|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1. All polymers form rigid solids at standard temperature and pressure.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | False | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *QUESTION TYPE:* | True / False | | *HAS VARIABLES:* | False | | *TOPICS:* | Conducting Polymers | | *DATE CREATED:* | 12/23/2013 1:59 PM | | *DATE MODIFIED:* | 1/19/2018 12:46 AM | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 2. The nucleus of an atom is comprised of protons and electrons.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | False | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *QUESTION TYPE:* | True / False | | *HAS VARIABLES:* | False | | *TOPICS:* | Atomic Structure and Mass | | *DATE CREATED:* | 12/23/2013 1:59 PM | | *DATE MODIFIED:* | 1/19/2018 12:46 AM | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 3. Cations are particles with fewer electrons than protons.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | True | | *POINTS:* | 1 | | *DIFFICULTY:* | Moderate | | *QUESTION TYPE:* | True / False | | *HAS VARIABLES:* | False | | *TOPICS:* | Ions | | *DATE CREATED:* | 12/23/2013 1:59 PM | | *DATE MODIFIED:* | 1/19/2018 12:48 AM | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 4. A horizontal row of elements on the periodic table is referred to as a family.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | False | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *QUESTION TYPE:* | True / False | | *HAS VARIABLES:* | False | | *TOPICS:* | The Periodic Table | | *DATE CREATED:* | 12/23/2013 1:59 PM | | *DATE MODIFIED:* | 1/19/2018 12:50 AM | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 5. The systematic name of V2O5 is vanadium pentoxide.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | True | | *POINTS:* | 1 | | *DIFFICULTY:* | Moderate | | *QUESTION TYPE:* | True / False | | *HAS VARIABLES:* | False | | *TOPICS:* | Chemical Nomenclature | | *DATE CREATED:* | 12/23/2013 1:59 PM | | *DATE MODIFIED:* | 1/19/2018 12:52 AM | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 6. The systematic name of AlCl3 is aluminum chloride.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | True | | *POINTS:* | 1 | | *DIFFICULTY:* | Moderate | | *QUESTION TYPE:* | True / False | | *HAS VARIABLES:* | False | | *TOPICS:* | Chemical Nomenclature | | *DATE CREATED:* | 12/23/2013 1:59 PM | | *DATE MODIFIED:* | 1/19/2018 12:55 AM | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 7. The chemical formula for nitrite is NO3−.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | False | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *QUESTION TYPE:* | True / False | | *HAS VARIABLES:* | False | | *TOPICS:* | Chemical Nomenclature | | *DATE CREATED:* | 12/23/2013 1:59 PM | | *DATE MODIFIED:* | 1/19/2018 12:58 AM | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 8. Elements in a periodic family tend to combine with the same number of hydrogen atoms.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | True | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *QUESTION TYPE:* | True / False | | *HAS VARIABLES:* | False | | *TOPICS:* | The Periodic Table | | *DATE CREATED:* | 12/23/2013 1:59 PM | | *DATE MODIFIED:* | 1/19/2018 1:35 AM | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 9. Free radicals, such as Cl∙, tend to be very reactive.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | True | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *QUESTION TYPE:* | True / False | | *HAS VARIABLES:* | False | | *TOPICS:* | Polyethylene | | *DATE CREATED:* | 12/23/2013 1:59 PM | | *DATE MODIFIED:* | 1/19/2018 1:39 AM | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 10. Silicon tetrachloride plays an important role in the production of semiconductors.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | True | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *QUESTION TYPE:* | True / False | | *HAS VARIABLES:* | False | | *TOPICS:* | Inorganic and Organic Chemistry | | *DATE CREATED:* | 12/23/2013 1:59 PM | | *DATE MODIFIED:* | 1/19/2018 1:40 AM | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 11. CH3−O−CH3 is an example of an alcohol.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | False | | *POINTS:* | 1 | | *DIFFICULTY:* | Moderate | | *QUESTION TYPE:* | True / False | | *HAS VARIABLES:* | False | | *TOPICS:* | Inorganic and Organic Chemistry | | *DATE CREATED:* | 12/23/2013 1:59 PM | | *DATE MODIFIED:* | 1/19/2018 1:42 AM | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 12. Chlorine forms four oxyanions.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | True | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *QUESTION TYPE:* | True / False | | *HAS VARIABLES:* | False | | *TOPICS:* | Chemical Nomenclature | | *DATE CREATED:* | 12/23/2013 1:59 PM | | *DATE MODIFIED:* | 1/19/2018 1:44 AM | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 13. The average mass of an atom is determined by:   |  |  |  | | --- | --- | --- | |  | a. | adding the number of protons and electrons and dividing it by the number of neutrons. | |  | b. | averaging the masses of each isotope. | |  | c. | calculating the weighted average of all stable isotopic masses. | |  | d. | adding the number of protons and neutrons and dividing it by the number of electrons. |  |  |  | | --- | --- | | *ANSWER:* | c | | *POINTS:* | 1 | | *DIFFICULTY:* | Moderate | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *TOPICS:* | Atomic Structure and Mass | | *DATE CREATED:* | 12/23/2013 1:59 PM | | *DATE MODIFIED:* | 1/19/2018 1:55 AM | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 14. Ions of opposite charges attract one another. This attraction is governed by \_\_\_\_\_.   |  |  |  | | --- | --- | --- | |  | a. | Graham's law | |  | b. | Henry's law | |  | c. | Kirchoff's law | |  | d. | Coulomb's law |  |  |  | | --- | --- | | *ANSWER:* | d | | *POINTS:* | 1 | | *DIFFICULTY:* | Moderate | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *TOPICS:* | Ions | | *DATE CREATED:* | 12/23/2013 1:59 PM | | *DATE MODIFIED:* | 1/19/2018 1:54 AM | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 15. In the modern periodic table, the densest element is found in \_\_\_\_\_.   |  |  |  | | --- | --- | --- | |  | a. | period 2 | |  | b. | period 4 | |  | c. | period 6 | |  | d. | period 8 |  |  |  | | --- | --- | | *ANSWER:* | c | | *POINTS:* | 1 | | *DIFFICULTY:* | Moderate | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *TOPICS:* | The Periodic Table | | *DATE CREATED:* | 12/23/2013 1:59 PM | | *DATE MODIFIED:* | 1/19/2018 1:54 AM | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 16. Group II elements (Be, Mg, Ca, Sr, and Ba) are commonly referred to as \_\_\_\_\_.   |  |  |  | | --- | --- | --- | |  | a. | alkali metals | |  | b. | alkaline earth metals | |  | c. | halogen metals | |  | d. | lanthanide metals |  |  |  | | --- | --- | | *ANSWER:* | b | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *TOPICS:* | The Periodic Table | | *DATE CREATED:* | 12/23/2013 1:59 PM | | *DATE MODIFIED:* | 1/19/2018 1:56 AM | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 17. The vertical columns in the periodic table are called \_\_\_\_\_.   |  |  |  | | --- | --- | --- | |  | a. | groups | |  | b. | periods | |  | c. | classes | |  | d. | sections |  |  |  | | --- | --- | | *ANSWER:* | a | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *TOPICS:* | The Periodic Table | | *DATE CREATED:* | 12/23/2013 1:59 PM | | *DATE MODIFIED:* | 1/19/2018 3:00 AM | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 18. In the context of the modern periodic table, \_\_\_\_\_ are examples of transition metals.   |  |  |  | | --- | --- | --- | |  | a. | Fe and Zn | |  | b. | Sb and I | |  | c. | Pm and Gd | |  | d. | Al and Ga |  |  |  | | --- | --- | | *ANSWER:* | a | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *TOPICS:* | The Periodic Table | | *DATE CREATED:* | 12/23/2013 1:59 PM | | *DATE MODIFIED:* | 1/19/2018 2:59 AM | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 19. \_\_\_\_\_ are examples of actinides.   |  |  |  | | --- | --- | --- | |  | a. | Ti and Cr | |  | b. | U and Np | |  | c. | Sm and Er | |  | d. | Kr and Xe |  |  |  | | --- | --- | | *ANSWER:* | b | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *TOPICS:* | The Periodic Table | | *DATE CREATED:* | 12/23/2013 1:59 PM | | *DATE MODIFIED:* | 1/19/2018 3:01 AM | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 20. Which of the following pairs of elements can be classified as noble gases?   |  |  |  | | --- | --- | --- | |  | a. | H and He | |  | b. | Na and K | |  | c. | Kr and Ar | |  | d. | N and O |  |  |  | | --- | --- | | *ANSWER:* | c | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *TOPICS:* | The Periodic Table | | *DATE CREATED:* | 12/23/2013 1:59 PM | | *DATE MODIFIED:* | 1/19/2018 3:03 AM | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 21. Uranium, plutonium, and neptunium are classified as \_\_\_\_\_.   |  |  |  | | --- | --- | --- | |  | a. | alkali metals | |  | b. | alkaline earth metals | |  | c. | lanthanides | |  | d. | actinides |  |  |  | | --- | --- | | *ANSWER:* | d | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *TOPICS:* | The Periodic Table | | *DATE CREATED:* | 12/23/2013 1:59 PM | | *DATE MODIFIED:* | 1/19/2018 3:04 AM | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 22. Alkali metal cations carry a charge of \_\_\_\_\_.   |  |  |  | | --- | --- | --- | |  | a. | 1+ | |  | b. | 2+ | |  | c. | 2− | |  | d. | 1− |  |  |  | | --- | --- | | *ANSWER:* | a | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *TOPICS:* | The Periodic Table | | *DATE CREATED:* | 12/23/2013 1:59 PM | | *DATE MODIFIED:* | 1/19/2018 3:09 AM | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 23. CaCl2 is an example of a(n) \_\_\_\_\_.   |  |  |  | | --- | --- | --- | |  | a. | covalent compound | |  | b. | formula unit | |  | c. | molecular compound | |  | d. | organic acid |  |  |  | | --- | --- | | *ANSWER:* | b | | *POINTS:* | 1 | | *DIFFICULTY:* | Moderate | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *TOPICS:* | Compounds and Chemical Bonds | | *DATE CREATED:* | 12/23/2013 1:59 PM | | *DATE MODIFIED:* | 1/19/2018 3:11 AM | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 24. The molecular formula for lead nitrate is \_\_\_\_\_.   |  |  |  | | --- | --- | --- | |  | a. | PbN3 | |  | b. | Pb(NO2)3 | |  | c. | Pb(NO3)2 | |  | d. | PNO3 |  |  |  | | --- | --- | | *ANSWER:* | c | | *POINTS:* | 1 | | *DIFFICULTY:* | Moderate | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *TOPICS:* | Chemical Nomenclature | | *DATE CREATED:* | 12/23/2013 1:59 PM | | *DATE MODIFIED:* | 1/19/2018 3:16 AM | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 25. The molecular formula for ammonium chloride is \_\_\_\_\_.   |  |  |  | | --- | --- | --- | |  | a. | NH3Cl | |  | b. | NH2Cl2 | |  | c. | NH4Cl | |  | d. | NH2Cl3 |  |  |  | | --- | --- | | *ANSWER:* | c | | *POINTS:* | 1 | | *DIFFICULTY:* | Moderate | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *TOPICS:* | Chemical Nomenclature | | *DATE CREATED:* | 12/23/2013 1:59 PM | | *DATE MODIFIED:* | 1/19/2018 3:20 AM | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 26. The molecular formula for strontium chloride is \_\_\_\_\_.   |  |  |  | | --- | --- | --- | |  | a. | SrCl2 | |  | b. | StCl2 | |  | c. | SrClO2 | |  | d. | SrCl |  |  |  | | --- | --- | | *ANSWER:* | a | | *POINTS:* | 1 | | *DIFFICULTY:* | Moderate | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *TOPICS:* | Chemical Nomenclature | | *DATE CREATED:* | 12/23/2013 1:59 PM | | *DATE MODIFIED:* | 1/19/2018 3:21 AM | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 27. The molecular formula for iron(II) bromide is \_\_\_\_\_.   |  |  |  | | --- | --- | --- | |  | a. | FeBr3 | |  | b. | FeBr2 | |  | c. | I2Br2 | |  | d. | IBr3 |  |  |  | | --- | --- | | *ANSWER:* | b | | *POINTS:* | 1 | | *DIFFICULTY:* | Moderate | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *TOPICS:* | Chemical Nomenclature | | *DATE CREATED:* | 12/23/2013 1:59 PM | | *DATE MODIFIED:* | 1/19/2018 3:23 AM | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 28. The molecular formula for dinitrogen pentoxide is \_\_\_\_\_.   |  |  |  | | --- | --- | --- | |  | a. | N2O5 | |  | b. | (NO5)2 | |  | c. | 2NO5 | |  | d. | N2P5O |  |  |  | | --- | --- | | *ANSWER:* | a | | *POINTS:* | 1 | | *DIFFICULTY:* | Moderate | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *TOPICS:* | Chemical Nomenclature | | *DATE CREATED:* | 12/23/2013 1:59 PM | | *DATE MODIFIED:* | 1/19/2018 3:29 AM | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 29. The molecular formula for rubidium chloride is \_\_\_\_\_.   |  |  |  | | --- | --- | --- | |  | a. | RuCl2 | |  | b. | RbCl2 | |  | c. | RuCl | |  | d. | RbCl |  |  |  | | --- | --- | | *ANSWER:* | d | | *POINTS:* | 1 | | *DIFFICULTY:* | Moderate | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *TOPICS:* | Chemical Nomenclature | | *DATE CREATED:* | 12/23/2013 1:59 PM | | *DATE MODIFIED:* | 1/19/2018 3:27 AM | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 30. The molecular formula for calcium phosphate is \_\_\_\_\_.   |  |  |  | | --- | --- | --- | |  | a. | Ca3P2 | |  | b. | CaPO3 | |  | c. | Ca3(PO4)2 | |  | d. | Ca2(PO4)3 |  |  |  | | --- | --- | | *ANSWER:* | c | | *POINTS:* | 1 | | *DIFFICULTY:* | Moderate | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *TOPICS:* | Chemical Nomenclature | | *DATE CREATED:* | 12/23/2013 1:59 PM | | *DATE MODIFIED:* | 1/19/2018 3:34 AM | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 31. The molecular formula for tin(IV) oxide is \_\_\_\_\_.   |  |  |  | | --- | --- | --- | |  | a. | TiO2 | |  | b. | SnO2 | |  | c. | SnO4 | |  | d. | TiO4 |  |  |  | | --- | --- | | *ANSWER:* | b | | *POINTS:* | 1 | | *DIFFICULTY:* | Moderate | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *TOPICS:* | Chemical Nomenclature | | *DATE CREATED:* | 12/23/2013 1:59 PM | | *DATE MODIFIED:* | 1/19/2018 3:36 AM | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 32. The systematic (IUPAC) name of MgI2 is \_\_\_\_\_.   |  |  |  | | --- | --- | --- | |  | a. | manganese iodide | |  | b. | manganese diiodide | |  | c. | magnesium iodide | |  | d. | magnesium (II) iodide |  |  |  | | --- | --- | | *ANSWER:* | c | | *POINTS:* | 1 | | *DIFFICULTY:* | Moderate | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *TOPICS:* | Chemical Nomenclature | | *DATE CREATED:* | 12/23/2013 1:59 PM | | *DATE MODIFIED:* | 1/19/2018 3:38 AM | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 33. The systematic (IUPAC) name of Sr(NO2)2 is \_\_\_\_\_.   |  |  |  | | --- | --- | --- | |  | a. | strontium nitrate | |  | b. | strontium dinitrate | |  | c. | sirium nitrate | |  | d. | strontium nitrite |  |  |  | | --- | --- | | *ANSWER:* | d | | *POINTS:* | 1 | | *DIFFICULTY:* | Moderate | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *TOPICS:* | Chemical Nomenclature | | *DATE CREATED:* | 12/23/2013 1:59 PM | | *DATE MODIFIED:* | 1/19/2018 3:39 AM | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 34. The systematic (IUPAC) name of CuO is \_\_\_\_\_.   |  |  |  | | --- | --- | --- | |  | a. | copper (I) oxide | |  | b. | copper (II) oxide | |  | c. | copper oxide | |  | d. | copper (II) hydroxide |  |  |  | | --- | --- | | *ANSWER:* | b | | *POINTS:* | 1 | | *DIFFICULTY:* | Moderate | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *TOPICS:* | Chemical Nomenclature | | *DATE CREATED:* | 12/23/2013 1:59 PM | | *DATE MODIFIED:* | 1/19/2018 3:42 AM | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 35. The systematic (IUPAC) name of NaClO4 is \_\_\_\_\_.   |  |  |  | | --- | --- | --- | |  | a. | sodium perchlorate | |  | b. | sodium chlorate | |  | c. | sodium hypochlorate | |  | d. | sodium chloride tetraoxide |  |  |  | | --- | --- | | *ANSWER:* | a | | *POINTS:* | 1 | | *DIFFICULTY:* | Moderate | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *TOPICS:* | Chemical Nomenclature | | *DATE CREATED:* | 12/23/2013 1:59 PM | | *DATE MODIFIED:* | 1/19/2018 3:49 AM | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 36. How many neutrons are present in 201Hg?   |  |  |  | | --- | --- | --- | |  | a. | 201 | |  | b. | 80 | |  | c. | 283 | |  | d. | 121 |  |  |  | | --- | --- | | *ANSWER:* | d | | *POINTS:* | 1 | | *DIFFICULTY:* | Moderate | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *TOPICS:* | Atomic Structure and Mass | | *DATE CREATED:* | 12/23/2013 1:59 PM | | *DATE MODIFIED:* | 1/19/2018 3:48 AM | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 37. How many electrons are present in 40Ca2+?   |  |  |  | | --- | --- | --- | |  | a. | 40 | |  | b. | 38 | |  | c. | 20 | |  | d. | 18 |  |  |  | | --- | --- | | *ANSWER:* | d | | *POINTS:* | 1 | | *DIFFICULTY:* | Moderate | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *TOPICS:* | Ions | | *DATE CREATED:* | 12/23/2013 1:59 PM | | *DATE MODIFIED:* | 1/19/2018 4:29 AM | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 38. Which of the following chemical species contains 9 protons?   |  |  |  | | --- | --- | --- | |  | a. | 16O | |  | b. | 19F | |  | c. | 35S | |  | d. | 32P |  |  |  | | --- | --- | | *ANSWER:* | b | | *POINTS:* | 1 | | *DIFFICULTY:* | Moderate | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *TOPICS:* | Atomic Structure and Mass | | *DATE CREATED:* | 12/23/2013 1:59 PM | | *DATE MODIFIED:* | 1/19/2018 3:50 AM | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 39. If an ion contains 33 protons, 39 neutrons, and 34 electrons, the ion is \_\_\_\_\_.   |  |  |  | | --- | --- | --- | |  | a. | 73Se1− | |  | b. | 72As1− | |  | c. | 67Y1+ | |  | d. | 73Se1+ |  |  |  | | --- | --- | | *ANSWER:* | b | | *POINTS:* | 1 | | *DIFFICULTY:* | Moderate | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *TOPICS:* | Ions | | *DATE CREATED:* | 12/23/2013 1:59 PM | | *DATE MODIFIED:* | 1/19/2018 3:55 AM | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 40. Consider 235U. How many neutrons are present in this nuclide?   |  |  |  | | --- | --- | --- | |  | a. | 143 | |  | b. | 235 | |  | c. | 92 | |  | d. | 177 |  |  |  | | --- | --- | | *ANSWER:* | a | | *POINTS:* | 1 | | *DIFFICULTY:* | Moderate | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *TOPICS:* | Atomic Structure and Mass | | *DATE CREATED:* | 12/23/2013 1:59 PM | | *DATE MODIFIED:* | 1/19/2018 3:56 AM | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 41. When electrons are shared between pairs of atoms rather than donated from one atom to another or mobile across an entire lattice, we have \_\_\_\_\_ bonding.   |  |  | | --- | --- | | *ANSWER:* | covalent | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *QUESTION TYPE:* | Completion | | *HAS VARIABLES:* | False | | *TOPICS:* | Compounds and Chemical Bonds | | *DATE CREATED:* | 12/23/2013 1:59 PM | | *DATE MODIFIED:* | 1/19/2018 3:58 AM | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 42. The atomic mass of an atom is the number of \_\_\_\_\_ in that particular atom.   |  |  | | --- | --- | | *ANSWER:* | protons and neutrons | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *QUESTION TYPE:* | Completion | | *HAS VARIABLES:* | False | | *TOPICS:* | Atomic Structure and Mass | | *DATE CREATED:* | 12/23/2013 1:59 PM | | *DATE MODIFIED:* | 1/19/2018 3:59 AM | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 43. An \_\_\_\_\_ provides the relative ratio between the numbers of atoms of the different elements present in a compound.   |  |  | | --- | --- | | *ANSWER:* | empirical formula | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *QUESTION TYPE:* | Completion | | *HAS VARIABLES:* | False | | *TOPICS:* | Compounds and Chemical Bonds | | *DATE CREATED:* | 12/23/2013 1:59 PM | | *DATE MODIFIED:* | 1/19/2018 4:01 AM | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 44. The ratio of isotopes for a given element can be measured instrumentally using a \_\_\_\_\_.   |  |  | | --- | --- | | *ANSWER:* | mass spectrometer | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *QUESTION TYPE:* | Completion | | *HAS VARIABLES:* | False | | *TOPICS:* | Atomic Structure and Mass | | *DATE CREATED:* | 12/23/2013 1:59 PM | | *DATE MODIFIED:* | 1/19/2018 4:02 AM | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 45. Atoms of the same element that have different numbers of neutrons are called \_\_\_\_\_.   |  |  | | --- | --- | | *ANSWER:* | isotopes | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *QUESTION TYPE:* | Completion | | *HAS VARIABLES:* | False | | *TOPICS:* | Atomic Structure and Mass | | *DATE CREATED:* | 12/23/2013 1:59 PM | | *DATE MODIFIED:* | 1/19/2018 4:04 AM | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 46. Potassium has two stable isotopes: 39K, which has a mass of 38.96 amu and makes up 93.26 % of the natural potassium found; and 41K, with a mass of 40.96 amu. What is the atomic weight of potassium?   |  |  | | --- | --- | | *ANSWER:* | 39.09 amu | | *POINTS:* | 1 | | *DIFFICULTY:* | Hard | | *QUESTION TYPE:* | Subjective Short Answer | | *HAS VARIABLES:* | False | | *TOPICS:* | Atomic Structure and Mass | | *DATE CREATED:* | 1/19/2018 4:09 AM | | *DATE MODIFIED:* | 1/19/2018 4:36 AM | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 47. Anions are negatively charged species that contain fewer electrons than protons.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | False | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *QUESTION TYPE:* | True / False | | *HAS VARIABLES:* | False | | *TOPICS:* | Ions | | *DATE CREATED:* | 1/19/2018 4:11 AM | | *DATE MODIFIED:* | 1/19/2018 4:12 AM | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 48. Barium is an alkali metal.   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | False | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *QUESTION TYPE:* | True / False | | *HAS VARIABLES:* | False | | *TOPICS:* | The Periodic Table | | *DATE CREATED:* | 1/19/2018 4:12 AM | | *DATE MODIFIED:* | 1/19/2018 4:13 AM | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 49. Which of the following is a metalloid?   |  |  |  | | --- | --- | --- | |  | a. | Boron | |  | b. | Lithium | |  | c. | Uranium | |  | d. | Tungsten |  |  |  | | --- | --- | | *ANSWER:* | a | | *POINTS:* | 1 | | *DIFFICULTY:* | Easy | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *TOPICS:* | The Periodic Table | | *DATE CREATED:* | 1/19/2018 4:14 AM | | *DATE MODIFIED:* | 1/19/2018 4:15 AM | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 50. Which of the following isotopes has the highest number of neutrons?   |  |  |  | | --- | --- | --- | |  | a. | 85Rb | |  | b. | 28Si | |  | c. | 79Br | |  | d. | 83Kr |  |  |  | | --- | --- | | *ANSWER:* | a | | *POINTS:* | 1 | | *DIFFICULTY:* | Moderate | | *QUESTION TYPE:* | Multiple Choice | | *HAS VARIABLES:* | False | | *TOPICS:* | Atomic Structure and Mass | | *DATE CREATED:* | 1/19/2018 4:16 AM | | *DATE MODIFIED:* | 1/19/2018 4:17 AM | |