



- A 34. Which group of elements is most likely to form ions by losing one electron?  
 a.  v c. x  
 b. w d. y
- C 35. Element X reacts with sodium to form an ionic compound with the formula  $\text{Na}_2\text{X}$ . Element X is a member of group \_\_\_\_\_  
 a. w c.  y  
 b. x d. z
- C 36. Which of the following compounds would you expect to be ionic?  
 a.  $\text{H}_2\text{O}$  c.   $\text{SrCl}_2$   
 b.  $\text{CO}_2$  d.  $\text{SO}_2$
- D 37. Which formula/name pair is incorrect?  
 a.  $\text{Mn}(\text{NO}_2)_2$  manganese (II) nitrite c.  $\text{Mn}(\text{NO}_3)_2$  manganese (II) nitrate  
 b.  $\text{Mg}(\text{NO}_3)_2$  magnesium nitrate d.   $\text{Mg}_3\text{N}_2$  magnesium nitrate
- B 38. The correct name for  $\text{MgCl}_2$  is \_\_\_\_\_  
 a. magnesium dichloride c. magnesium chlorine  
 b.  magnesium chloride d. magnesium chlorate
- A 39. Which of the following is NOT an ionic compound?  
 a.   $\text{PCl}_5$  c.  $\text{RbCl}$   
 b.  $\text{MoCl}_6$  d.  $\text{PbCl}_2$
- A 40. Elements in Group 2 are known as the \_\_\_\_\_  
 a.  alkaline earth metals c. noble gases  
 b. alkali metals d. halogens
- A 41. The correct name for  $\text{Al}_2\text{O}_3$  is \_\_\_\_\_  
 a.  aluminum oxide c. aluminum hydroxide  
 b. dialuminum oxide d. aluminum trioxide
- C 42. The correct name for  $\text{CCl}_4$  is \_\_\_\_\_  
 a. carbon chloride c.  carbon tetrachloride  
 b. carbon tetrachlorate d. carbon chlorate
- C 43. The charge on the manganese in the salt  $\text{MnF}_3$  is \_\_\_\_\_  
 a. +1 c.  +3  
 b. -1 d. -3
- D 44. The ions  $\text{Ca}^{2+}$  and  $\text{PO}_4^{3-}$  form a salt with the formula \_\_\_\_\_  
 a.  $\text{CaPO}_4$  c.  $\text{Ca}_2\text{PO}_4$   
 b.  $\text{Ca}_2(\text{PO}_4)_3$  d.   $\text{Ca}_3(\text{PO}_4)_2$

- D 11. The temperature of 25°C is \_\_\_\_\_ in Kelvins  
 a. 103 c. 248  
 b. 138 d. 298
- B or C 12. Which of the following shows relative temperatures correctly?  
 a. ~~12°C > 310 K~~ c. 25°C > 250 K ✓  
b. 43°C > 300K ✓ d. All of the above
- A 13. Absolute zero refers to \_\_\_\_\_  
a. 0 Kelvin c. 0 Celsius  
 b. 0 Farenheit d. 273.14°C
- A 14. A scientific \_\_\_\_\_ is a statement or equation that summarizes a broad variety of observations  
a. law c. theory  
 b. hypothesis d. trend
- C 15. The initial or tentative explanation of an observation is called a(n) \_\_\_\_\_  
~~a. law~~ c. hypothesis  
 b. theory d. trend
- A 16. Precision refers to \_\_\_\_\_  
~~a. how close a measured number is to other measured numbers~~ c. how close a measured number is to the calculated value  
b. how close a measured number is to the true value d. how close a measured number is to zero
- B 17. Accuracy refers to  
 a. how close a number is to zero c. how close a measured number is to the other measured numbers  
 b. how close a measured number is to the correct value d. how close a measured number is to infinity
- C 18. \_\_\_\_\_ and \_\_\_\_\_ reside in the atomic nucleus  
 a. Protons, electrons c. Protons, neutrons  
 b. Electrons, neutrons d. None of the above
- C 19. Of the following, which is the smallest sub-atomic particle?  
 a. neutron c. electron  
 b. proton d. nucleus
- B 20. All atoms of a given element have the same \_\_\_\_\_  
 a. mass c. number of neutrons  
b. number of protons d. density
- C 21. The atomic number indicates \_\_\_\_\_  
 a. the number of neutrons in a nucleus c. the number of protons or electrons in a neutral atom  
 b. the total number of neutrons and protons in a nucleus d. the number of atoms in 1 gram of an element