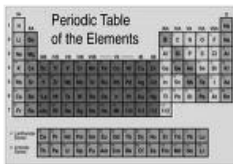


Chapter 6 Review “The Periodic Table”



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Chapter 6 Review

- Which of the following groupings contains only representative elements: a) Cu, Co, Cd, or b) Al, Mg, Li?
- What is true about the electron configurations of the representative elements?
- The metals in Groups 1A, 2A, and 3A ____ electrons when forming ions.

Chapter 6 Review

- What are the Group 1A and Group 7A elements examples of?
- Which of the following elements has the smallest radius: a) chlorine, or b) bromine?
- How does the size of an ion compare to the atom it came from?
- The modern periodic table is arranged according to _____.

Chapter 6 Review

- In which of the following groups of ions are the charges all shown correctly: a) Li^{1-} , O^{2-} , S^{2+} , or b) Ca^{2+} , Al^{3+} , Br^{1-} ?
- Which of the following elements are nonmetal: Pt, V, Li, and Kr
- Know the characteristics of cations and anions.

Chapter 6 Review

- What is another name for the transition metals?
- Which of the following elements is a transition metal: a) copper, or b) cesium?
- What is the factor that contributes to the increase in ionization energy from left to right across a period?

Chapter 6 Review

- To what category of elements does an element belong if it is a poor conductor of electricity?
- What is the charge of a cation?
- Which of these elements has the lowest electronegativity value: a) cesium, or b) calcium?
- Which of the following is correct:
a) In, 49 protons, 49 electrons, or
b) Zn, 30 protons, 60 electrons?

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- What element in the second period has the largest atomic radius?
- Which of the following elements is in the same period as phosphorus: a) magnesium, or b) nitrogen?
- Who arranged the elements according to atomic mass, and used the arrangement to predict the properties of missing elements?

Chapter 6 Review

- What causes the shielding effect to remain constant across a period?
- For Group 2A metals, which electron is the most difficult to remove?
- What is true about the electron configurations of the noble gases?
- What category includes the majority of the elements?

Chapter 6 Review

- What is the element with the highest electronegativity value: a) calcium, or b) fluorine?
- Which subatomic particle plays the greatest part in determining the properties of an element?
- Of the following, which one has the smallest first ionization energy: a) aluminum, or b) silicon?

Chapter 6 Review

- What element has the electron configuration of $1s^22s^22p^63s^23p^2$?
- In which of the following sets are the charges given correctly for all the ions: a) Na^{1+} , Mg^{1+} , Al^{1+} , or b) K^{1+} , Sr^{2+} , O^{2-} ?
- Which of the following elements has the smallest ionic radius: a) Li, or b) K?

Chapter 6 Review

- What electron configuration is most likely to result in an element that is relatively inactive?
- How does atomic radius change from left to right across a period in the periodic table?
- How does atomic radius change from top to bottom in a group in the periodic table?

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- Elements that are characterized by the filling of p orbitals are classified as _____.
- As you move from left to right across the second period of the periodic table, ionization energy ____.
- Atomic size generally decreases as you _____.

Chapter 6 Review

- Which of the following is a representative element: a) Fe, or b) Te
- Cations form when an atom _____ electrons.
- What is the energy required to remove an electron from an atom in the gaseous state called?

Chapter 6 Review

- Which of the following decreases with increasing atomic number in Group 2A: a) ionization energy, or b) ionic size?
- What is another name for the representative elements?
- Each period in the periodic table corresponds to _____.

Chapter 6 Review

- Which of the following elements has the smallest first ionization energy: a) potassium, or b) magnesium?
- Compared with the electronegativity of elements on the left side of a period, the electronegativity of the elements on the right side of the same period tend to be _____.

Chapter 6 Review

- The atomic number of an element is the total number of what particles in the nucleus?
- How many electrons does the ion Ca^{2+} contain?
- How many electrons are there in the highest occupied energy level of atoms in Group 5A elements?

Chapter 6 Review

- How many electrons are in a rubidium ion, Rb^{1+} ?
- How many electrons are present in the d sublevel of a neutral atom of nickel?
- What is the usual charge on an ion from Group 7A?

Chapter 6 Review

End of Chapter 6 Review