

Name: .....

School: .....

Class: **Grade 9**

Subject: **Chemistry.** Title: **Structure of Matter**

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### Interactive Worksheet

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#### **I- Answer by True (T) or False (F):**

- a. Matter seems to be continuous, but it is not.
- b. All substances even you are made of particles called atoms.
- c. Atoms are the basic building blocks of all substances.
- d. Atoms are the smallest particle of matter that could exist.

#### **II- Fill in the blanks**

- a. Atoms consists of protons, neutrons and .....
- b. Protons and neutrons are found in the ..... while the ..... orbit the nucleus.
- c. Protons are positively charged while electrons are ..... charged.
- d. In an atom, the number of protons is ..... to the number of electrons.

#### **III- An Aluminum atom contains 13 positivity charged particles and 14 neutral particles in its nucleus. Thus**

- a. This atom contains 14 protons and 13 neutrons in its nucleus.
- b. This atom contains 13 protons and 14 neutrons in its nucleus.
- c. This atom contains 14 electrons and 13 neutrons.
- d. This atom contains 27 protons in its nucleus.

**IV- Match each sub-atomic particle with its electric properties**

Sub-atomic Particle
Protons
Neutrons
Electrons

Electric Properties
Negatively Charged
Positively Charged
Neutral

**V- Refer to the schematic drawing below that represents a Lithium atom to answer the following questions.**

- Indicate the number of electrons: .....
- Deduce the number of protons: .....
- Determine the number of neutrons: .....
- Then drag each sub-atomic particle to its correct labelling.

- Proton
- Electron
- Neutron

