Name: _____ **Pd.** _____ **Date:** _____

Periodic Table Trends: Understanding Models

Directions: Draw the Bohr Model and Lewis-Dot (electron) diagrams for each of the following elements:

1. **Lithium** Atomic #: _____ Family / Group #: _____

Bohr Model	**Dot-Structure**

2. **Boron** Atomic #: _____ Family / Group #: _____

Bohr Model	**Dot-Structure**

3. **Nitrogen** Atomic #: _____ Family / Group #: _____

Bohr Model	**Dot-Structure**

4. Beryllium Atomic #: _____ Family / Group #: _____

Bohr Model

Dot-Structure

5. Oxygen Atomic #: _____ Family / Group #: _____

Bohr Model

Dot-Structure

6. **Flourine** Atomic #: _____ Family / Group#: _____

Bohr Model

Dot-Structure

7. **Neon** Atomic #: _____ Family / Group #: _____

Bohr Model	**Dot-Structure**

8. **Carbon** Atomic #: _____ Family / Group #: _____

Bohr Model	**Dot-Structure**

Answer the following questions based on the periodic table:

1. What are valence electrons and why are they so important for understanding chemistry?

2. What pattern do you notice as you move across **OR** down the table when considering valence electrons?

3. Based on the electron-dot diagrams and what you know about an element's ability to bond/react with other elements, which chemical family is the most reactive (most likely to bond with others) and why?

4. Which chemical family would be least reactive (least likely to bond with others) and why?