

Answer on Question #56203 – Chemistry - General Chemistry

Question:

10. Rearrange the following compounds in order of increasing acidity. (The more non-metallic the central atom, the more acidic the oxide is).

CO₂, P₂O₅, CaO, SO₃, SiO₂, CO₂

11. Consider the elements B, Ca, Cl, O, and S.

(a) Identify the element that is most likely to form an ionic bond with magnesium. _____

(b) Identify the element that is most likely to form a covalent bond with nitrogen _____

12. Use orbital diagram to illustrate what happens when an oxygen atom gains two electrons. Use both a Condensed electron configuration and Orbital diagram.

Answer:

10. **CaO, SiO₂, CO₂, P₂O₅, SO₃**

11. a) Cl

b) O

12. O²⁻

1s² 2s² 2p⁶

