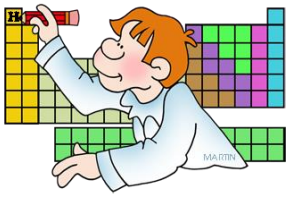

Name: _____ Date: _____ Hour: _____

Periodic Table Elements and Organization

Periodic Table Timeline

1669 – An unknown element (_____) is discovered. How?

1789 – Known elements are grouped by metals (_____) and nonmetals (_____).

1809 – At least 47 elements have been discovered. Scientists are noticing other _____.

1829 – Known elements are being sorted by chemical _____.

1860 – A list is released with the atomic _____ of known elements.

1869 – The Father of the Modern Periodic Table arranges it based on known _____.
Dmitri Mendeleev discovered a pattern that _____ showed similar properties.

Arrangement of Elements

Elements are arranged vertically into _____ or _____.

Hydrogen Group

Has _____ electron(s).

Very _____ _____

Group 1: Alkali Metals

Soft, silvery _____

Loses _____ electron(s).

Very _____, (especially with _____)

Group 2: Alkaline Earth Metals

Silvery-white metals

Loses _____ electron(s).

_____

Found in _____ in earth's crust

Used in _____ and _____

Groups 3-12: Transition Metals

Good and excellent conductors of _____ and _____.

_____ and ductile.

Electrons _____ (N/A)

Group 13: Boron Family

Gains/shares/loses _____ electrons.

_____ is the most abundant metal in Earth's crust.

Group 14: Carbon Family

Gains/shares/loses _____ electrons

_____ is mostly found in sand

The element _____ is called the "basis of life"

Includes a non-metal (_____), metalloids, and _____

Group 15: Nitrogen Family

Gains or shares _____ electrons

_____ makes up 78% of our atmosphere

Group 16: Oxygen Family

Gains or shares _____ electrons.

_____ is the most abundant element in the Earth's crust.

Group 17: Halogens

Most are _____.

Very _____.

Gains or shares _____ electron(s).

React with _____ _____ to form salts.

Group 18: Noble Gases

_____-reactive; inert

_____ gases

_____ _____ gain or lose electrons

Rare Earth Metals

At the _____ of the Periodic Table

Composed of _____ series

1. Lanthanide Series
   Very _____
   Typically _____ in color
2. Actinide Series
   All are _____