{S})} \rightarrow \text{___ AlBr}_{3(\text{AQ})} + \text{___ Zn}_{(\text{S})}$	
$\text{___ C}_{(\text{S})} + \text{___ S}_{8(\text{S})} \rightarrow \text{___ CS}_{2(\text{S})}$	
$\text{___ K}_{(\text{S})} + \text{___ Ni(C}_2\text{H}_3\text{O}_2)_{3(\text{AQ})} \rightarrow \text{___ KC}_2\text{H}_3\text{O}_{2(\text{AQ})} + \text{___ Ni}_{(\text{S})}$	
$\text{___ N}_{2(\text{G})} + \text{___ O}_{2(\text{G})} \rightarrow \text{___ N}_2\text{O}_{5(\text{G})}$	
$\text{___ P}_{(\text{S})} + \text{___ Cl}_{2(\text{G})} \rightarrow \text{___ PCl}_{5(\text{S})}$	
$\text{___ Pb(NO}_3)_{2(\text{AQ})} + \text{___ LiCl}_{(\text{AQ})} \rightarrow \text{___ PbCl}_{2(\text{S})} + \text{___ LiNO}_{3(\text{AQ})}$	
$\text{___ Al}_{(\text{S})} + \text{___ S}_{8(\text{S})} \rightarrow \text{___ Al}_2\text{S}_{3(\text{S})}$	
$\text{___ C}_3\text{H}_{8(\text{G})} + \text{___ O}_{2(\text{G})} \rightarrow \text{___ CO}_{2(\text{G})} + \text{___ H}_2\text{O}_{(\text{G})}$	
$\text{___ Mg}_{(\text{S})} + \text{___ Cl}_{2(\text{G})} \rightarrow \text{___ MgCl}_{2(\text{S})}$	
$\text{___ C}_{15}\text{H}_{32(\text{S})} + \text{___ O}_{2(\text{G})} \rightarrow \text{___ CO}_{2(\text{G})} + \text{___ H}_2\text{O}_{(\text{G})}$	
$\text{___ C}_6\text{H}_{6(\text{G})} + \text{___ O}_{2(\text{G})} \rightarrow \text{___ CO}_{2(\text{G})} + \text{___ H}_2\text{O}_{(\text{G})}$	
$\text{___ N}_{2(\text{G})} + \text{___ H}_{2(\text{G})} \rightarrow \text{___ NH}_{3(\text{G})}$	

Page 2	Reaction Type
$__\text{Li}_{(\text{s})} + __\text{TiCl}_{3(\text{AQ})} \rightarrow __\text{LiCl}_{(\text{AQ})} + __\text{Ti}_{(\text{s})}$	
$__\text{C}_2\text{H}_{6(\text{G})} + __\text{O}_{2(\text{G})} \rightarrow __\text{CO}_{2(\text{G})} + __\text{H}_2\text{O}_{(\text{G})}$	
$__\text{Rb}_{(\text{s})} + __\text{P}_{(\text{s})} \rightarrow __\text{Rb}_3\text{P}_{(\text{s})}$	
$__\text{CH}_{4(\text{G})} + __\text{O}_{2(\text{G})} \rightarrow __\text{CO}_{2(\text{G})} + __\text{H}_2\text{O}_{(\text{G})}$	
$__\text{Na}_{(\text{s})} + __\text{I}_{2(\text{s})} \rightarrow __\text{NaI}_{(\text{s})}$	
$__\text{Rb}_{(\text{s})} + __\text{S}_{8(\text{s})} \rightarrow __\text{Rb}_2\text{S}_{(\text{s})}$	
$__\text{Al}(\text{HCO}_3)_{3(\text{AQ})} + __\text{CaCrO}_{4(\text{AQ})} \rightarrow __\text{Al}_2(\text{CrO}_4)_{3(\text{s})} + __\text{Ca}(\text{HCO}_3)_{2(\text{AQ})}$	
$__\text{Li}_{(\text{s})} + __\text{SnCl}_{4(\text{AQ})} \rightarrow __\text{LiCl}_{(\text{AQ})} + __\text{Sn}_{(\text{s})}$	
$__\text{NH}_{3(\text{G})} \rightarrow __\text{N}_{2(\text{G})} + __\text{H}_{2(\text{G})}$	
$__\text{Cs}_{(\text{s})} + __\text{N}_{2(\text{G})} \rightarrow __\text{Cs}_3\text{N}_{(\text{s})}$	
$__\text{CaCO}_{3(\text{s})} \rightarrow __\text{CaO}_{(\text{s})} + __\text{CO}_{2(\text{G})}$	
$__\text{C}_{10}\text{H}_{22(\text{s})} + __\text{O}_{2(\text{G})} \rightarrow __\text{CO}_{2(\text{G})} + __\text{H}_2\text{O}_{(\text{G})}$	
$__\text{Mn}_{(\text{s})} + __\text{ZnSO}_{4(\text{AQ})} \rightarrow __\text{Mn}_2(\text{SO}_4)_{7(\text{AQ})} + __\text{Zn}_{(\text{s})}$	