



Aprenda Chemistry
proudly presents...

Atomic Structure

Flash Cards

<http://www.aprenda.info/>

Odd Answer

1. Ba

1. What is the chemical symbol for Barium?

3. Pt

2. What is the chemical symbol for Beryllium?

5. Sn

3. What is the chemical symbol for Platinum?

7. K

4. What is the chemical symbol for Arsenic?

9. H

5. What is the chemical symbol for Tin?

Even Answers

6. What is the chemical symbol for Sodium?

2. Be

7. What is the chemical symbol for Potassium?

4. As

8. What is the chemical symbol for Calcium?

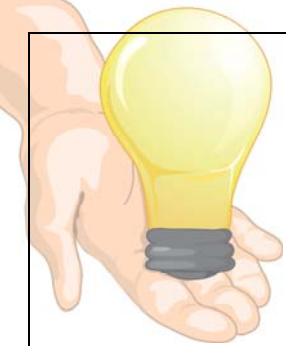
6. Na

9. What is the chemical symbol for Hydrogen?

8. Ca

10. What is the chemical symbol for Magnesium?

10. Mg



Aprenda Chemistry
proudly presents...

Atomic Structure

Flash Cards

<http://www.aprenda.info/>

Odd Answer

11. Iron

11. Which element is represented by the following symbol? Fe

13. Nickel

12. Which element is represented by the following symbol? Co

15. Carbon

13. Which element is represented by the following symbol? Ni

17. Nitrogen

14. Which element is represented by the following symbol? Cu

19. Oxygen

15. Which element is represented by the following symbol? C

Even Answers

16. Which element is represented by the following symbol? Si

12. Cobalt

17. Which element is represented by the following symbol? N

14. Copper

18. Which element is represented by the following symbol? P

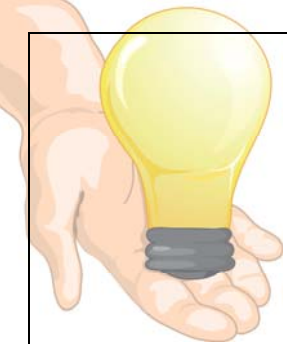
16. Silicon

19. Which element is represented by the following symbol? O

18. Phosphorous

20. Which element is represented by the following symbol? Zn

20. Zinc



Aprenda Chemistry
proudly presents...

Atomic Structure

Flash Cards

<http://www.aprenda.info/>

Odd Answer

21. Ag

21. What is the chemical symbol for Silver?

23. Hg

22. What is the chemical symbol for Gold?

25. Pb

23. What is the chemical symbol for Mercury?

27. F

24. What is the chemical symbol for Aluminum?

29. Br

25. What is the chemical symbol for Lead?

Even Answers

26. What is the chemical symbol for Sulfur?

22. Au

27. What is the chemical symbol for Fluorine?

24. Al

28. What is the chemical symbol for Chlorine?

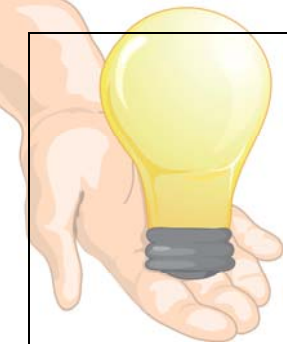
26. S

29. What is the chemical symbol for Bromine?

28. Cl

30. What is the chemical symbol for Iodine?

30. I



Aprenda Chemistry
proudly presents...

Atomic Structure

Flash Cards

<http://www.aprenda.info/>

Odd Answer

31. Iron

31. Which element is represented by the following symbol? Fe

33. Neon

32. Which element is represented by the following symbol? He

35. Argon

33. Which element is represented by the following symbol? Ne

37. 1) An element is composed of identical atoms. 2) Atoms of different elements have different properties. 3) Compounds are atoms of 2 or more elements chemically combined.

34. Which element is represented by the following symbol? Kr

39. 1911 – Identified the presence of a small, positively charged atomic nucleus. (Gold foil experiment).

35. Which element is represented by the following symbol? Ar

Even Answers

36. Which element is represented by the following symbol? U

32. Helium

37. State the three postulates of Dalton's Atomic Theory.

34. Krypton

38. Describe the Research of Millikan.

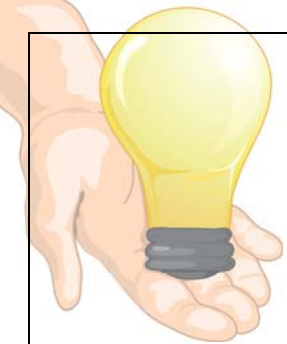
36. Uranium

39. Describe the research of Rutherford.

38. 1909 – Calculated the electric charge and the mass of an electron with his "oil drop" experiment.

40. Define Atomic Mass Unit.

40. The mass of a proton or neutron is equal to 1 atomic mass unit. (symbol = "amu"; $1 \text{ amu} = 1.66 \times 10^{-24} \text{g}$)



Aprenda Chemistry
proudly presents...

Atomic Structure

Flash Cards

<http://www.aprenda.info/>

Odd Answer

41. atomic nucleus

41. Regarding the proton, what is its location in the atom?

43. +1

42. Regarding the proton, what is its mass in amu?

45. electron cloud surrounding the nucleus.

43. Regarding the proton, what is its charge?

47. -1

44. Regarding the proton, what is its symbol?

49. atomic nucleus

45. Regarding the electron, what is its location in the atom?

Even Answers

46. Regarding the electron, what is its mass in amu?

42. 1 amu

47. Regarding the electron, what is its charge?

44. p^+

48. Regarding the electron, what is its symbol?

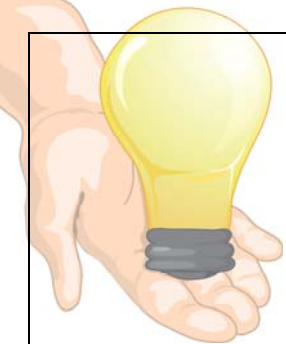
46. $1/1837$ amu (sometimes expressed as zero)

49. Regarding the neutron, what is its location in the atom?

48. e^-

50. Regarding the neutron, what is its mass in amu?

50. 1 amu



Aprenda Chemistry
proudly presents...

Atomic Structure

Flash Cards

<http://www.aprenda.info/>

Odd Answer

51. zero

51. Regarding the neutron, what is its charge?

53. Metals tend to form positive ions by losing electrons. $\text{Na} \rightarrow \text{Na}^+ + \text{e}^-$

52. Regarding the neutron, what is its symbol?

55. Na Atom loses 1 electron.

53. Which elements tend to form positive ions?

57. O atom gains 2 electrons.

54. Which elements tend to form negative ions?

59. IA \rightarrow +1

55. How was this ion formed? Na^{+1}

Even Answers

56. How was this ion formed? Cl^{-1}

52. n^0

57. How was this ion formed? O^{-2}

54. Non-metals form negative ions by gaining electrons. $\text{Cl} + \text{e}^- \rightarrow \text{Cl}^-$

58. How was this ion formed? Al^{+3}

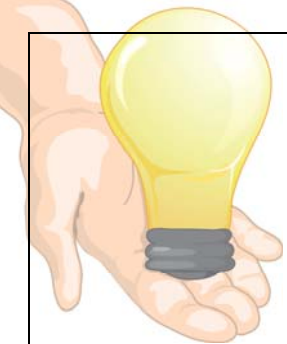
56. Cl atom gains 1 electron.

59. State oxidation numbers for ions of Group IA.

58. Al atom loses 3 electrons.

60. State oxidation numbers for ions of Group IIA.

60. IIA \rightarrow +2



Aprenda Chemistry
proudly presents...

Atomic Structure

Flash Cards

<http://www.aprenda.info/>

Odd Answer

71. VIA \rightarrow -2

71. State oxidation numbers for ions of Group VIA.

73. Na (Group IA) +1

72. State oxidation numbers for ions of Group VIIA.

75. Mg (Group IIA) +2

73. State oxidation number for an ion of Sodium.

77. Ammonium: NH_4^{+1}

74. State oxidation number for an ion of Chlorine.

79. Hydroxide: OH^{-1}

75. State oxidation number for an ion of Magnesium.

Even Answers

76. State oxidation number for an ion of Oxygen.

72. VIIA \rightarrow -1

77. State formula for polyatomic ion. (Ammonium)

74. Cl (Group VIIA) -1

78. State formula for polyatomic ion. (Nitrate)

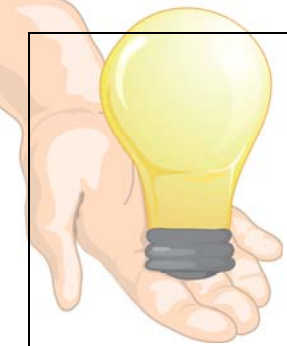
76. O (Group VIA) - 2

79. State formula for polyatomic ion. (Hydroxide)

78. Nitrate: NO_3^{-1}

80. State formula for polyatomic ion. (Sulfate)

80. Sulfate: SO_4^{-2}



Aprenda Chemistry
proudly presents...

Atomic Structure

Flash Cards

<http://www.aprenda.info/>

Odd Answer

81. Nitrite.

81. State name for polyatomic ion. (NO_2^{-1})

83. Phosphate.

82. State name for polyatomic ion. (SO_3^{-2})

85. ClO_4^{-1}

83. State name for polyatomic ion. (PO_4^{-3})

87. $\text{Cr}_2\text{O}_7^{-2}$

84. State name for polyatomic ion. (CrO_4^{-2})

89. Copper +1 or +2

85. State name for polyatomic ion. (Perchlorate)

Even Answers

86. State name for polyatomic ion. (Hypochlorite)

82. Sulfite.

87. State name for polyatomic ion. (Dichromate)

84. Chromate.

88. State possible oxidation numbers for: (Iron)

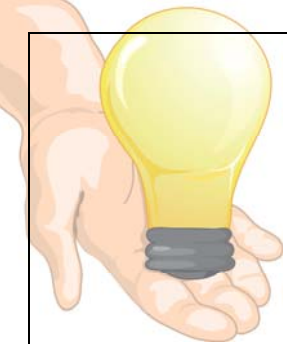
86. ClO^{-1}

89. State possible oxidation numbers for: (Copper)

88. Iron +2 or +3

90. State possible oxidation numbers for: (Silver)

90. Silver +1



Aprenda Chemistry
proudly presents...

Atomic Structure

Flash Cards

<http://www.aprenda.info/>

Odd Answer

91. Zinc +2

91. State possible oxidation numbers for: (Zinc)

93. Lead +2

92. State possible oxidation numbers for: (Nickel)

95. CaI_2

93. State possible oxidation numbers for: (Lead)

97. Na_2SO_4

94. State the formula for a compound of Sodium and Chlorine.

99. AlPO_4

95. State the formula for a compound of Calcium and Iodine.

Even Answers

96. State the formula for a compound of Aluminum and Oxygen.

92. Nickel +2

97. State the formula for a compound of Sodium and Sulfate.

94. NaCl

98. State the formula for a compound of Magnesium and Nitrite.

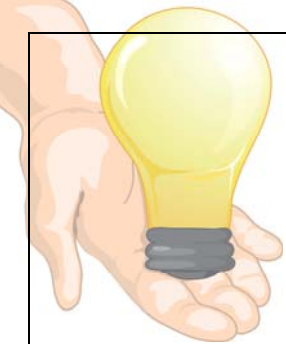
96. Al_2O_3

99. State the formula for a compound of Aluminum and Phosphate.

98. $\text{Mg}(\text{NO}_2)_2$

100. State the formula for iron (III) oxide?

100. Fe_2O_3



Aprenda Chemistry
proudly presents...

Atomic Structure

Flash Cards

<http://www.aprenda.info/>

Odd Answer

101. FeO

101. State the formula for iron (II) oxide?

103. aluminum nitrate.

102. Name this ionic compound. (KBr)

105. iron (III) chloride.

103. Name this ionic compound. $\text{Al}(\text{NO}_3)_3$

107. copper (II) hydroxide

104. Name this ionic compound. $(\text{NH}_4\text{ClO}_3)$

109. mono – 1; di – 2; tri – 3; tetra – 4; penta – 5;
hexa – 6; hepta – 7; octa – 8; nona – 9; deca – 10

105. Name this ionic compound. (FeCl_3)

Even Answers

106. Name this ionic compound. (FeO)

102. potassium bromide

37. Name this ionic compound. $\text{Cu}(\text{OH})_2$

104. ammonium chlorate.

38. Name this ionic compound. Cu_3PO_4

106. iron (II) oxide.

109. What are the ten prefixes which indicate number of atoms etc. and are used to name covalent compounds?

108. copper (I) phosphate.

110. Name covalent compound. PCl_5

110. phosphorous pentachloride



Aprenda Chemistry
proudly presents...

Atomic Structure

Flash Cards

<http://www.aprenda.info/>

Odd Answer

111. *Abundant (5% of earth's crust), *principal ores: hematite, pyrite, magnetite, *Separated from ore in a blast furnace, *Uses: structural, magnetic, dyes

111. List some basic facts about iron.

113. An alloy of iron and carbon containing less than 2% carbon. Use: building material.

112. What is transition element?

115. Bluish-white, brittle transition metal, hard, corrosion-resistant. Chief ore: chromite, Use: chromium plating, paint pigment.

113. What is steel?

117. Principle ores: chalcocite, cuprite, chalcopyrite. Soft, red-brown, ductile, malleable. Use: wires, brass, bronze.

114. What is alloy steel?

119. The only liquid metal at room temperature. Uses: thermometers, Hg vapor lamps, alloys – amalgams.

115. List some basic facts about Chromium.

Even Answers

116. List some basic facts about nickel.

112. A metal having two incomplete shells of electrons, many have multiple oxidation states, less active than family IA and IIA. *Uses: Fe, Ag, Au, Cr, W

117. List some basic facts about copper.

114. By combining a transition metal with steel an endless variety of "alloy steels" can be produced. Common metals used: Cr, Co, Ni, W, Sn, Ti, V.

118. List some basic facts about zinc.

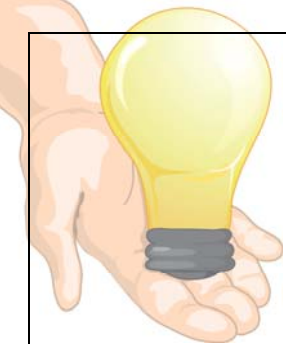
116. A hard, white metal which resists tarnish. Ferromagnetic. Use: catalyst for hydrogenation of fats. Coins, the magnetic alloy is called alnico.

119. List some basic facts about mercury.

118. Principle ores: sphalerite, smithsonite, zincite. Use: galvanized iron, dry cells, electrical connectors, die casting.

120. List some basic facts about tin.

120. Soft, white low-melting metal. Use: tinfoil – to protect steel and in alloys



Aprenda Chemistry
proudly presents...

Atomic Structure

Flash Cards

<http://www.aprenda.info/>

Odd Answer

121. soft, non-elastic, low-melting, blue-white metal. Becomes dark grey in air. Uses: piping, telephone cables, alloys

121. List some basic facts about lead.

123. Found uncombined as nuggets or grains. Uses: coins, jewelry, alloys

122. List some basic facts about silver.

125. Transition elements #57-71 and #89-103 which have partially filled f orbitals. Only the first four elements occur naturally.

123. List some basic facts about gold.

127. Ba

124. List some basic facts about platinum metals.

129. The energy change required for the removal of the outermost electron from the gaseous atom to form a +1 atom.

125. What are Lanthanide and Actinide Series?

Even Answers

126. Describe the change in atomic radius across the periodic table.

122. Found uncombined or as Ag_2S . Bright, lustrous, soft, malleable. Uses: silver plating, jewelry, photographic film and paper.

127. Which of the following elements has the largest atomic radius? Ca, Be, Ba, Sr

124. They are: Ru, Rh, Pd, Os, Ir, Pt. Inert and occur free in nature, rare and expensive. Uses or Pt: dentistry, jewelry, industrial catalyst.

128. Which of the following elements has the largest atomic radius? Mg, Cl, Na, P

126. The atomic radius tends to decrease from left to right across the table and increase down the columns.

129. What is ionization energy?

128. Na

130. Describe the change in ionization energy across the periodic table.

130. Ionization energy tends to increase from left to right across the table and decrease down the columns.