

- 1 **Table 1** shows the electron arrangement of the atoms of four elements. The letters are **not** the correct symbol for the elements.

Table 1

Element	Electron arrangement in the atoms
A	2 : 1
B	2
C	2 : 8 : 1
D	2 : 8 : 8
E	2 : 8 : 4

- 1 (a) (i) Give the letter or letters that matches the description of the elements given.

Use **Table 1** to help you answer.

An element in group 4 of the periodic table **E [1]**

Elements with a full outer shell **B [1]** **D [1]**

An element that reacts with water to produce a metal hydroxide and hydrogen

**A [1]** or **C [1]**

Unreactive elements **B [1]** **D [1]**

Element B is helium. It has two electrons on the outer shell but remember, the first shell only holds two electrons.

**[5 marks]**

- 1 (a) (ii) Balance the following symbol equation for the reaction of lithium with oxygen. **[2 marks]**



**(Total 7 marks)**

**End**