

Chemguide – questions

GROUP 1: FLAME TESTS

- Name the Group 1 metal whose compounds give a lilac flame colour.
 - Name the two Group 1 metals whose compounds give a red flame colour.
 - If you did a flame test of a Group 1 metal compound and got a red flame colour, how could you decide which metal was in the compound?
 - Considering metals from other parts of the Periodic Table, which metal forms compounds which give
 - a pale green flame colour;
 - a blue-green flame colour?
- If you heat a compound containing Group 1 metal ions strongly in a bunsen flame, some of the ions are converted back to atoms. Heat energy from the flame promotes electrons in the atoms to empty higher energy levels. Explain how this results in a characteristic flame colour for the particular metal.