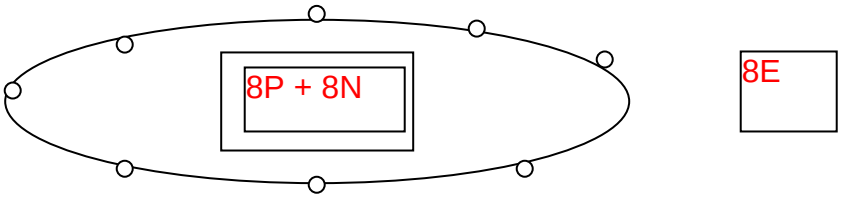
CHEMISTRY PRACTICE A-1

1. FILL IN THE CHART BELOW:

ELEMENT	SYMBOL	ATOMIC NUMBER	# PROTONS	# ELECTRONS	AMU	MASS NUMBERS	# NEUTRONS
Hydrogen	H	1	1	1	1	1 (Protium) 2 (Deuterium) 3 (Tritium)	0
Carbon	C	6	6	6	12	12	6
Nitrogen	N	7	7	7	14	14	7
Oxygen	O	8	8	8	16	16, 17 or 18	8, 9 or 10
Sodium	Na	11	11	11	23	23	12

2. DRAW AN OXYGEN ATOM:



3. MATCH THE PARTS OF AN ATOM WITH THE APPROPRIATE CHARGE:

positive (+) negative (-) No Charge ( )

Electron _____**(-)**_____ **Proton** _____**(+)**_____ **Neutron** _____**( )**_____

4. MATCH THE SUBSTANCE WITH THE DESCRIPTIONS BELOW:

A.) PURE SUBSTANCE *B.) MIXTURE*

BLOOD __**M**___ WATER ___**P**___ AIR ____**M**___ SUGAR _**P**___

HELIUM _**P**___ SALT ___**P**_____ ITALIAN DRESSING ___**M**____

5. MATCH THE SUBSTANCE WITH THE DESCRITIONS BELOW:

A.) ELEMENT *B.) COMPOUND*

OXYGEN ___E__ WATER ___C____ MERCURY ___E____ SUGAR __C__

HELIUM __E___ SALT ___C_____ CARBON DIOXIDE ___C_____

6. Which of the following determines "*chemical properties*"?

a.) electron b.) proton c.) neutron

Give an example of a chemical property: separation of components when electric current applied

7. Which of the following determines "*physical properties*"?

a.) electron b.) proton **c.) neutron**

Give an example of a physical property: color

8. Electrons shift during chemical reactions.
(**electrons**, protons, neutrons)

9. An atom that gains or looses an electron is called an **ion** and is no longer neutral.

10. The "Mass Number" equals the atomic number (protons) PLUS the number of neutrons.

11. True or False
The number of neutrons for an atom is always the same.

12. FILL IN THE ISOTOPE CHARTS BELOW:

CHLORINE

Mass number Symbol Atomic number	35 Cl 17	36 Cl 17	37 Cl 17
Number of neutrons = (Mass # - Atomic #)	18	19	20
Number of protons & electrons	17	17	17

PLATINUM

Mass number Symbol Atomic number	194 Pt 78	195 Pt 78	196 Pt 78
Number of neutrons = (Mass # - Atomic #)	116	117	118