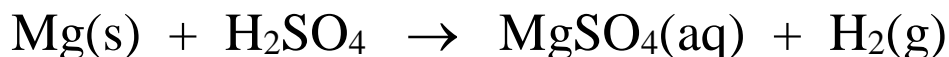
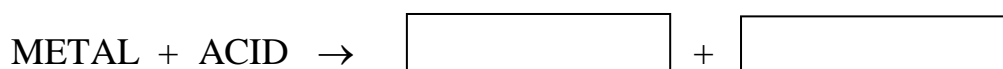


Salts Chemistry Taster Session Holiday Home Study

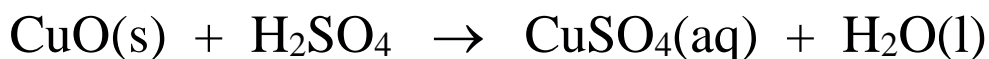
When a metal is added to an acid, the metal displaces the hydrogen. The hydrogen in the acid is replaced by the metal.



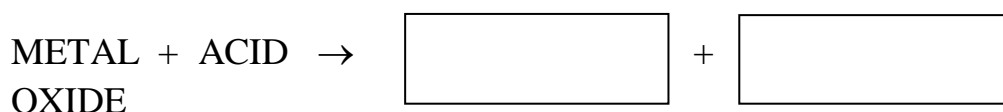
The product formed when the hydrogen in an acid is replaced by a metal is called a **SALT**. We can summarise this idea in a *general* word equation.



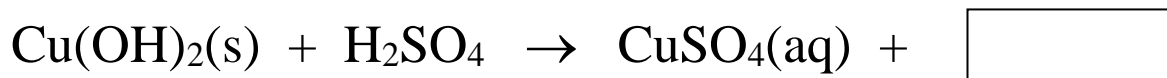
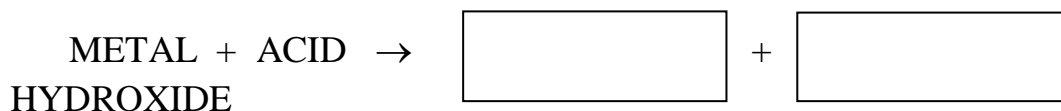
When a metal **oxide** dissolves in an acid, the hydrogen in the acid is again replaced by the metal to form a salt.



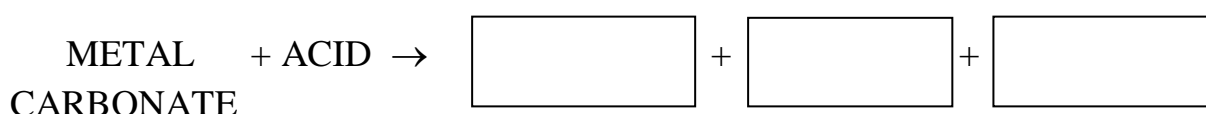
The other product of the reaction is now $\boxed{\phantom{\text{H}_2\text{O}}}$. The general word equation for the reaction of a metal oxide with an acid is...



The same general word equation applies to the reaction of a metal **hydroxide** with an acid,



When a metal **carbonate** dissolves in an acid, the hydrogen in the acid is still replaced by the metal to form a salt but now **two** other products are formed.



Complete the following equations by *adding the formulae of the products* and then **balance** them by *adding numbers, where appropriate, in front of the reactants/products*:

Mg(s)	+	H ₂ SO ₄ (aq)	⇒		+		
KOH(aq)	+	HNO ₃ (aq)	⇒		+		
CaCO ₃ (s)	+	HCl(aq)	⇒		+		+
CuO(s)	+	HNO ₃ (aq)	⇒		+		
NH ₄ OH(aq)	+	H ₂ SO ₄ (aq)	⇒		+		
Na ₂ CO ₃ (s)	+	HNO ₃ (aq)	⇒		+		+
Al(s)	+	HCl(aq)	⇒		+		
MgCO ₃ (s)	+	H ₂ SO ₄ (aq)	⇒		+		+
Al ₂ O ₃ (s)	+	HBr(aq)	⇒		+		
NaOH(aq)	+	H ₃ PO ₄ (aq)	⇒		+		