

Name: _____

Date: _____

Electron Configuration/Orbital Diagrams/Noble Gas Notation

Write the orbital notations, electron configurations, and noble gas notation for atoms of the following elements:

1) Ni

2) Al

3) Se

4) B

5) O

6) I

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Electron Configuration/Orbital Diagrams/Noble Gas Notation

Extra Credit 1:

Write the orbital notations, electron configurations, and noble gas notation for atoms of the following elements:

1) F⁻

2) Ca²⁺

Extra Credit 2:

1) How many protons, electrons, and neutrons in the atom: **Zn**

2) Demonstrate the following decays for the atom below:

$\frac{238}{92}\text{U} \rightarrow$ alpha decay beta decay beta decay alpha decay

Solve the following: (round to the appropriate significant figures)

1) Given $\lambda = 3.5 \times 10^{-8}\text{m}$, solve for ν

Calculate the atomic mass of silicon (Si). The three silicon isotopes have atomic masses and relative abundances of 27.9769 amu (92.2297%), 28.9765 amu (4.6832%) and 29.9738 amu (3.0872%).