

Name: _____

Date: _____

Pd: _____

Electron Configurations

LONGHAND ELECTRON CONFIGURATION

Use the patterns within the periodic table to write longhand electron configurations for the following atoms.

	Symbol	# e ⁻	Longhand Electron Configuration
1.	Mg		
2.	P		
3.	V		
4.	Ge		
5.	Kr		
6.	U		

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HONORS - ELECTRON CONFIGURATION PRACTICE

In the space below, write the full (unabbreviated) electron configurations of the following elements:

- 1) Na _____
- 2) Fe _____
- 3) Br⁻¹ _____
- 4) Ba⁺² _____
- 5) Np _____

In the space below, write the Noble Gas (abbreviated) electron configurations of the following elements:

- 6) Co _____
- 7) Ag _____
- 8) Te _____
- 9) Fr⁺¹ _____
- 10) Cl⁻¹ _____

Determine what elements are denoted by the following electron configurations:

- 11) $1s^2 2s^2 2p^6 3s^2 3p^4$ _____
- 12) $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^{10} 4p^6 5s^1$ _____
- 13) [Kr] $5s^2 4d^{10} 5p^3$ _____
- 14) [Xe] $6s^2 4f^{14} 5d^6$ _____
- 15) [Rn] $7s^2 5f^{11}$ _____

State whether the following electron configurations is valid or invalid. If invalid, correct it!

- 16) $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 4d^{10} 4p^5$ _____
- 17) $1s^2 2s^2 2p^6 3s^3 3d^5$ _____
- 18) [Ra] $7s^2 5f^8$ _____
- 19) [Kr] $5s^2 4d^{10} 5p^5$ _____
- 20) [Xe] _____