

Quiz 9.1 – Periodic Trends

Name: Key

Question 1 (2 points)

Arrange the following elements from smallest atomic radius to largest atomic radius:

~~F~~ ~~P~~ ~~He~~ ~~Ne~~ ~~O~~ ~~S~~

He Ne F O S P

Question 2 (2 points)

Choose which element of each pair has the higher first ionization energy

☐ Na or Mg☐ P or N☐ Mg or Al☐ Zn or Ga

Question 3 (1 point)

Describe why the *third* ionization energy for Ca is so much higher than its *second* ionization energy

Ca has only 2 valence electrons, so the third ionization must remove a core electron.