

60

Name: CALVIN
Date:
Hour:

Chemistry – Ch.2 Quiz

1) Prepare a chart showing three subatomic particles, give the relative *charge*, relative *mass*, and location of each.

1pt

Particle	Location	Relative mass	Relative charge
Proton	nucleus	1	+
Neutron	nucleus	1	0
Electron	orbit	0	-

2) Find the number of protons, neutrons, and electrons in the following:

1pt

	<u>Protons</u>	<u>Neutrons</u>	<u>Electrons</u>
a) Lithium	3	4	3
b) Carbon	6	6	6
c) Magnesium	12	12	12
d) Calcium	20	20	20
e) Phosphorus	15	16	15
f) Nickel	28	31	28
g) Oxygen	8	8	8
h) Calcium ~ 42	20	22	20
i) Ba ⁺²	56	81	54
j) F ⁻¹	9	10	10

3) Explain the difference between an *ion* and an *isotope*.

Ion ~ different # of electrons

Isotope ~ different # of neutrons

1pt

4) Provide *symbol* notation for Potassium:

39
19

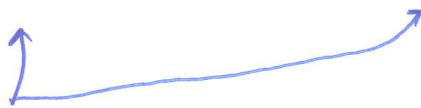
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5) Provide *hyphen* notation for Copper if it has 37 neutrons:

Copper ~ 66

6) Create a drawing and use the drawing to explain Rutherford's gold foil experiment:

Reasonable
Need BOTH



3pts

Circle the best answer

7) (Millikin, Thomson, Rutherford) found that the atom was mostly empty space.

8) An element with a different number of electrons is an (ion, isotope).

9) An element with a different number of neutrons is an (ion, isotope).

10) (Protons, Neutrons, Electrons) can NOT change and still be the same element.

11) The elements on the periodic table are arranged by (atomic mass, atomic number).

Short Answer

12) Write FOUR sentences about the atom. (4 pts)

4pts

Reasonable

BONUS: Write ANY quote or word of the day from last week:

+2

Reasonable

Go Vikings!!