Physical Science Chapter 5 Notes Outline

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**The Periodic Table – Pages 124-152**

5.1 – Organizing the Elements

The Search for Order

Mendeleev’s Periodic Table-

 Mendeleev’s Proposal-

 **Periodic Table-**

Mendeleev’s Prediction-

 Evidence Supporting Mendeleev’s Table-

**SECTION QESTION**

1. **Describe how Mendeleev organized the elements into row and columns in his periodic table.**
2. **Why did Mendeleev leave spaces in his table?**

5.2 The Modern Periodic Table

The Periodic Law

 **Periods-**

 **Groups-**

 **Periodic Law-**

**Atomic Mass-**

 **Atomic Mass Unit-**

Isotopes of Chlorine-

 Weighted Averages-

Classes of Elements-

 **Metals-**

 **Transition Metals-**

 **Non-metals-**

 **Metalloids-**

Variation across a Period-

**SECTION QUESTIONS**

1. **Name three categories that are used to classify the elements in the periodic table.**

**-**

**-**

**-**

1. **Explain how you know that no new element with an atomic number less than 100 will be discovered.**

5.3 Representative Groups

**Valence Electrons-**

The Alkali Metals

 **Alkali metals-**

The Alkaline Earth Metals-

Magnesium-

 Calcium-

The Boron Family-

The Carbon Family-

The Nitrogen Family-

The Oxygen Family-

The Halogens-

The Noble Gases-

**SECTION QUESTIONS**

1. **Explain why elements in a group have similar properties.**
2. **What element exists in almost every compound in your body?**
3. **Which group of elements is the least reactive?**