



Oxford Cambridge and RSA

GCSE Chemistry B (Twenty First Century Science)

J258/04 Depth in chemistry (Higher Tier)

Question Set 7

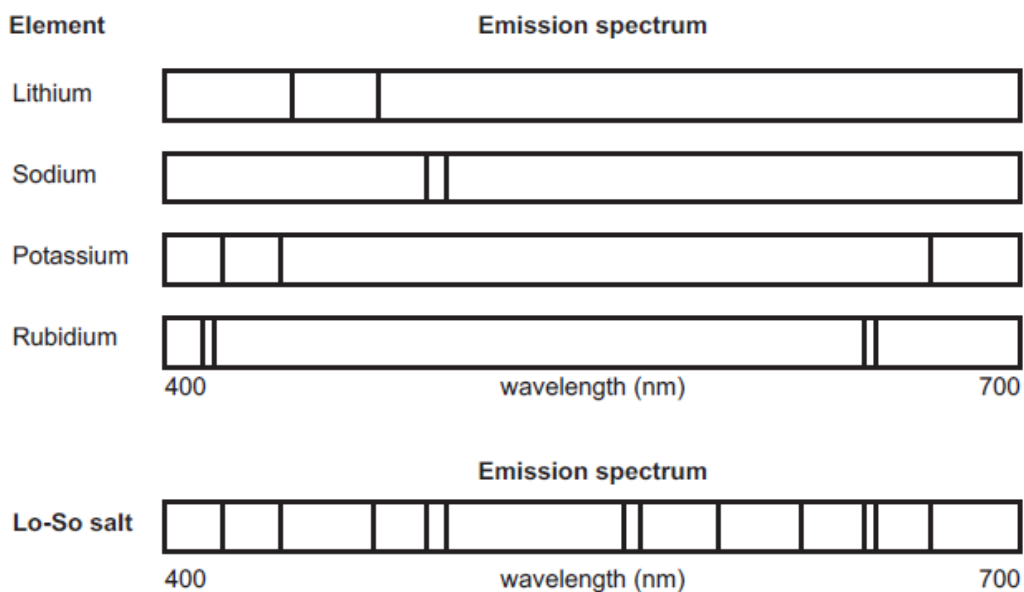
1. A new type of salt for using on food is called 'Lo-So salt'.

Nina wants to find out what elements 'Lo-So salt' contains.

She does some experiments to find the emission spectra of some compounds of Group 1 elements. She also does an experiment to find the emission spectrum of 'Lo-So salt'.

She puts small samples of each element and the salt in a spectroscopy machine and looks at the print-out of results.

Here are Nina's results.



- (a)* Nina says that she thinks she needs to do further experiments to identify all the elements in 'Lo-So salt'.

State which elements 'Lo-So salt' does and does not contain, giving your reasons, and describe what further experiments Nina needs to do to identify all the elements in 'Lo-So salt'.

[6]

- (b) The label for 'Lo-So salt' claims that it is 'low in sodium'.

Nina says that she cannot use spectroscopy to check this claim because spectroscopy is a qualitative, not a quantitative technique.

Explain why Nina is right.

[2]

Total Marks for Question Set 7: 8

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