SL Paper 2

- c. The relative atomic mass of naturally occurring copper is 63.55. Calculate the abundances of $^{63}\mathrm{Cu}$ and $^{65}\mathrm{Cu}$ in naturally occurring copper. [2]
- d. The isotopes of some elements are radioactive. State a radioisotope used in medicine. [1]
- e. State a balanced equation for the reaction of sodium with water. Include state symbols. [2]
- f. With reference to electronic arrangements, suggest why the reaction between rubidium and water is more vigorous than that between sodium [2] and water.

[3]

- g. Describe and explain what you will see if chlorine gas is bubbled through a solution of
 - (i) potassium iodide.
 - (ii) potassium fluoride.