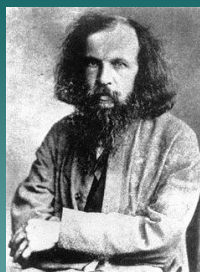


Introduction to the Periodic Table

Atomic Number ● Symbol ● Atomic Weight
Element ● Compound ● Mixture

I am Dmitri Mendeleev!



I made the PERIODIC TABLE !

What is the PERIODIC TABLE?

- Shows all known elements in the universe.
- Organizes the elements by chemical properties.

6	7
C Carbon 12.011	N Nitrogen 14.006
14	15
Si	

How do you read the PERIODIC TABLE?

6
C
Carbon
12.01

- Atomic number
- Symbol
- Name
- Atomic Weight

What is the ATOMIC NUMBER?

6	— Atomic number
C	
Carbon	
12.01	

- The number of protons found in the nucleus of an atom
- Or
- The number of electrons surrounding the nucleus of an atom.

What is the SYMBOL?

6	— Symbol
C	
Carbon	
12.01	

- An abbreviation of the element name.

What is the ATOMIC WEIGHT?

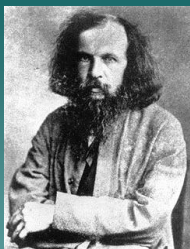
6	— Atomic Weight
C	
Carbon	
12.01	

- The number of protons and neutrons in the nucleus of an atom.

How do I find the number of protons, electrons, and neutrons in an element using the periodic table?

- # of PROTONS = ATOMIC NUMBER
- # of ELECTRONS = ATOMIC NUMBER
- # of NEUTRONS = ATOMIC WEIGHT — ATOMIC NUMBER

Now you are almost as smart as I am!



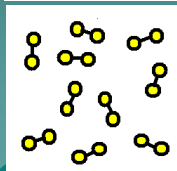
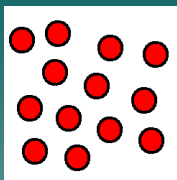
But not as handsome!
Man, I look *GOOD!*

Elements, Compounds, and Mixtures

H																	He
Li	Be											B	C	N	O	F	Ne
Na	Mg											Al	Si	P	S	Cl	Ar
K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr
Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe
Cs	Ba	La	Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Rn

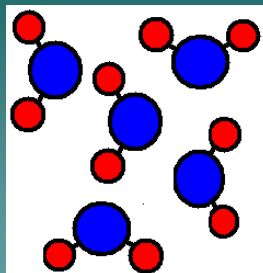
What is an ELEMENT?

- A substance composed of a single kind of atom.
- Cannot be broken down into another substance by chemical or physical means.



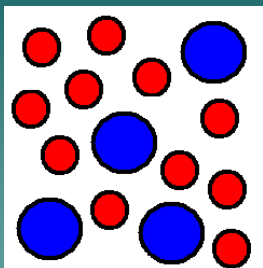
What is a COMPOUND?

- A substance in which two or more different elements are **CHEMICALLY** bonded together.

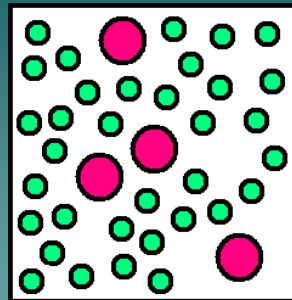


What is a MIXTURE?

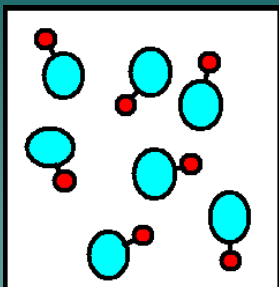
- Two or more substances that are mixed together but are NOT chemically bonded.



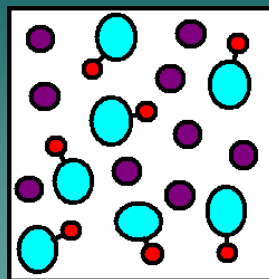
Element, Compound or Mixture?



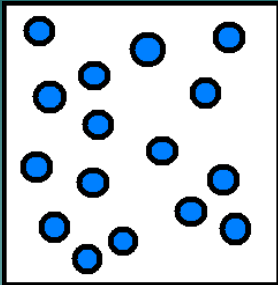
Element, Compound or Mixture?



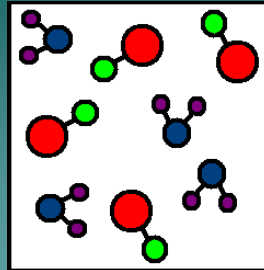
Element, Compound or Mixture?



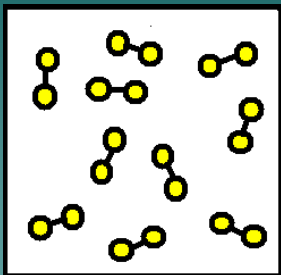
Element, Compound or Mixture?



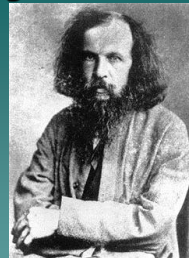
Element, Compound or Mixture?



Element, Compound or Mixture?



You are still not as handsome as
the great Mendeleev!



I am working this beard!
Man, I look GOOD!