

16. What is the charge of each element?

- a) selenium b) barium c) cesium d) phosphorus

17. How many electrons does the neutral atom gain or lose?

- a) Fe^{+3} b) O^{-2} c) Cu^{+} d) Cd^{+2}

18. Name each ion in #16. Identify each as anion or cation.

- a) b) c) d)

19. Name each ion in #17. Identify each as anion or cation.

- a) b) c) d)

20. How can the periodic table be used to determine the charge of an ion? Use specific example. _____

21. Define polyatomic and give an example.

22. Write the formula (including charge) of the ion:

- a) potassium b) sulfur c) argon d) bromine
e) beryllium f) sodium g) calcium h) aluminum

23. Write the formula (including charge) of the ion:

- a) ammonium ion b) tin (II) ion c) chromate d) nitrate
e) cyanide ion f) iron (III) ion g) permanganate h) manganese (II)

24. Write formula for compounds formed from these pairs of ions.

- a) Ba^{+2} , S^{-2} b) Li^{+} , O^{-2} c) Ca^{+2} , N^{-3} d) Cu^{+2} , I^{-}

25. Write formula for these compounds:

- a) sodium iodide b) stannous chloride c) potassium sulfide d) calcium iodide

26. Write names for these binary ionic compounds.

- a) ZnS b) KCl c) BaO d) CuBr_2

27. Write names for these binary ionic compounds.

- a) CaO b) Cu_2Se c) FeS d) AlF_3

29. Write formulas for these compounds

- a) lithium hydrogen sulfate b) chromium (III) nitrite c) mercury (II) bromide

Solve # 30 and # 31 on back.