Writing Electron Configuration & Orbital Diagram

1. Write the long-form electron configuration of the following elements?

i. Lithium _____

ii. Magnesium _____

iii. Potassium _____

iv. Nickel _____

v. Bromine _____

2. Write the abbreviated electron configuration of the following elements?

i. Nitrogen _____

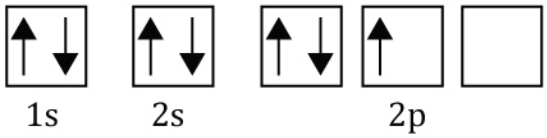
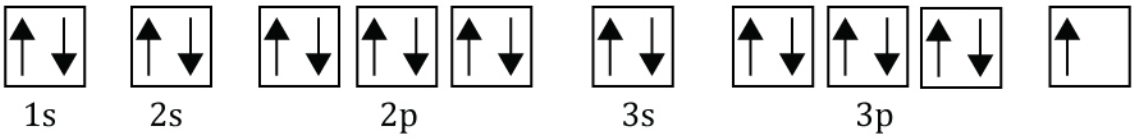
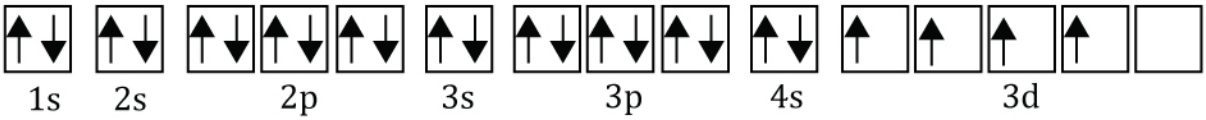
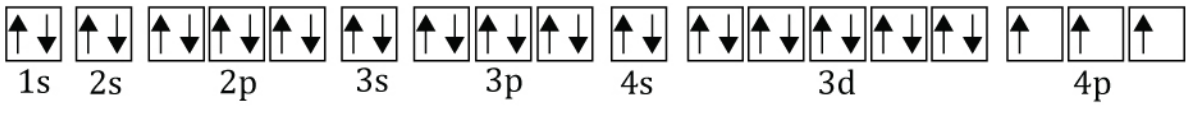
ii. Argon _____

iii. Manganese _____

iv. Silver _____

v. Barium _____

3. Identify the elements from the orbital filling diagrams.

Orbital Filling Diagram	Element
	
	
	
	
	

Writing Electron Configuration & Orbital Diagram

Answers

1. Write the long-form electron configuration of the following elements?

i. Lithium $1s^2\ 2s^1$

ii. Magnesium $1s^2\ 2s^2\ 2p^6\ 3s^2$

iii. Potassium $1s^2\ 2s^2\ 2p^6\ 3s^2\ 3p^6\ 4s^1$

iv. Nickel $1s^2\ 2s^2\ 2p^6\ 3s^2\ 3p^6\ 4s^2\ 3d^8$

v. Bromine $1s^2\ 2s^2\ 2p^6\ 3s^2\ 3p^6\ 4s^2\ 3d^{10}\ 4p^5$

2. Write the abbreviated electron configuration of the following elements?

i. Nitrogen $[He]\ 2s^2\ 2p^3$

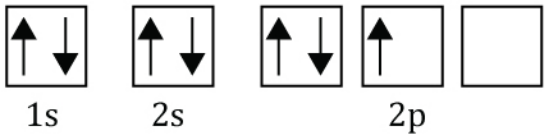
ii. Argon $[Ne]\ 3s^2\ 3p^6$

iii. Manganese $[Ar]\ 4s^2\ 3d^5$

iv. Silver $[Kr]\ 5s^1\ 4d^{10}$

v. Barium $[Xe]\ 6s^2$

3. Identify the elements from the orbital filling diagrams.

Orbital Filling Diagram	Element
	C
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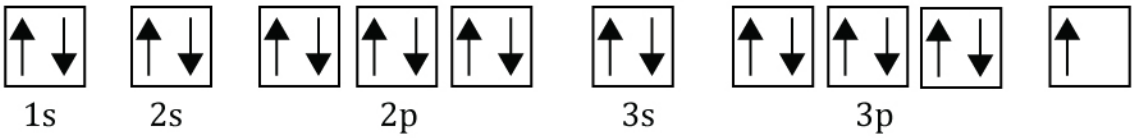
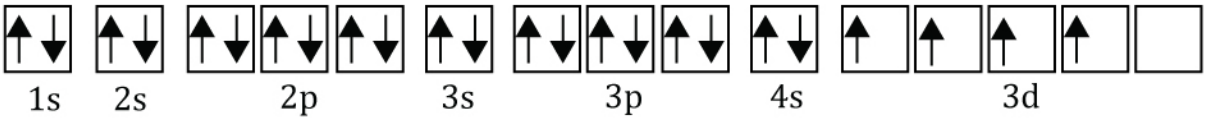
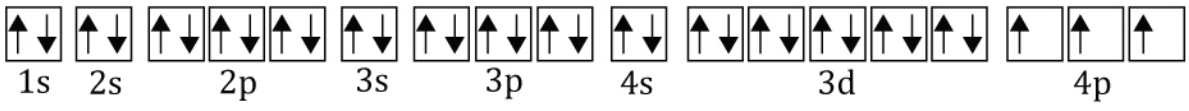
	K
	Sr
	As