

Name: _____ Date: _____ Period: **B**

What you will be allowed to use during this test:

- Calculator (though you probably won't need it)
- YOUR periodic table (no sharing)
- YOUR polyatomic ion formula chart (clean... no "extra" notes on it)
- a 3 × 5 index card

The Test Topics

- Atomic Structure
 - Parts of the atom, Electron configurations (shells), Lewis Dot Diagrams
 - Ernest Rutherford and his contribution to the atomic model.
 - Isotopes: naming, nuclide symbols, finding average atomic mass of elements
 - Ion Formation
- Periodic Table
 - Using it (duh!)
 - Names of various groups, differences between groups (families) and periods.
- Chemical Bonding
 - How ionic and covalent bonding work
 - What elements combine to form ionic compounds, and what elements combine to form covalent compounds
 - The differences between ionic compound structures (crystalline lattice structures) versus covalent compound structures (molecules)
- Chemical formulas and names of compounds
 - Understanding how to write chemical formulas.
 - Translate back and forth between names and formulas for:
 - ionic compounds (binary compounds and those containing polyatomic ions)
 - covalent compounds (binary compounds only)
- Drawing ball-and-stick diagrams (covalent compounds only)
 - You will be expected to draw all the non-bonding valence electron pairs. For example, in the ball-and-stick diagram of H₂O below:

