

# IONIZATION ENERGY - GENERAL CHEMISTRY FORMATIVE ASSESSMENT



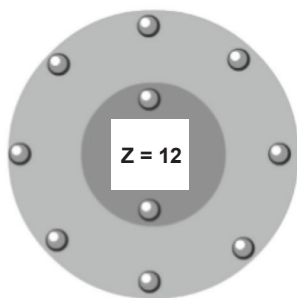
## STUDENT CHECK FOR UNDERSTANDING

Concepts:  
Ion Formation,  
Octet Rule, Ionic  
Radii, Ionization  
Energy Trends,  
Electron Affinity  
Trends

i

### PART I

Use a periodic table to determine the identity and charge of the two ions below.

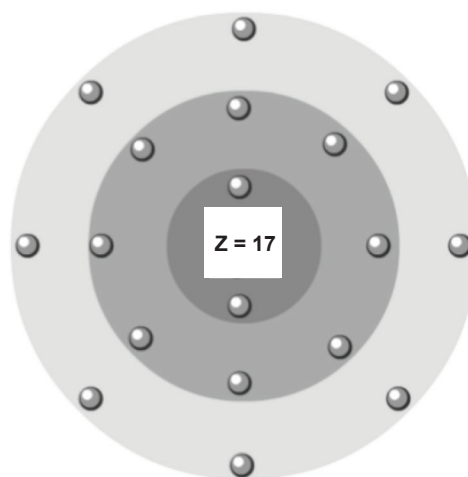


Ion

Cation or Anion?

Number of  
electrons lost or  
gained?



Ion

Cation or Anion?

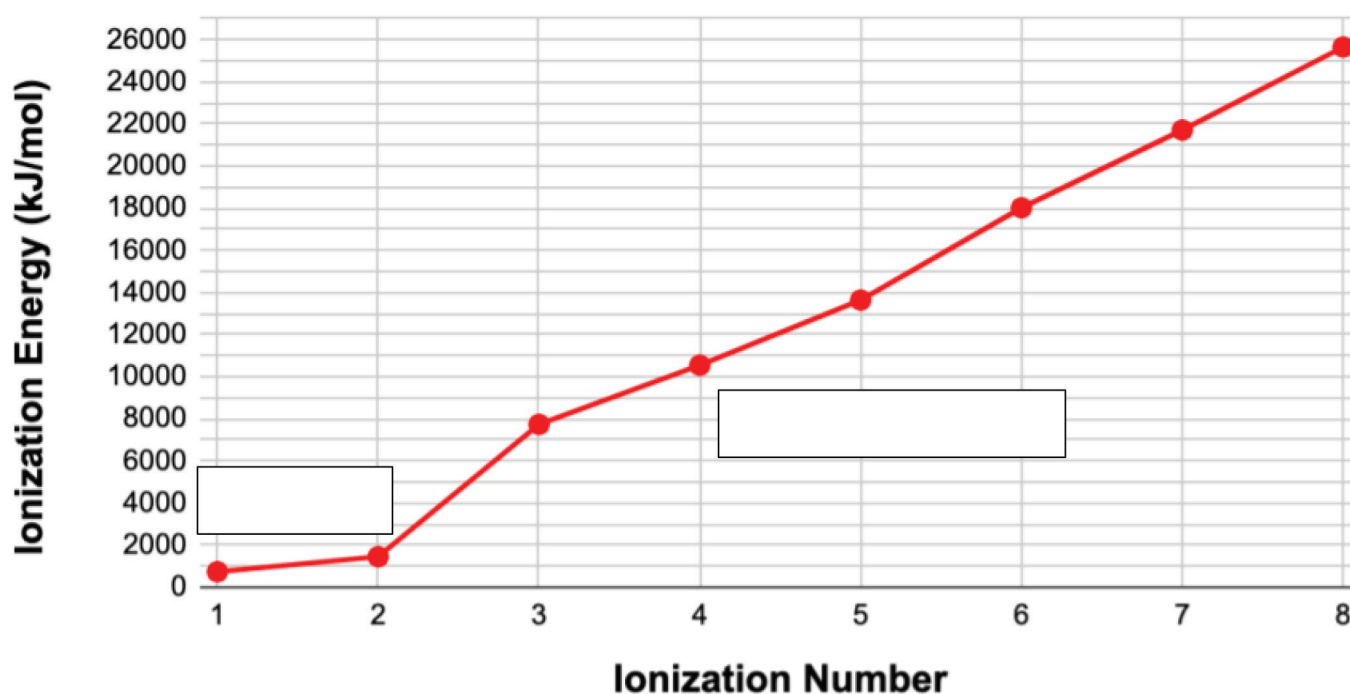
Number of  
electrons lost or  
gained?

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## PART II

Below is a graph of successive ionization energies for one of the two elements you identified in Part I. Determine which one it is and enter the name in the blank of the graph title. Afterwards, label it with the location of electrons that have been removed in each section of the graph. A bank of options has been provided beneath the graph.

### Successive Ionization Energies of \_\_\_\_\_



Bank: 2s electrons   2p electrons   3s electrons   3p electrons   3d electrons   4s electrons

In the space below, explain how you determined the identity of the element for which the ionization energies are shown.