Electron Configurations Practice #2: Orbital Notation Name:				
Part I: Write the <u>orbital notation (orbital diagram)</u> electron configuration of the following elements. Be sure to <u>include the long-hand electron configuration notation</u> underneath each orbital notation.				
1)	Magnesium			
2)	Cobalt			
3)	Krypton			
4)	Chlorine			
Part II: Write the long-hand electron configuration notation of the following elements:				
5)	Nickel			
6)	Cadmium			
7)	Selenium			

8) Strontium

Part III: Determine the identity of the element that is denoted by each of the following electron	n
configurations. Include element name with correct spelling AND element symbol in parenthes	sis.

9)	$1s^22s^22p^63s^23p^5$
10)	$1s^22s^22p^63s^23p^64s^23d^{10}4p^65s^2 \qquad \underline{\hspace{2cm}}$
11)	$1s^22s^22p^63s^23p^64s^23d^{10}4p^65s^24d^{10}5p^4 \  \   \underline{\hspace{1.5cm}}$
12)	$1s^22s^22p^63s^23p^64s^23d^{10}4p^65s^24d^{10}5p^66s^24f^{14}5d^7  \underline{\hspace{1.5cm}}$
	IV: VALID or INVALID electron configurations? If INVALID, rewrite the CORRECT long-hand ion so that it contains the <u>SAME</u> number of electrons as the <u>original</u> electron configuration.
13)	$1s^22s^22p^63s^23p^64s^24d^{10}4p^6 \qquad \underline{\hspace{2cm}}$
	→ Correct electron configuration:
14)	$1s^22s^22p^63s^33d^6$
	→ Correct electron configuration:
15)	$1s^22s^22p^63s^23p^64s^23d^{10}4p^65s^24d^{10}5p^46s^24f^{14} \qquad \underline{\hspace{2cm}}$
	→ Correct electron configuration:
16)	1s <sup>2</sup> 2s <sup>2</sup> 2p <sup>6</sup> 3s <sup>2</sup> 3p <sup>8</sup>
	→ Correct electron configuration: