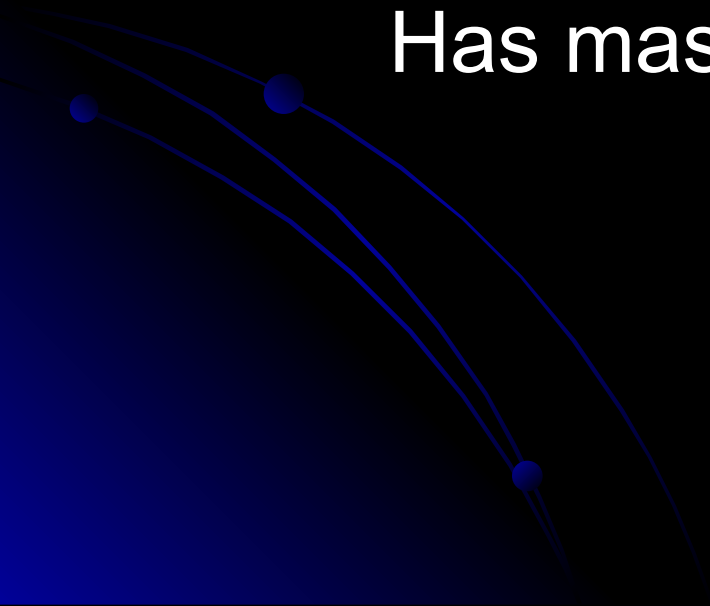


Matter

Has mass and takes up space

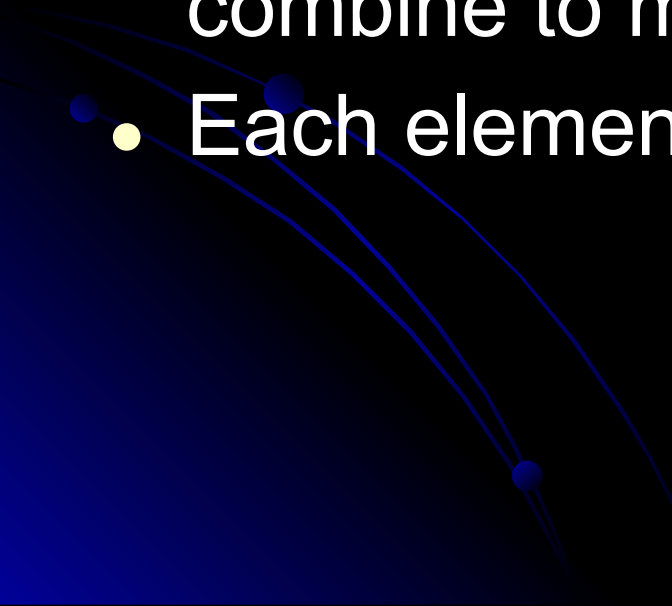


What is matter made of?

- Matter is made of elements
- Elements are the basic building blocks of all matter.



Elements

- Are pure substances
 - They cannot be broken down into simpler substances.
 - There are 100 known elements that combine to make up all matter.
 - Each element has its own kind of atom.
- 

Periodic Table of the Elements

© www.elementsdatabase.com

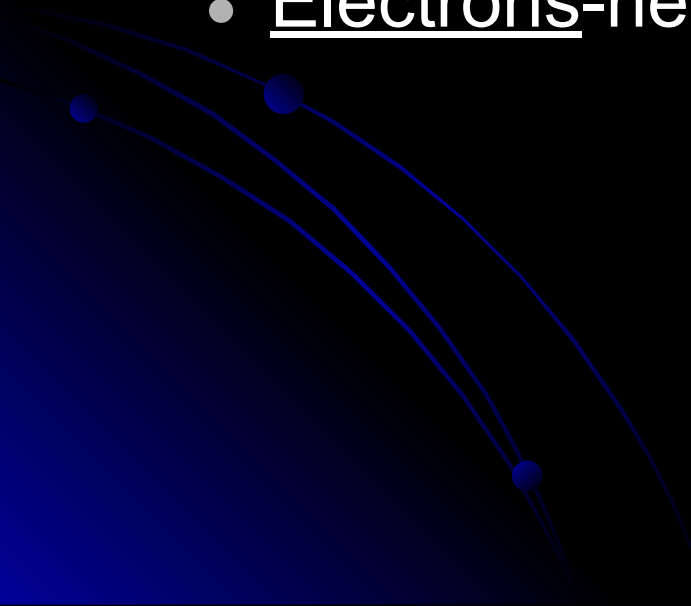
1 H																	2 He
3 Li	4 Be											5 B	6 C	7 N	8 O	9 F	10 Ne
11 Na	12 Mg											13 Al	14 Si	15 P	16 S	17 Cl	18 Ar
19 K	20 Ca	21 Sc	22 Ti	23 V	24 Cr	25 Mn	26 Fe	27 Co	28 Ni	29 Cu	30 Zn	31 Ga	32 Ge	33 As	34 Se	35 Br	36 Kr
37 Rb	38 Sr	39 Y	40 Zr	41 Nb	42 Mo	43 Tc	44 Ru	45 Rh	46 Pd	47 Ag	48 Cd	49 In	50 Sn	51 Sb	52 Te	53 I	54 Xe
55 Cs	56 Ba	57 La	72 Hf	73 Ta	74 W	75 Re	76 Os	77 Ir	78 Pt	79 Au	80 Hg	81 Tl	82 Pb	83 Bi	84 Po	85 At	86 Rn
87 Fr	88 Ra	89 Ac	104 Unq	105 Unp	106 Unh	107 Uns	108 Uno	109 Une	110 Unn								

- hydrogen
- alkali metals
- alkali earth metals
- transition metals
- poor metals
- nonmetals
- noble gases
- rare earth metals

58 Ce	59 Pr	60 Nd	61 Pm	62 Sm	63 Eu	64 Gd	65 Tb	66 Dy	67 Ho	68 Er	69 Tm	70 Yb	71 Lu
90 Th	91 Pa	92 U	93 Np	94 Pu	95 Am	96 Cm	97 Bk	98 Cf	99 Es	100 Fm	101 Md	102 No	103 Lr

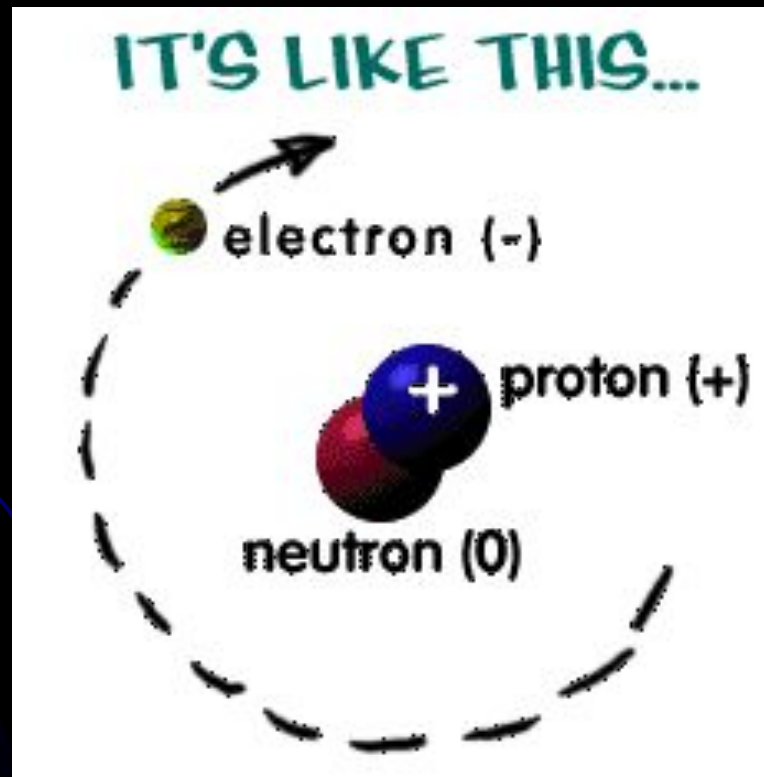
Atoms

- Are the smallest unit of an element.
- Are made up of 3 particles
 - Protons-positive charges
 - Neutrons-neutral
 - Electrons-negative



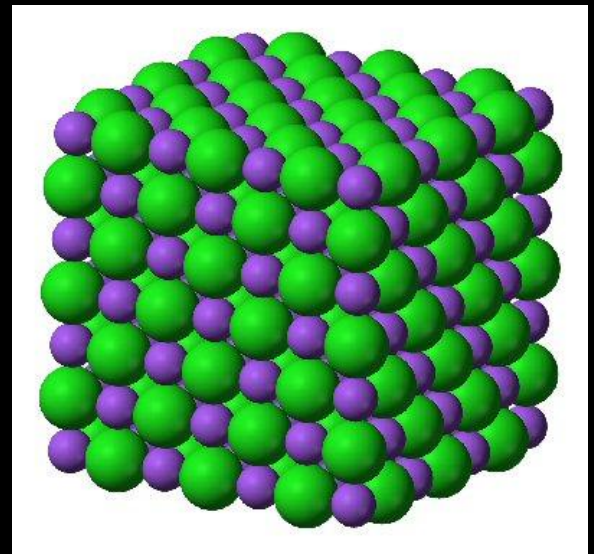
Atoms

- All atoms have a nucleus in the center.
 - Inside the nucleus are protons and neutrons.
 - Outside the nucleus are electrons.



Compounds

- Are any substance that is formed by two or more elements being chemically combined.
- There are many different compounds because the elements can combine in so many different ways.
 - Examples:
 - Water H_2O
 - Salt NaCl
 - Carbon Dioxide CO_2



Molecules

- Are the smallest part of a compound.
- Contain more than one atom.

