PRECIPITATION REACTIONS

Sometimes you are asked for your observations – that is – what would you see.

So you need to know some colours of

- **Solutions**
- **Precipitates**

so that you can describe what would be seen during the reaction.

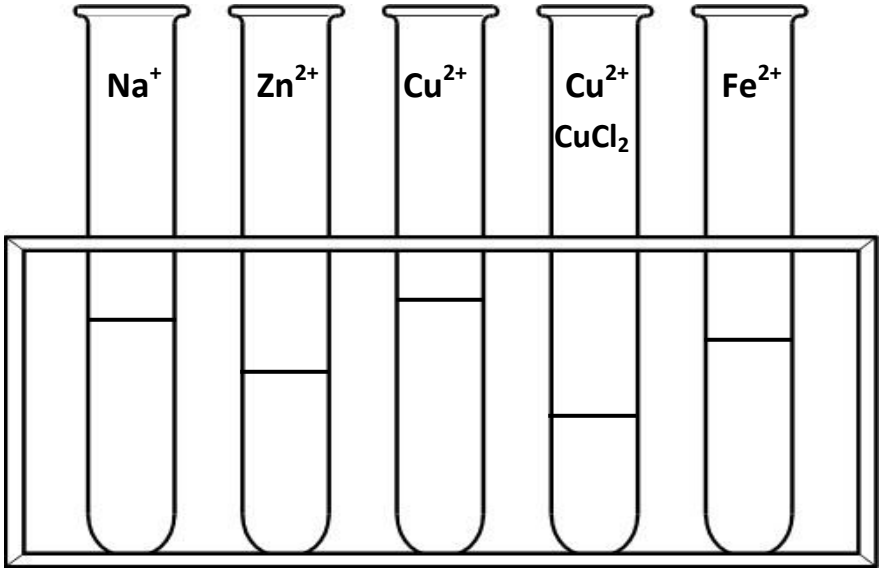
We make this easy for ourselves by learning that most solutions are COLOURLESS and most precipitates are WHITE but then we need to memorise those that are the exceptions.

As there aren't many, please make the effort!!

Solutions (aq)

The solutions you will meet will be colourless except….

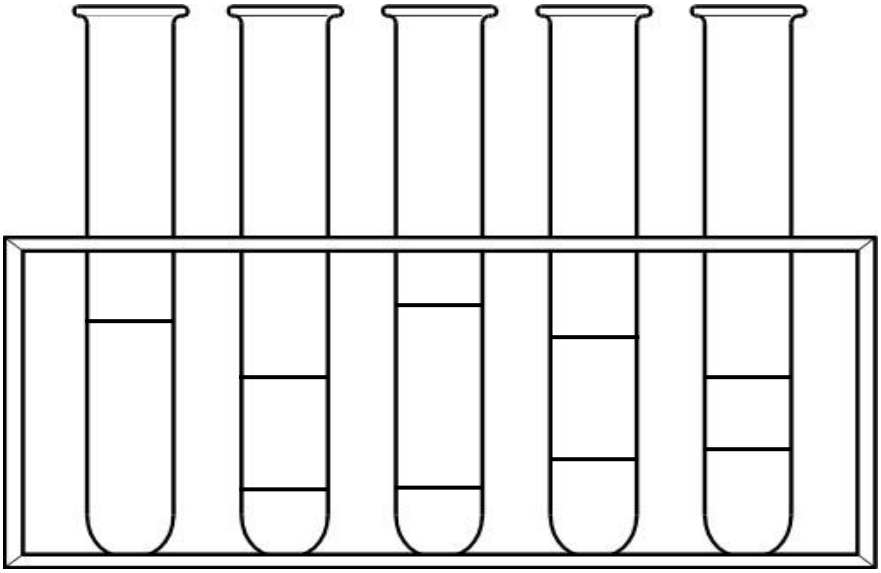
- **Those containing the Cu^{2+}(aq) ion which will be blue if $CuSO_4$ solution or $Cu(NO_3)_2$ solution or a blue-green if $CuCl_2$ solution.**
- **Those containing the iron(II) ion, Fe^{2+}(aq) ion which will be a very pale green e.g. $FeSO_4$ or $Fe(NO_3)_2$ or $FeCl_2$ solutions.**
- ***Those containing the iron(III) ion, Fe^{3+}(aq) ion which will be a pale orange e.g. $FeCl_3$ or $Fe_2(SO_4)_3$ or $Fe(NO_3)_2$ solutions. (Iron(III) won't be examined in 2012 but I have included as it will turn up in the past questions).***



Precipitates (s)

The precipitates that you meet will all be white except….

- **Those containing Cu^{2+} ion which will be blue e.g. $Cu(OH)_2(s)$ and green $CuCO_3(s)$**
- **Those containing the iron(II) ion, Fe^{2+} ion which will be green e.g. $Fe(OH)_2(s)$ and $FeCO_3(s)$**
- ***Those containing the iron(III) ion, Fe^{3+} ion which will be orange-brown e.g. $Fe(OH)_3(s)$ (Iron(III) won't be examined in 2012 but I have included as it will turn up in the past questions).***



None **$Al(OH)_3$ $PbSO_4$** **$Cu(OH)_2$** **$CuCO_3$** **$Fe(OH)_2$ $FeCO_3$**

Become a visual learner – colour the solutions on the previous page and the precipitates on this page.