



Task 3: Chemical properties and trends

a) **Complete** the sentences.

- i) The Group 1 metals are called the _____ metals.
- ii) They have _____ densities and melting points.
- iii) Lithium is the _____ reactive in the group.
- iv) They react with water to give off _____ and make an _____ solution.

b) **Describe** the trend in reactivity of the alkali metals as you go down the group.

c) **Complete** the word equations.

sodium + oxygen \longrightarrow _____

potassium + water \longrightarrow _____ + _____



Task 3: Chemical properties and trends

a) **Complete** the sentences.

- i) The Group 1 metals are called the alkali metals.
- ii) They have low densities and melting points.
- iii) Lithium is the least reactive in the group.
- iv) They react with water to give off hydrogen and make an alkali solution.

b) **Describe** the trend in reactivity of the alkali metals as you go down the group.

As you go down the Group 1 metals from lithium towards caesium, they become more reactive with both water and oxygen.

c) **Complete** the word equations.

sodium + oxygen \longrightarrow sodium oxide

potassium + water \longrightarrow potassium hydroxide + hydrogen