

CB
C

INTEGRATED SCIENCE

GRADE

9

FIRST EDITION

NOVEMBER
2024

STRAND 1: MIXTURES, ELEMENTS S AND COMPOUNDS

Simple Structure of the Atom

There are about 119 known elements

The following illustration shows the names and symbols of first 20 elements of the periodic table.

First Twenty Elements				
1 H Hydrogen	2 He Helium	3 Li Lithium	4 Be Beryllium	5 B Boron
6 C Carbon	7 N Nitrogen	8 O Oxygen	9 F Fluorine	10 Ne Neon
11 Na Sodium	12 Mg Magnesium	13 Al Aluminum	14 Si Silicon	15 P Phosphorus
16 S Sulfur	17 Cl Chlorine	18 Ar Argon	19 K Potassium	20 Ca Calcium

Atoms are very small particles of an element, but they contain even smaller particles called sub-atomic particles as follows;

- **Protons** - found in the nucleus, they are positively charged (+ve)
- **Electrons** - found in the nucleus, they are negatively charged (–ve)
- **Neutrons** - they can be imagined as circulating the nucleus in energy levels, they have no charge
- In a neutral atom, *Number of protons = Number of electrons*

Particles present in an atom are summarized below.