

Deep Run High School

CHEMISTRY I: 1(A), 5(A), 7(A)

## Unit 4 Quiz

Due Date: **November 28, 2018**

Instructor: **Jennifer Krug**

Name: \_\_\_\_\_

Score:  / 100

Question 1

/1

**Which of the following elements has the highest electronegativity?**

- ☐ Phosphorus (P)
- ☐ Antimony (Sb)
- ☐ Nitrogen (N)
- ☐ Arsenic (As)

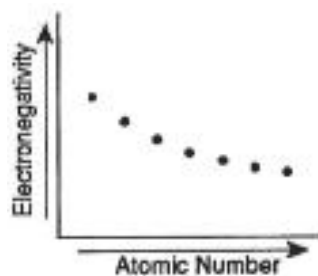
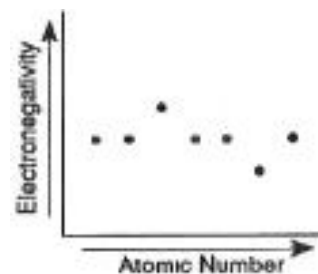
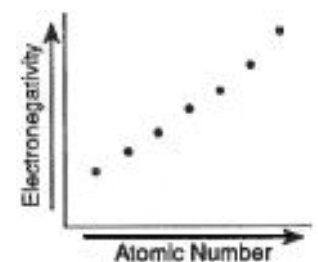
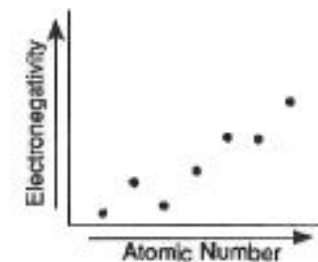
Question 2

/1

**Which chemist organized the modern periodic table, which is based on the atomic number of elements?**

- ☐ Neils Bohr
- ☐ Henry Moseley
- ☐ Ernest Rutherford
- ☐ Dmitri Mendeleev

Which diagram correctly shows the relationship between electronegativity and atomic number for the elements of Period 3?

☐☐☐☐

Name: \_\_\_\_\_

Question 4

/1

Compared to the amount of shielding of an oxygen atom, a phosphorus atom would have –

- ☐ the same amount of shielding
- ☐ more shielding
- ☐ less shielding

Question 5

/1

Which of the following trends decreases as shielding increases?

- ☐ Ionic Radii
- ☐ Electronegativity
- ☐ Atomic Radii
- ☐ Metallic Properties

Name: \_\_\_\_\_

Question 6

/1

**Which cation will have the largest radius?**

☐  $\text{Mg}^{+2}$

☐  $\text{Si}^{+4}$

☐  $\text{Na}^{+1}$

☐  $\text{Al}^{+3}$

Question 7

/1

**A cation is formed when**

☐ a metal loses electrons

☐ a nonmetal gains electrons

☐ a metal gains protons

☐ a nonmetal gains neutrons

Name: \_\_\_\_\_

Question 8

/1

**Which alkali metal has the highest first ionization energy?**

☐

K

☐

Cs

☐

Na

☐

Rb

Question 9

/1

**Which periodic trend is a measure of the energy required to remove a valence electron?**

☐

Shielding

☐

Ionic Radii

☐

Electronegativity

☐

Ionization Energy

Name: \_\_\_\_\_

Question 10

/1

**Which sequence of elements is arranged in order of *increasing* ionization energy?**

- ☐ Cl, S, P
- ☐ Al, Mg, Na
- ☐ Li, C, F
- ☐ O, S, Se

Question 11

/1

**Which of the following is an example of a chemical property of metals?**

- ☐ Conductivity
- ☐ Reactivity
- ☐ Appearance
- ☐ Malleability

Name: \_\_\_\_\_

Question 12

/1

**Which group of the periodic table has the most reactive metals?**

- ☐ Transition Metals
- ☐ Halogens
- ☐ Alkali Metals
- ☐ Metalloids

Question 13

/1

**Which chemist organized the first periodic table based on average atomic mass?**

- ☐ Neils Bohr
- ☐ Henry Moseley
- ☐ Ernest Rutherford
- ☐ Dmitri Mendeleev



Name: \_\_\_\_\_

Question 14

/1

**As you go down a group of the periodic table, the atomic radii increases due to**

- ☐ Electron-electron repulsion
- ☐ Nuclear Force
- ☐ Gravity
- ☐ Shielding

Question 15

/1

**Which of the following elements has the largest atomic radius?**

- ☐ Potassium (K)
- ☐ Cesium (Cs)
- ☐ Sodium (Na)
- ☐ Rubidium (Rb)