

## Electron Configuration and Orbital Diagram

Write longhand electron configurations and draw orbital (arrow) diagrams for the following:

Symbol	# e <sup>-</sup>	Orbital Diagram and Longhand Electron Configuration
O		Electron configurations:
		Orbital Diagram:
Mg		Electron configurations:
		Orbital Diagram:
P		Electron configurations:
		Orbital Diagram:
V		Electron configurations:
		Orbital Diagram:
Ge		Electron configurations:
		Orbital Diagram:
Kr		Electron configurations:
		Orbital Diagram:
Sr		Electron configurations:
		Orbital Diagram:

# Electron Configuration and Orbital Diagram

## Answers

Write longhand electron configurations and draw orbital (arrow) diagrams for the following:

Symbol	# e <sup>-</sup>	Orbital Diagram and Longhand Electron Configuration
O	8	Electron configurations: $1s^2 2s^2 2p^4$
		Orbital Diagram: 
Mg	12	Electron configurations: $1s^2 2s^2 2p^6 3s^2$
		Orbital Diagram: 
P	15	Electron configurations: $1s^2 2s^2 2p^6 3s^2 3p^3$
		Orbital Diagram: 
V	23	Electron configurations: $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^3$
		Orbital Diagram: 
Ge	32	Electron configurations: $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^{10} 4p^2$
		Orbital Diagram: 
Kr	36	Electron configurations: $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^{10} 4p^6$
		Orbital Diagram: 
Sr	38	Electron configurations: $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^{10} 4p^6 5s^2$
		Orbital Diagram: 