

Unit 3 Vocab

Name: Key Period: _____ Date: _____

Define the following terms:

1. Nucleus

Small dense center of the atom - neutron + protons

2. Proton

p^+ - positive particle, in nucleus, has mass of 1

3. Neutron

n^0 - neutral particle in nucleus, has mass of 1

4. Electron

e^- - negative particle, outside nucleus, has mass of 0

5. Atomic number

The number of protons in the nucleus of an atom

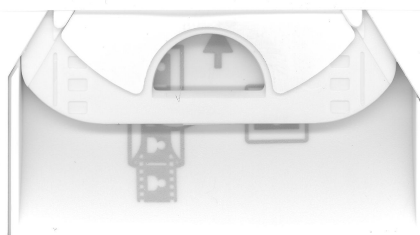
6. Mass number

protons + neutrons

7. Isotopes

Same number of protons but changing number of neutrons

${}^6_6\text{C}$ ${}^{14}_6\text{C}$ example!



8. Ion

Charged atom Na^{+1} or Cl^{-1}
the electrons do not match the protons

9. Anion

negative ion Cl^{-} example

10. Cation

positive ion Na^{+} ← example

11. Diatomic

an element needing 2 atoms

There are 7 $\text{H}_2 \text{N}_2 \text{O}_2 \text{F}_2 \text{Cl}_2 \text{Br}_2 \text{I}_2$

12. Family or Group

column in the periodic table.
There are 18; some have names

12. Metal

elements that are to the left of
the stair steps

13. Fill-in the missing information in the chart below:

Atom or ion	Symbol	Atomic #	# Protons	# Electrons	# Neutrons	Mass #
atom	${}^1_1\text{H}$	1	1	1	0	1
ion	${}^2_1\text{H}^{+1}$	1	1	0	1	2
atom	${}^3_1\text{H}$	1	1	1	2	3
ion	${}^{86}_{38}\text{Sr}^{+2}$	38	38	36	48	86
ion	${}^{16}_8\text{O}^{-2}$	8	8	10	8	16

