

### Question #46772, Chemistry, Inorganic Chemistry

What five elements whose ions might produce color in water. indicate cations and/or anions containing those elements that occur in ionic compound.

Answer:

chemical compound	ion	element which gives color in water	Color
KMnO <sub>4</sub>	MnO <sub>4</sub> <sup>-</sup>	Mn <sup>+7</sup>	crimson
CoCl <sub>2</sub>	[Co(H <sub>2</sub> O)] <sup>2+</sup>	Co <sup>+2</sup>	pink
K <sub>3</sub> [Fe(CNS) <sub>6</sub> ]	[Fe(CNS) <sub>6</sub> ] <sup>3+</sup>	Fe <sup>+3</sup>	red
CuSO <sub>4</sub>	[Cu(H <sub>2</sub> O)] <sup>2+</sup>	Cu <sup>+2</sup>	blue
NiSO <sub>4</sub>	[Ni(H <sub>2</sub> O)] <sup>2+</sup>	Ni <sup>+2</sup>	green