

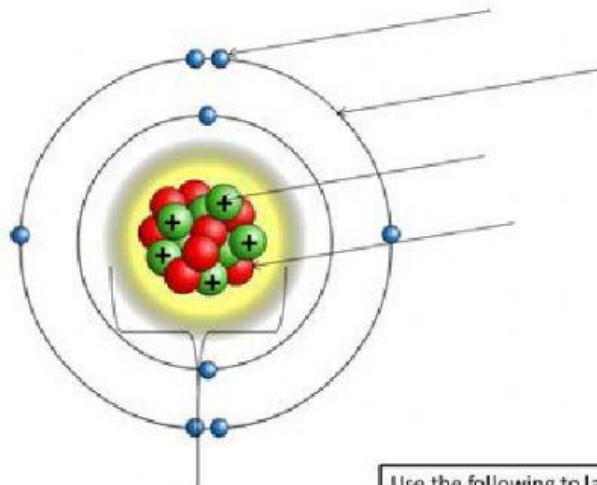
Name: _____

Form: _____

Date: _____

INTEGRATED SCIENCE
ELEMENTS, MIXTURES & COMPOUNDS

1. Label the components of the atom below. Drag the labels from the word bank.



Use the following to label the atom:

Nucleus Proton Neutron Shell Electron

(5 marks)

2. Select whether the statement is true or false.

- a. Electrons are negatively charged _____
- b. Protons orbit the nucleus of the atom _____
- c. Protons and electrons are attracted to each other _____
- d. Atoms contain equal numbers of protons and electrons _____
- e. Neutrons can be either positively or negatively charged _____

(5 marks)

1

3. Match the element to its chemical symbol. (Drag to draw a line between the two)

Oxygen

Na

Sodium

Ag

Carbon

Fe

Aluminium

Al

Iron

O

Silver

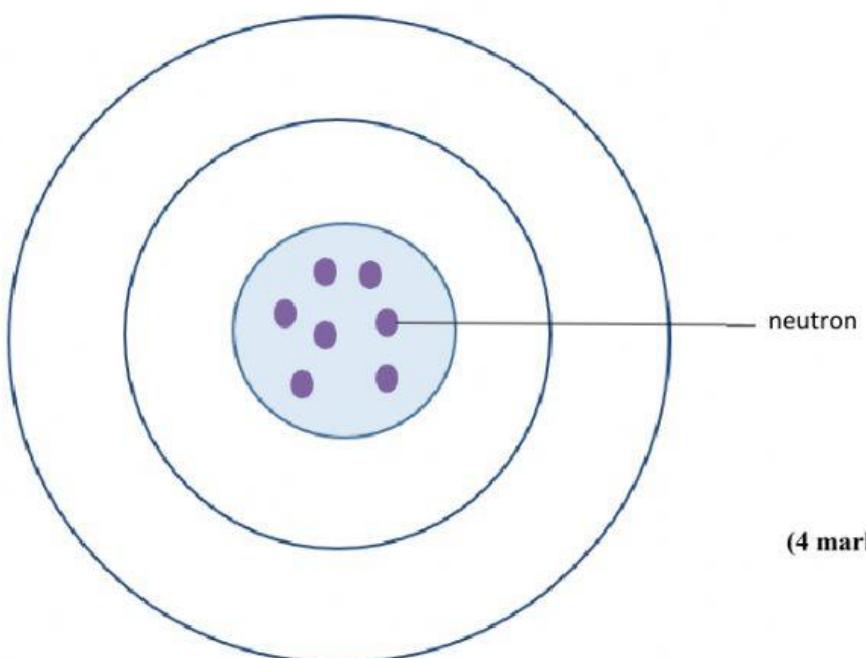
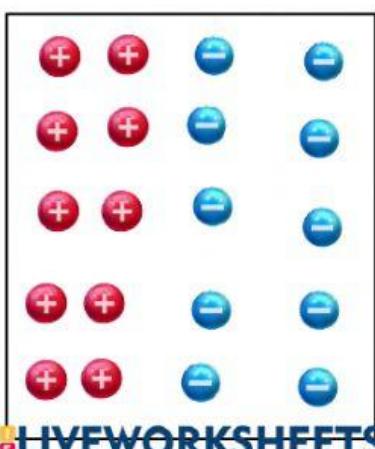
C

(6 marks)

4. If an atom has equal numbers of protons, neutrons and electrons, complete the diagram below, which has seven (7) neutrons. Choose protons and electrons from the box.

⊕ = proton

⊖ = electron



2

Atomic and Mass Numbers

| Element | Atomic number | Mass number | Number of protons | Number of electrons | Number of neutrons |
|----------------|---------------|-------------|-------------------|---------------------|--------------------|
| Sodium (Na) | | | | | |
| Beryllium (Be) | | | | | |
| Carbon (C) | | | | | |
| Lithium (Li) | | | | | |
| Oxygen (O) | | | | | |
| Sulfur (S) | | | | | |
| Cobalt (Co) | | | | | |
| Iron (Fe) | | | | | |
| Nitrogen (N) | | | | | |
| Sodium (Na) | | | | | |
| Rubidium (Rb) | | | | | |
| Silicon (Si) | | | | | |
| Aluminium (Al) | | | | | |
| Phosphorus (P) | | | | | |
| Nickel (Ni) | | | | | |
| Copper (Cu) | | | | | |
| Zinc (Zn) | | | | | |
| Yttrium (Y) | | | | | |
| Boron (B) | | | | | |