

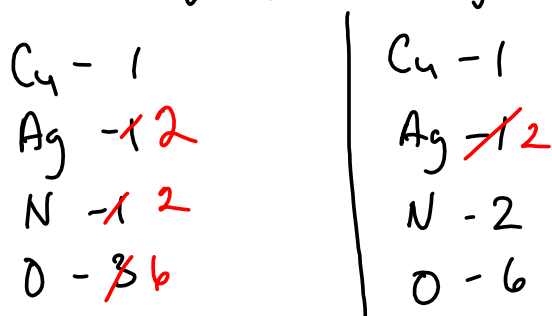
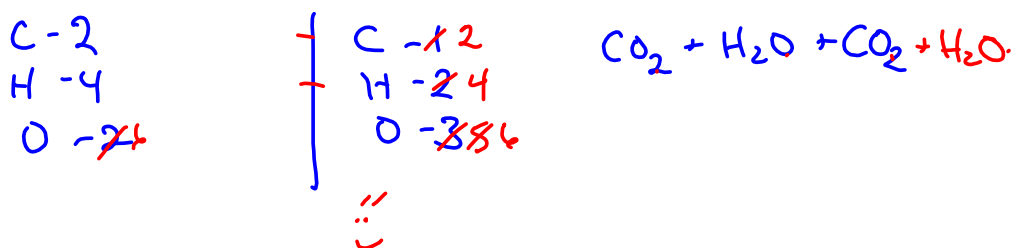
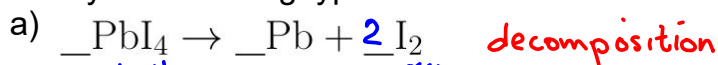
Warmup: Open book

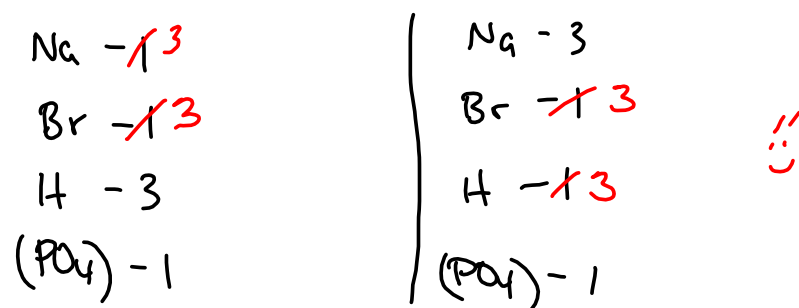
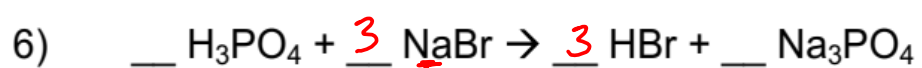


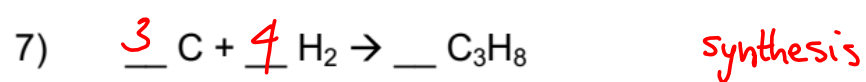
1) Name the following chemicals. Identify them as ionic or molecular.

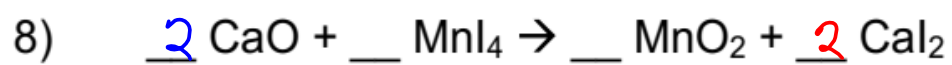


2) Identify the following types of chemical reactions AND balance them.

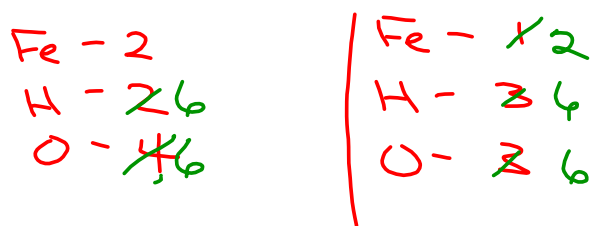








Ca - 2		Ca - 2
Mn - 1		Mn - 1
I - 4		I - 4
O - 2		O - 2

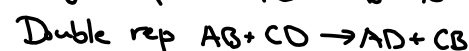
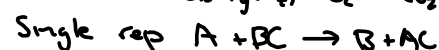
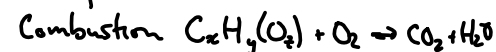
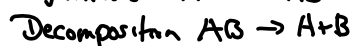
*Synthesis*

Predicting Products of Chemical Reactions

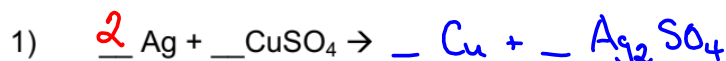
Based on the reactants, we can make a prediction of

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

warning: periodic table required!



Example



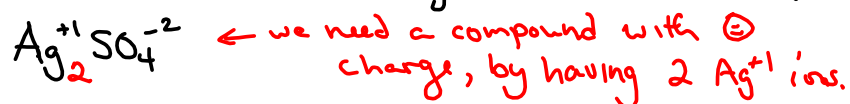
Type: Single replacement

Thought process:

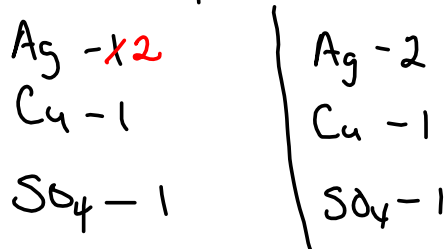
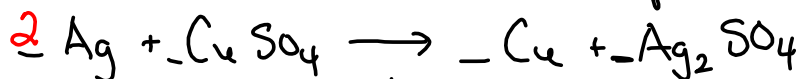
- 1) Not synthesis (it has 2 different metals)
- 2) Not decomposition (it has 2 reactants, not 1)
- 3) Not combustion (not hydrocarbons and O_2)
- 4) It is single replacement (Ag is by its lonesome)
- 5) That means Ag and Cu swap places

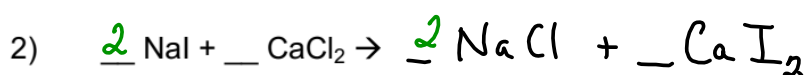


- 6) But we have to check the ion charges in silver sulfate!



- 7) Now we can balance the equation

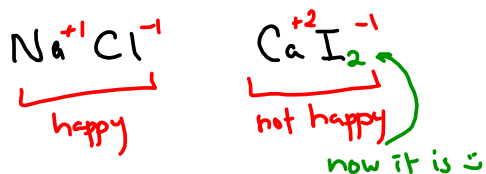




Type: double replacement

• double replacement \rightarrow + ions
flip flop.

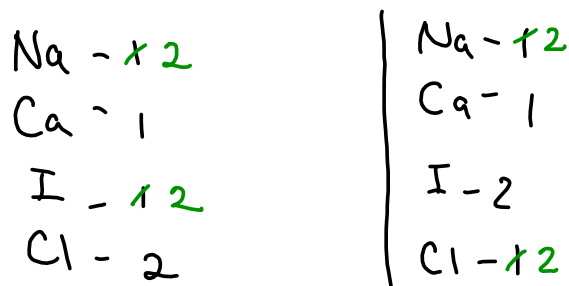
\rightarrow look at ion charges

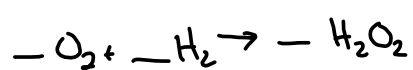
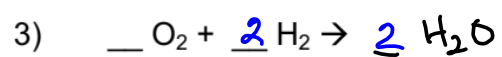


\checkmark 1) Predict type of reaction

\checkmark 2) Identify the products - this may involve balancing ions in SR, DR reactions or possibly synthesis/decomposition

\checkmark 3) Balance the equation.





Type: Synthesis or perhaps Combustion
(hydrogen peroxide)

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