

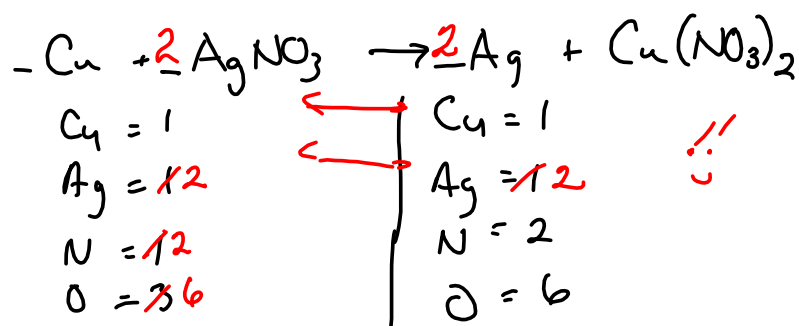
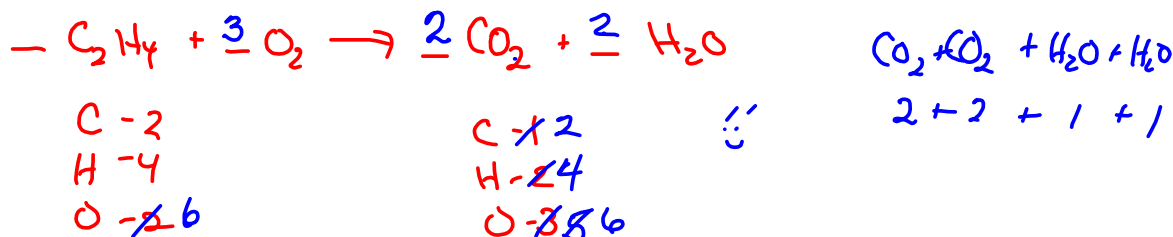
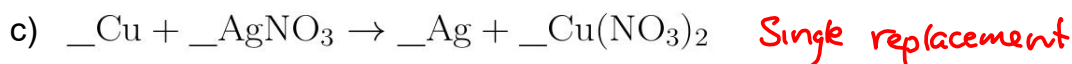
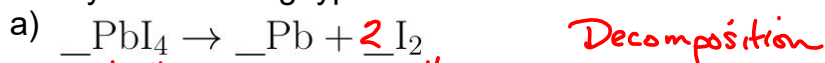
## Warmup: Open book

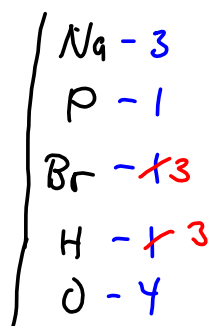
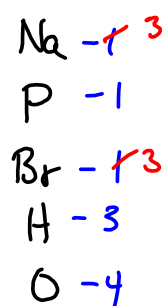
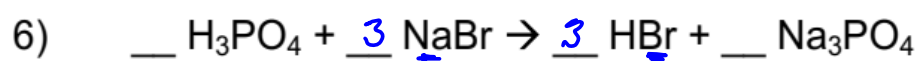


1) Name the following chemicals. Identify them as ionic or molecular.

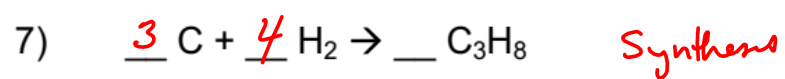


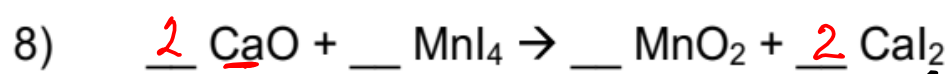
2) Identify the following types of chemical reactions AND balance them.

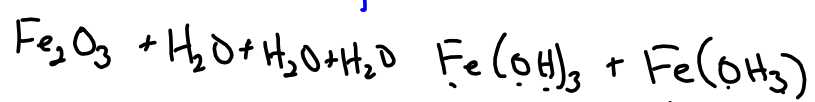
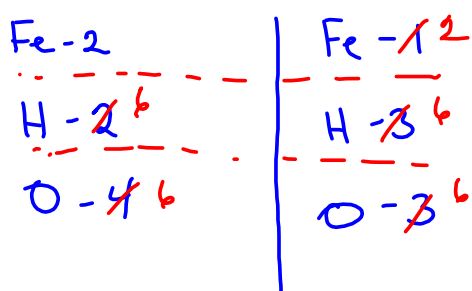
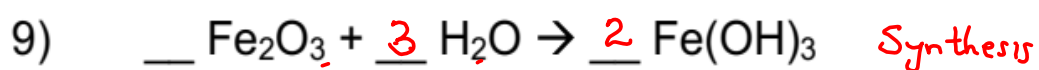




Double replacement







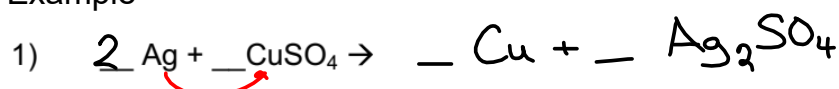
## Predicting Products of Chemical Reactions

Based on the reactants, we can make a prediction of

- 1) what type of chemical reaction will occur, and
- 2) what the products will be.

warning: periodic table required!

Example



Thought process:

Type: single replacement

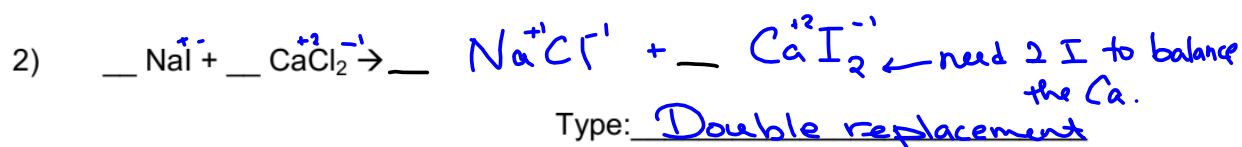
- 1) Not synthesis (2 different metals)
- 2) Not decomposition (2 reactants instead of 1)
- 3) Not combustion (Not hydro carbons and oxygen)
- 4) Not double replacement (Ag is by its lonesome)

5) So Ag replaces Cu

6) But how does Ag form a compound with  $\text{SO}_4$ ?

$\text{Ag}^{+1}$     $\text{SO}_4^{-2}$     $\uparrow$  ion charge  
 How many Ag to balance  $\text{SO}_4$ ? 2  
 So  $\text{Ag}_2\text{SO}_4$

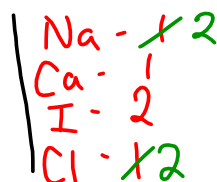
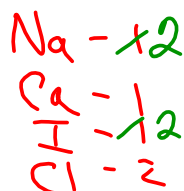
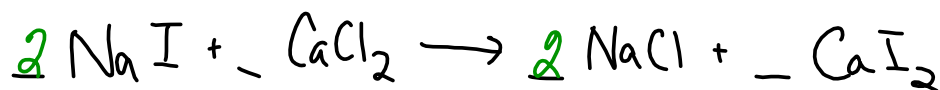
7) Now balance it :)

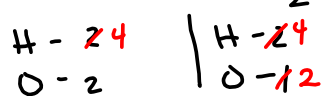
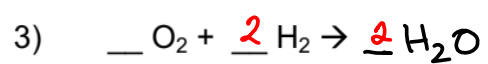
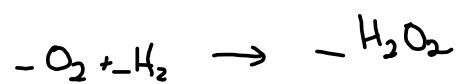


1) Identify type.

2) Identify the products (This may involve balancing ions for single, double replacement)

3) Balance the equation



Type: Synthesis



Try # 4-10. Don't forget to practice balancing them!