

Name: _____ () Class: _____ Date: _____

The Periodic Table

General Properties of the Periodic Table

- The Periodic Table is a table that groups elements according to certain physical properties or chemical properties.
- The elements are arranged in order of **increasing proton number (atomic number)**.
- A **HORIZONTAL** row of elements is known as a **Period**.
Across a period, the element changes from **metal** character to **non-metal** character.
Elements on left hand side of Periodic Table are _____.
Elements on right hand side of Periodic Table are _____.
- A **VERTICAL** row of elements is known as a **Group**.
- Hydrogen and Helium are in the same **Period 1**.
They all have ____ **electron shell**.

Draw out the electronic structure of Hydrogen and Helium below:



Hydrogen



Helium

- The following elements are in the same **Period 2**.
They all have _____.

Draw out the electronic structure of these elements.

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Lithium Beryllium Boron Carbon Nitrogen Oxygen Fluorine Neon

- Lithium is in **Group 1**. Lithium has ____ outer electron.
Beryllium is in **Group 2**. Beryllium has ____ outer electrons.
Oxygen is in **Group 6**. Oxygen has _____.

Quick Check

Without reference to the Periodic Table, predict the Period and Group of the elements below:

- | | |
|-------------------------------|-----------------------------------|
| a) Ca – 2.8.8.2 _____ | d) Xe 2.8.18.18.8 _____ |
| b) S – 2.8.6 _____ | e) Pb 2.8.18.32.18.4 _____ |
| c) Ga – 2.8.18.3 _____ | f) Rb – 2.8.18.8.1 _____ |