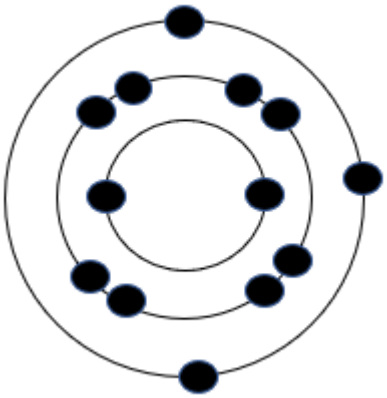
RQ Electron Arrangement

Name: _____ **Date:** _____

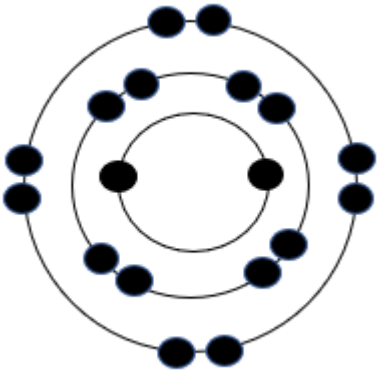
1.

Which of the following shows the correct electron arrangement for chlorine?

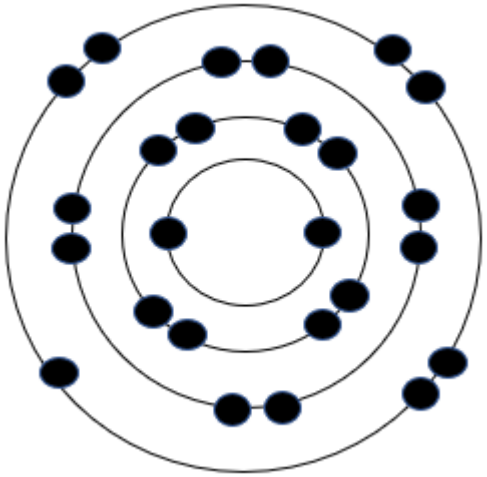
A.



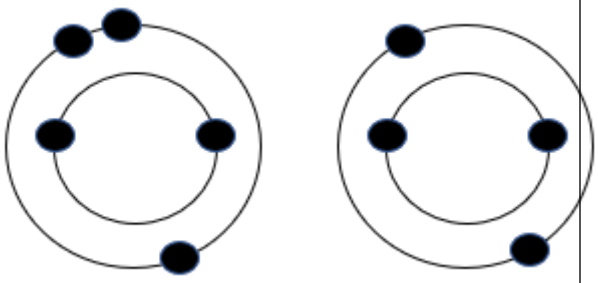
B.



C.



D.

2. 

What do the above two elements have in common?

A. They have the same number of electrons

B. They would be found in the same column on the periodic table

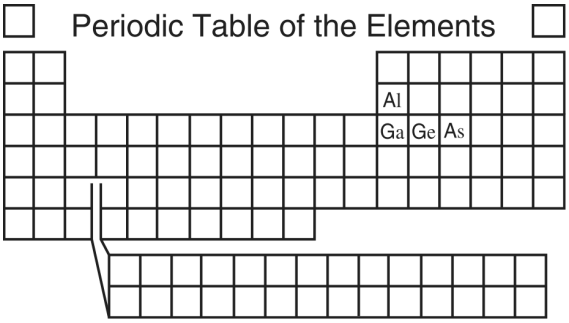
C. They would be found in the same row on the periodic table?

D. They have the same number of protons

3. Which one of these scientists described a model of the atom that included energy levels?

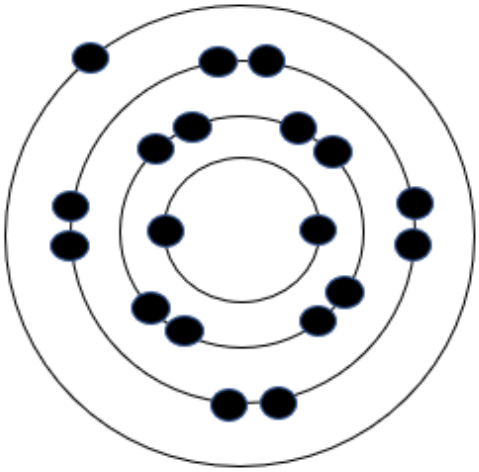
A. Dalton B. Bohr

C. Newton D. Thomson

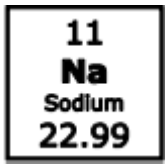
4. 

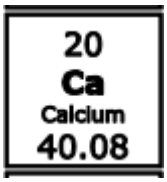
How many energy levels does Aluminum contain?

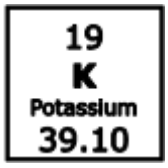
A. 1 B. 2 C. 3 D. 4

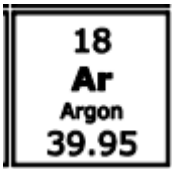
5. 

Which element is represented in the above diagram?

A. 

B. 

C. 

D. 

6. Which subatomic particle orbit around the nucleus in well defined energy levels?

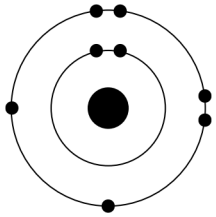
A. protons B. neutrons C. electrons

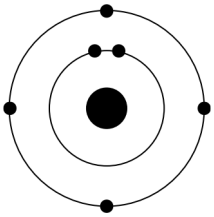
7. Which of the following atoms has six valence electrons?

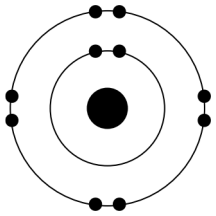
A. magnesium (Mg) B. silicon (Si)

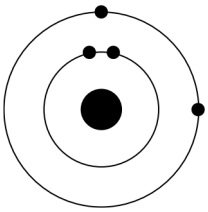
C. sulfur (S) D. argon (Ar)

8. An atom with which atomic diagram has chemical properties *most similar* to calcium?

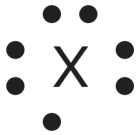
A. 

B. 

C. 

D. 

9. This is an electron dot diagram:



Which element is represented?

A. boron (B)

B. phosphorus (P)

C. sulfur (S)

D. bromine (Br)

10.

6 Carbon **C** 12.011 2,4
14 Silicon **Si** 28.086 2,8,4
32 Germanium **Ge** 72.59 2,8,18,4
50 Tin **Sn** 118.69 2,8,18,18,4
82 Lead **Pb** 207.19 -18,32,18,4

What do all of the elements listed above have in common?

A. They are metals.

B. They are in the same period.

C. They have the same number of electrons.

D. They have four valence electrons.