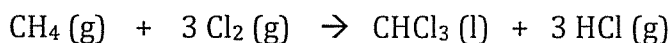
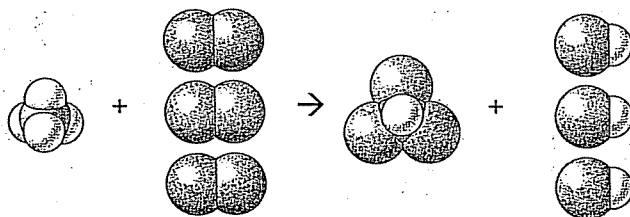


Writing Equations

Methane gas reacts with chlorine gas to form liquid chloroform and hydrogen chloride gas as shown in the equation below.



Atom inventory: 1 carbon \rightarrow 1 carbon
 4 hydrogen 4 hydrogen
 3 chlorine 3 chlorine

In the above equation:

What are the reactants?

What are the products?

What does \rightarrow mean?

What does (l) indicate? What about (g)?

What does the subscript "2" in Cl_2 indicate?

What does the coefficient "3" in 3HCl indicate?

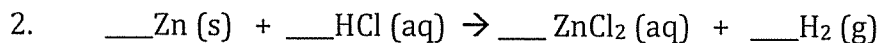
Explain the difference between a subscript and a coefficient using the drawings of the molecules involved in the reaction show above.

Write the equation for the reaction in which solid carbon reacts with solid copper(II) oxide to form elemental copper solid and carbon dioxide gas. Balance the equation, do an atom inventory, and sketch the atoms and molecules involved.

Add coefficients to balance the following equations:

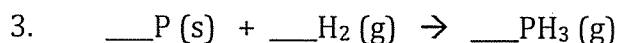


Sketch atoms and molecules:

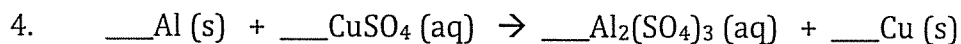


What does the (aq) after HCl mean? _____

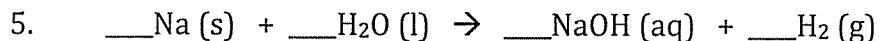
What does the (s) after Zn mean? _____



Sketch atoms and molecules:



Do atom inventory to show matter is conserved:



Sketch atoms and molecules:

