

Periodic Table Notes

_____ : Father of the Table

HOW HIS WORKED...

- Put elements in rows by increasing _____.
- Put elements _____ by the way they reacted.
- SOME PROBLEMS...
- He left blank spaces for what he said were _____.
(Turned out he was right!)
- He broke the pattern _____ to keep similar reacting elements _____.

The Current Periodic Table

- _____ wasn't too far off.
- Now the elements are put in rows by increasing _____ !!
- The _____ rows are called _____ and are labeled from 1 to 7.
- The _____ columns are called _____ are labeled from 1 to 18.

Groups...

- Elements in the same group have similar _____ properties!!
- (Mendeleev did that _____.)
 - Why??
- They have the same number of _____.

Families on the Periodic Table

- _____ are also grouped into _____.
- Families are _____ or groups.
- Families have _____ rather than _____.
(Just like your family has a common last name.)

Hydrogen

- Hydrogen belongs to a _____.
- Hydrogen was involved in the explosion of the _____.

Alkali Metals

- _____ on the periodic table (Group 1) not including _____.
- Very reactive _____, always combined with something else in nature (like in salt).
- Soft enough to cut with a _____.

Alkaline Earth Metals

- _____ on the periodic table. (Group 2)
- Reactive _____ that are always combined with _____ in nature.
- Several of these elements are important _____ (such as Mg and Ca)

Transition Metals

- Elements in groups _____.
- _____ harder metals
- Includes metals used in _____.

Boron Family

- Elements in group _____.
- Aluminum metal was once _____, not a “disposable metal.”

Carbon Family

- Elements in group _____.
- Contains elements important to _____.
- Carbon is the basis for an entire branch of _____.
- Silicon and Germanium are important _____.

Nitrogen Family

- Elements in group _____.
- Nitrogen makes up over _____.
- _____ are both important in living things.
- Most of the world’s nitrogen is not available to _____.
- The red stuff on the tip of matches is _____.

Oxygen Family

- Elements in group _____.
- Oxygen is necessary for _____.
- Many things that stink, contain _____ (rotten eggs, garlic, skunks, etc.)

Halogens (also called Salt Formers)

- Elements in group _____
- _____, volatile, nonmetals
- _____ found combined with other elements in nature .
- Combine with _____ to form _____.

The Noble Gases

- Like _____
- _____ of the Periodic Table.
- _____ with anything else.
- All _____ !!!
- Elements in group _____.
- VERY _____.
- Used in lighted “neon” signs
- _____ replaced Hydrogen in blimps after the Hindenberg accident.
- Have a _____ valence shell.

Representative Elements

- Groups _____.
- All of the groups with a _____.
- Most common elements in _____.

Rare Earth Metals

- Also called _____ because they fit in the transition metals section.
- Located at the _____ of the periodic table
- Lanthanides – _____ – soft metals that can be cut with a knife.
- Actinides – _____ – all are radioactive. Some are synthetic
- _____ – made in laboratories

Metals

- Shiny _____
- Malleable
- Good conductors of _____.
- Solids at _____, except for _____.
- _____ melting points
- Located on the _____ of the Periodic Table

Nonmetals

- _____ solids, _____.
- _____ conduct heat or electricity well
- Non _____, various colors
- Located on the _____ of the periodic table.

Metalloids

- Share _____ with metals and some with nonmetals.
- Located on the _____ of the periodic table (except for _____)