One-Pager Review for the MidTerm Exam

You will be making a One Pager for each unit. They will be placed in a booklet for you to use as you review for the final exam.

The pages **MUST** be finished by MONDAY DEC 14 in order to be made into the booklet.

The vocabulary and topics that need to be covered are on the back.

Follow this format for your One-Pager Project. Check off steps as you go.

- ❏ Include the title and a **SYMBOLIC BORDER**!!!! The border should mean something, not just be stars or squiggles (Think ICONS. Check out the website the https://thenounproject.com)
- ❏ Develop a quote or slogan that is unique to the unit. Think about something that is catchy (think like a commercial saying. For example "HEB: here everything's better". Or "I'm Loving It" from McDonalds).
- ❏ Include a graphic representation (drawing, magazine picture, computer graphic symbol, etc) that would represent the selection. BE CREATIVE! Tie your graphic/illustration to the slogan you chose.
- ❏ Include 5 key vocabulary *wo*rds and their definitions
- ❏ Ask **AND ANSWER** two high level questions (see the depth of knowledge reference sheet)
- ❏ Include a personal response - a comment, a connection, an interpretation. Should be about 5 sentences.
- ❏ Use 4+ colors. **PENS, PENCIL COLORS, MARKERS, COLORED PICTURES WORK GREAT!**
- ❏ Fill up the entire piece of paper.

Extra Credit will be offered for Extra Effort

Unit 1: The Periodic Table

Learning Topics Covered:

1. I can identify trends in ionization energy, electronegativity, and the relative sizes of atoms and ions.
2. I can identify the different parts of the periodic table: metals, nonmetals, metalloids, representative elements, alkali metals, alkaline earth metals, halogens, noble gases, transition metals and the lanthanide and actinide series.
3. I can predict the relative sizes of neutral atoms in comparison to their positive or negative ions.
4. I can identify the probable charge on the ion of a main group of elements based upon its position on the periodic table.
5. I can identify the number of valence electrons in any element on the periodic table.

Vocabulary to Know

● atom ● nucleus ● atomic number ● atomic mass ● metal ● nonmetal ● metalloid ● ionization energy ● electronegativity	● mass number ● periodic table ● alkali metal ● alkaline earth metal ● halogens ● noble gases	● electron ● neutron ● isotope ● period ● transition metals ● atomic radius	● proton ● group ● ion ● cation ● anion ●

Unit 2: Naming Compounds

Learning Topics Covered:

1. I can develop a flow chart that can be used to name and write chemical formulas.
2. I can understand that the drive for atoms to form bonds is based on the stability of the noble gases and the octet rule.
3. I can describe the formation of an ionic bond.
4. I can describe the formation of an anion or cation from its neutral atom.
5. I can state and apply the octet rule.
6. I can determine the correct ratio of cations to anions needed to form a neutral ionic compound.
7. I can explain the difference between a monoatomic and polyatomic ion.
8. I can understand that a formula unit represents one particle of an ionic compound.
9. I can distinguish between ionic compounds and covalent compounds.
10. I can name and write formulas for ionic compounds.
11. I can name and write formulas for covalent compounds.

Vocabulary to Know

● valence electron ● electron dot structure ● octet rule	● ionic compounds ● ionic bonds ● chemical formula ● formula unit	● monatomic ion ● polyatomic ion

Unit 3: Balancing Equations

Learning Topics Covered

1. I can identify reactants and products in a chemical reaction.
2. I can write a balanced equation when given the names or formulas of all reactants and products in a chemical reaction.
3. I can understand that chemical reactions can be described by writing balanced equations.
4. I can classify a reaction as synthesis, decomposition, combustion, single replacement or double replacement.
5. I can use the appropriate symbol to indicate a reactant or product as a solid, liquid, gas, or aqueous.
6. I can predict the products of single and double replacement reactions types using appropriate references, such as the activity series or solubility rules.
7. I can prove that conservation of mass occurs during a chemical reaction.
8. I can understand that coefficients in a chemical reaction describe the quantities of individual particles (atoms, molecules, and formula units) and moles of the substances involved.

Vocabulary to Know

● chemical equation ● coefficient	● balanced equation ● double replacement reaction	● single replacement reaction ● combination reaction	● combustion reaction ● decomposition reaction

Unit 4: Stoichiometry

Learning Topics Covered:

1. I can define molar mass and use the periodic table to obtain or calculate the molar mass for any given substance.
2. I can perform stoichiometric calculations to determine mass and/or mole relationships between reactants and products and calculations for limiting reactants.

Vocabulary to Know

● significant figures ● mole ● Avogadro's number	● Molar ratio ● Calculations ● Molar mass ● grams	● percent composition