

Semester 1 Final Review Quiz: Units 1 and 2 (Accel)

- What group of elements that form cations is the most reactive on the periodic table?
 - Alkali metals
 - Alkaline earth metals
 - Halogens
 - Noble gases
- What element has the following noble gas configuration: $[\text{Kr}]5s^24d^8$?
 - Ag
 - Ni
 - Pd
 - Cd
- Which group of elements does not have an electronegativity value?
 - Alkali metals
 - Alkaline earth metals
 - Halogens
 - Noble Gases
- What elements are most abundant in the universe?
 - The most massive elements
 - The least massive elements
 - Elements that form anions
 - Elements that form cations
- What results from the fusion of 3 helium nuclei?
 - A carbon nuclei
 - 3 helium ions
 - 3 alpha particles
 - Not enough information
- What results from the alpha decay of uranium – 238?
 - ${}_{93}^{238}\text{Np}$
 - ${}_{92}^{234}\text{U}$
 - ${}_{95}^{242}\text{Am}$
 - ${}_{90}^{234}\text{Th}$
- What subatomic particle determines the identity of an atom?
 - protons
 - neutrons
 - electrons
 - quarks
- How many neutrons does nitrogen – 15 have?
 - 6 neutrons
 - 7 neutrons
 - 8 neutrons
 - 15 neutrons
- Which of the following has the greatest radius?
 - K
 - K^+
 - Rb
 - Rb^+
- Elements in the same group on the periodic table typically share:
 - The same chemical properties
 - The same number of electrons
 - The same number of energy levels
 - The same electron configuration
- Which of the following is a correctly written electron configuration?
 - $1s^22s^22p^53s^1$
 - $1s^22s^22p^63s^23p^64s^24d^{10}5p^2$
 - $1s^22s^22p^63s^23p^4$
 - $1s^22s^23p^64$
- How many valence electrons does selenium (Se) have?
 - 4
 - 6
 - 14
 - 50
- How many electrons can fit in a single orbital?
 - 1
 - 2
 - 3
 - 4
- What type of charge would repel an alpha particle?
 - Positive charge
 - Negative charge
 - Neutral charge
 - Impossible to tell
- Visible light arranged according wavelengths is called a...
 - Nebula
 - Main sequence
 - Spectrum
 - Constellation