

**Quiz (Colour of ions)**

Complete the following table:

Name	Chemical Formula	Colour in	
		solid state	aqueous state
	NH <sub>4</sub> Cl		
potassium carbonate			
	MgSO <sub>4</sub>		
lead(II) chloride			
	K <sub>2</sub> CrO <sub>4</sub>		
sodium nitrate			
	KMnO <sub>4</sub>		
copper(II) sulphate			
	FeSO <sub>4</sub>		
iron(III) chloride			
	CoCl <sub>2</sub>		
nickel(II) sulphate			
	K <sub>2</sub> Cr <sub>2</sub> O <sub>7</sub>		

## Suggested Answer

Name	Chemical Formula	Colour in	
		solid state	aqueous state
<b>ammonium chloride</b>	NH <sub>4</sub> Cl	<b>White</b>	<b>Colourless</b>
potassium carbonate	<b>K<sub>2</sub>CO<sub>3</sub></b>	<b>White</b>	<b>Colourless</b>
<b>magnesium sulphate</b>	MgSO <sub>4</sub>	<b>White</b>	<b>Colourless</b>
lead(II) chloride	<b>PbCl<sub>2</sub></b>	<b>White</b>	<b>Colourless</b>
<b>potassium chromate</b>	K <sub>2</sub> CrO <sub>4</sub>	<b>Yellow</b>	<b>Yellow</b>
sodium nitrate	<b>NaNO<sub>3</sub></b>	<b>White</b>	<b>Colourless</b>
<b>potassium permanganate</b>	KMnO <sub>4</sub>	<b>Purple</b>	<b>Purple</b>
copper(II) sulphate	<b>CuSO<sub>4</sub></b>	<b>Blue</b>	<b>Blue</b>
<b>iron(II) sulphate</b>	FeSO <sub>4</sub>	<b>Pale green</b>	<b>Pale green</b>
iron(III) chloride	<b>FeCl<sub>3</sub></b>	<b>Brown / Yellow</b>	<b>Brown / Yellow</b>
<b>cobalt(II) chloride</b>	CoCl <sub>2</sub>	<b>Pale Pink</b>	<b>Pale Pink</b>
nickel(II) sulphate	<b>NiSO<sub>4</sub></b>	<b>Green</b>	<b>Green</b>
<b>potassium dichromate</b>	K <sub>2</sub> Cr <sub>2</sub> O <sub>7</sub>	<b>Orange</b>	<b>Orange</b>