

SCH 3U1**Unit 1 Matter, Chemical Trends, and Chemical Bonding (18 periods)**

- Day 1** - diagnostic test, atomic theory, atomic structure review (atomic #, mass # atomic mass) pg36
 - comparison of subatomic particles table 2.1 pg 35
 - calculating # of p, n and electrons(complete charts) pg 37 #1, bohr-rutherford diagrams
 - define isotopes and radioisotopes pg 37 ; fraction of an isotope versus abundance
 - assignment page 39 (1,2, and 3)
- Day 2** - periodic law (pg 40), arrangement of electrons(pg 43), valence e's, review of periodic table layout (pg 41) and review group names, metals, nonmetals and metalloids
 - lewis structures to represent valence e's(pg 46)
 - assign page 42 # 2; page 46 (3,5,6); page 48 (3,6 and 11)
- Day 3** - periodic table trends (size, ionization energy, electron affinity)pg 49
 - complete assignment 2 A page 50
 - do practice problems with students page 52, 55,
 - assignment page 60 (2-5) page 61 (6, 11)
- Day 4** - Video : reactivity of metals ;Teacher demos , review sheets, alien periodic table
- Day 5** - Quiz chp 2 ; chemical bonding, ionic and covalent definitions (pg 70), electronegativity (pg71) and predicting bond type (pg72); properties of ionic and covalently bonded compounds(pg 67) , Complete pg 68 Ionic or Covalent
 - Assign page 74 (4,5,6) pg 76 (2,3) Read careers in chemistry pg 77.
- Day 6** - Using diagrams to represent ionic bond formation (pg 75)
 - octet rule ; practice problem page 76 # 2; account for properties of ionic compounds(pg 78).
- Day 7/8** - Use diagrams to represent covalent bonding; define pure covalent bond; state the diatomic elements; Polar covalent bonds (page 86 (11 -13 draw lewis structures for single, double and triple bonds. Identify and sketch the 5 basic shapes of molecules;
 - Watch video www.teachersdomain.org : molecular shapes
 - do practice problems page 81 (6, 7) and page 82 (8-10)
 - assign page 84 (1,2,3,4 and 6) page 94 (1, 4)
- Day 9** - Do lab modeling molecules page 92. Assignment
- Day 10** - Research Assignment : Computer lab.
- Day 11** - Writing formulas and naming compounds; know valence chart page 97) do practice problems pg 97(14,15)page 99 (16, 17)pg 100(18,19) complete handouts given. Know common names for compounds and uses see page 102
- Day 12** - Binary compounds multivalent cations pg 103 (20,21), pg 106 (2,4); binary acids
- Day 13** - Know the following polyatomic ions (see charts pages 97,98) Naming using the stock system and alternative system, naming acids, prefix method for naming compounds containing 2 or more non-metals, hydrated salts pg 103 (20,21) pg 105(23) pg 106 (1,3)
- Day 14** - Naming using the stock system and alternative system, naming acids, prefix method for naming compounds containing 2 or more non-metals
 pg 105(24) do review page 107 (2,3,7,8,9,14,15,16,17,18,19,22)
- Day 15** - Unit Review pg. 154 (8,9,11,28,29,30,31,32,40,43,44-47,49) pg 647 (8-21)