**Honors Chemistry: Unit Three Bonding Assignments**

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| **Week** | **Date** | **Assignments** | **Due** | **Textbook Section** | **Objectives** | **Turn in or stamp?** |
| Q2  Week 1 | 10/19 | CW: Chemical Bonding Webquest | 10/19 | 8.1 & 9.1 | 1 – 3 | T |
| HW: Chemical formulas Video and Ionic Vs Molecular Video notes | 10/20 | 8 – 9 | 1 - 3 | S |
| 10/20 | CW: Memorizing Polyatomic ions | 10/26 | 8.3 | 7 | N/A |
| HW: Properties of molecules & salts video and Metallic Bonding video notes | 10/20 | 8 – 9 | 2 – 6 | S |
| 10/21 | CW: Ionic and Molecular Compounds Lab | 10/21 | 8 – 9 | 1 – 3 | T |
| HW: Monatomic ions video notes | 10/22 | 8.1 | 8 – 9 | S |
| 10/22 | CW: Naming Ionic Compounds POGIL | 10/22 | 8.3 | 10 – 12 | T |
| HW: Writing Ionic Formulas video and writing Ionic formulas practice problem video notes | 10/23 | 8.3 | 10 – 11 | S |
| http://www.comments20.com/wp-content/uploads/2012/05/National-Mole-Day-Graphics.jpeg | https://mrdchemawiki.wikispaces.com/file/view/6_02.jpg/211697918/6_02.jpghttp://mbbc.us/science/images/moleparty.gif**Mole Day Party!** | | | | |
| HW: Writing Formulas with Transition Metals video and Transition metals in Ionic… video notes | 10/26 | 8.3 | 10 – 12 | S |
| Q2  Week 2 | 10/26 | **\*\*\*Polyatomic Ion Quiz\*\*\*** | | | | |
| CW: Testing for Different Charges Lab | 10/26 | 8.3 | 12 | T |
| HW: Binary Ionic compounds Single Charge and Multi-charge worksheet | 10/27 | 8.3 | 10 – 12 | T |
| 10/27 | CW: Polyatomic Ions POGIL | 10/27 | 8.3 | 10 – 14 | T |
| HW: Writing Formulas with Polyatomic ions video and practice video notes | 10/28 | 8.3 | 10 – 14 | S |
| 10/28 CP | CW: Precipitate Lab | 10/29 | 8.3 | 10 – 14 | T |
| HW: More Practice Naming WS | 10/29 | 8.3 | 10 – 14 | T |
| 10/29 | **\*\*\*Ionic Bonding Quiz (Chapter 8)\*\*\*** | | | | |
| CW: Naming Acids POGIL | 10/29 | 9.2 | 15 | T |
| HW: Naming Acid WS | 10/30 | 9.2 | 15 | T |
| HW: Naming Acid video notes |
| 10/30 | CW: Naming Molecules POGIL | 10/30 | 9.2 | 16 – 21 | T |
| HW: Naming Molecule video and What are the diatomic elements video notes | 10/30 | 9.2 | 16 – 21 | T |
| Q2  Week 3 | 11/2 | CW: Mixed Naming Notes & Changing Poly Notes | 11/2 | 8.3 – 9.2 | 1 – 21 | S |
| HW: Mixed Naming Video and Mixed Formula Video notes | 11/3 | 8.3 – 9.2 | 1 – 21 | S |
| 11/3 | CW: Mixed Naming WS | 11/4 | 8.3 – 9.2 | 1 – 21 | T |
| HW: Finish Mixed Naming WS |
| 11/4 | CW: Drawing Lewis Structures Activity | 11/4 | 9.1 | 22 | T |
| HW: Drawing Lewis Structures video notes | 11/5 | 9.3 | 22 | S |
| 11/5 | **\*\*\*Mixed Naming and Properties Quiz\*\*\*** | | | | |
| CW: Lewis Structure 1 WS | 11/5 | 9.3 | 22 – 23 | T |
| HW: Drawing L. S. with Resonance video notes  HW: Drawing L.S. Exceptions to octet Rule (Odd #, Electron Deficient, and Expanded Octet) Video Notes (3) | 11/6 | 9.3 | 22 – 25 | S |
| 11/6 | CW: Lewis Structure 2 WS  Lewis Structure whiteboard Review | 11/6 | 9.3 | 22 – 25 | T |
| HW: VSEPR introduction video notes | 11/9 | 9.4 | 26 – 27 | S |
| Q2  Week 4 | 11/9 | **\*\*\*Lewis Structure Quiz\*\*\*** | | | | |
| PhET Molecular Shapes Activity | 11/9 | 9.4 | 26 - 28 | T |
| HW: VSEPR Theory video and Hybridized Orbitals video notes | 11/10 | 9.4 | 26 – 28 | S |
| 11/10 | CW: VSEPR WS | 11/10 | 9.4 | 26 – 28 | T |
| HW: Polar Covalent Bond video and Polar or non-polar molecules video | 11/12 | 9.5 | 29 - 30 | S |
| 11/11 | **Veteran’s Day- No School** | | | | |
| 11/12 | CW: Polarity WS | 11/12 | 9.5 | 29 - 30 | T |
| HW: Objectives | 11/16 | 8 – 9 | 1 – 30 | S |
| 11/13 | CW: Lewis Structures WB Review | 11/16 | 9 | 22 – 30 | N/A |
| HW: Objectives | 11/16 | 8 – 9 | 1 – 30 | S |
| 5 | 11/16 | **\*\*\*Unit 3 Binder Check\*\*\*** | | | | |
| CW: Naming and Properties Review |  |  |  | N/A |
| 11/17 | **Unit 3 Test** | | | | |

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**Unit Three Bonding Objectives**

1. I can determine whether a compound is ionic or covalent based on the first atom in the compound.
2. I can list the properties of ionic compounds, covalent compounds, and metallically bonded atoms.
3. I know the difference between an ionic compound (formula unit) and a covalent compound (molecule).
4. I can define the word alloy.
5. I know what happens to the electrons in a metallic bond.
6. I can list the properties of metals that result from the free movement of e- in metallic bonds.
7. I have memorized the name, formula, and charge of the following polyatomic ions: nitrate, sulfate, phosphate, carbonate, bromate, iodate, chlorate, hydroxide, cyanide, acetate, and ammonium.
8. I can describe how an atom becomes an anion or a cation.
9. I can explain how the octet rule is used to explain why atoms bond.
10. I can describe what happens to the electrons in an ionic bond.
11. I can make a formula from ions or the name of an ionic compound.
12. I can explain how the rules for naming ionic compounds are different when a transition metal is involved.
13. I know the difference between a monatomic ion and a polyatomic ion.
14. I know how to change any -ate polyatomic ion to an –ite, per…-ate, and hypo…ite ion.
15. I can explain the rules for naming acids and oxyacids.
16. I know what types of atoms form covalent bonds.
17. I know what happens to the electrons in a covalent bond.
18. I can apply the rules for naming molecules.
19. I know the 7 diatomic molecules.
20. I know the common names for NH3, O3, and H2O.
21. I know how to name the diatomic molecules.
22. I can list the rules for drawing Lewis structures.
23. I can draw a Lewis structure for a polyatomic ion.
24. I how to draw resonance structure.
25. I know how to draw Lewis structure exceptions (electron deficient, expanded octet, and odd number)
26. I know what a VSEPR stands for.
27. I know the difference between a bonding pair of electrons and a lone pair of electrons.
28. I can draw the following VSEPR structures, list their bond angles, and hybridization based on the number of lone pairs and bonding pairs from memory: linear, trigonal planar, tetrahedral, trigonal pyramidal, bent, trigonal bipyramidal, and octahedral.
29. I know how to determine the polarity of a bond using ∆EN.
30. I know how to classify a molecule as polar and nonpolar based on its VSEPR structure, bond polarity, and terminal atoms. (just for VSEPR shapes listed in #28)