

IUPAC/Balancing Test (Science 10)

LEARNING MAP CRITERIA:

Relevance	Extending	Proficient	Developing	Emerging
Write and Balance Chemical Equations <input checked="" type="checkbox"/>	Write and balance chemical equations consistently and accurately.	Write and balance chemical equations, most of the time. State the law of conservation of mass. Explain how the law of conservation of mass relates to the balancing of chemical equations.	Write chemical formulas and names for ionic compounds (including those with polyatomic ions, multivalent metals). Write chemical formulas and names for binary covalent compounds. Write chemical formulas and names for elements. Define and identify the products and reactants in a chemical equation. Count the number of each atom in a chemical equation. Identify whether a chemical equation is balanced or not.	Identify a chemical compound as ionic or covalent based on its chemical formula or chemical name. Distinguish between metals and non-metals using a periodic table. Count the atoms in a chemical compound.

VOCABULARY:

(Disclaimer: This is not meant to be an exhaustive list. Vocabulary words may appear on the test that are not in this list.)

- Atom
- Ion
 - o Cation
 - o Anion
 - o Monovalent ion
 - o Multivalent ion
 - o Polyatomic ion
- Subatomic particle
 - o Proton
 - o Neutron
 - o Electron
- Neutral
- Charge
- Metal
- Non-metal
- Valence shell
- Valence electron
- Ionic compound
- Covalent compound
- Element
- Diatomic element
- Subscript
- Charge balancing
- Prefix

PRIMARY STUDY MATERIAL:

- “Comprehensive Chemical Compounds” Powerpoint
 - o Additional resources online (e.g. practice quizzes for naming) on a slide near the end of the powerpoint. Worth checking out!!!
- Chemistry Notes Package
- Workbook practice questions
- IUPAC Mixed Naming Worksheet