

Physical Science 10
Chemistry Review

- Be able to match each of the following words to their definition:
 - Alkaline earth metals
 - Chemistry
 - Matter
 - Group
 - Period
 - Alkali metals
 - Covalent bond
 - Proton
 - Neutron
 - Molecular compound
 - Ionic compound
 - Polyatomic ion
 - Chemical property
 - Physical property
 - Electron
 - Subatomic particles
 - Pure substance
 - Particle Theory of matter
- Where are valance electrons located?
 - How many valence electrons are in each of the following:
 - Oxygen
 - Carbon
 - Nitrogen
 - What is the most reactive group of elements on the periodic table? The most un-reactive?
- What two subatomic particles are found in the nucleus and what are their charges?
- Draw Bohr diagrams of the following atoms/ions:
 - nitride
 - Nitrogen
 - Aluminum
 - Argon
 - Chloride
 - Magnesium²⁺
- Identify the following elements based on their position on the periodic table:
 - Period 4, group 5
 - Period 5, group 1
 - Period 2, group 17
- Why do elements gain or lose electrons?
- State the charge that each ion would have if it:
 - Lost 2 electrons
 - Lost 1 electron
 - Gained 3 electrons
 - Gained 1 electron
- For each of the following state whether it is a physical or chemical change.
 - A popsicle melts on the pavement
 - Gasoline burns in the air
 - Water freezes at 0°C
- What is the difference between an ionic compound and a molecular compound in terms of:
 - The bonds formed between them
 - The elements involved