

100 Chemistry facts!

You *must learn* these facts. They are all facts, that have come up on Past papers. You *are expected to know them and more!!*

1. The boiling point of water is 100 degrees Celcius.
2. Aluminium, calcium and copper are all metallic elements.
3. Hydrogen, oxygen and nitrogen are all gaseous elements.
4. Metals are good electrical and thermal conductors.
5. Non-metallic elements usually produce acidic oxides.
6. Copper and sulphur react to make copper sulphide.
7. Pure water would be found in a shower of rain.
8. Seawater contains a high percentage of dissolved solids.
9. Black copper oxide is reduced to copper metal (brown).
10. Calcium metal reacts with water to produce hydrogen gas.
11. Oxygen gas relights a glowing splint.
12. When water vapour turns to water it is called condensing.
13. Anhydrous cobalt chloride turns from blue to pink in water.

14. Anhydrous copper sulphate turns from white to blue in water.
15. The gas responsible for acid rain is sulphur dioxide.
16. A metal used for water pipes is copper.
17. When the Bunsen hole is closed the flame is yellow.
18. The most common gas in the air is nitrogen.
19. Methane gas produces carbon dioxide when it burns.
20. The gas produced in photosynthesis is oxygen.
21. When limestone reacts with acid carbon dioxide is produced.
22. Distillation can separate two liquids with two different boiling points.
23. The substance left on a filter paper is called the residue.
24. The substance, which drips through the filter paper, is called the filtrate.
25. Iron reacts with sulphur to make iron sulphide.
26. When the Bunsen burner hole is fully open the flame is hotter.
27. In salt solution, the salt is the solute, the water is the solvent.
28. A strong acid has a pH of 1.
29. Hydrogen burns in air producing water only.
30. Mercury rises up the thermometer because the mercury expands.

31. Sublimation is when solids turn straight into gases when heated.
32. Copper carbonate is made up of copper, carbon and oxygen.
33. Gold is an example of an unreactive metallic element.
34. Salt solution is a mixture of two compounds, salt and water.
35. The pH of a strong alkali is 13.
36. An acid reacts with an alkali to produce a salt.
37. When a substance burns in oxygen it is called combustion.
38. Potassium manganate(VII) gives off oxygen when it is heated.
39. A substance, which does not dissolve in water, is insoluble in water.
40. Carbon dioxide puts out a lighted splint.
41. Hydrogen burns with a squeaky pop.
42. Carbon dioxide turns limewater milky.
43. Polyethene is not found naturally but made from a raw material. (oil).
44. Lime is used by farmers to make their fields less acidic.
45. Water is not used as a fuel.
46. Methane is a gas, which can be used as a fuel.
47. Photosynthesis reduces the amount of carbon dioxide in the atmosphere.

48. Oxygen is used to make steel.
49. Liquids have fixed volumes and flow easily.
50. Particles move rapidly and are widely spaced in a gas.
51. Ethanol is obtained from wine by distillation (ethanol boils at 78°C).
52. Iron is a shiny and magnetic metallic element.
53. Water is a liquid which freezes at 0 °C.
54. Water is often used as a solvent to dissolve substances.
55. The three states of matter are solids, liquids and gases.
56. An element is a substance that contains only one kind of atom.
57. Metals are shiny and malleable.
58. When elements combine they form compounds.
59. Air is a mixture of different gases.
60. Chromatography is used to separate a mixture of coloured solutes from a solution.
61. A solute is a solid added to a solvent to make a solution.
62. Some substances such as copper oxide do not change chemically when

heated.

63. When a fuel burns it produces carbon dioxide, water and heat.

64. Metals react with oxygen to produce metal oxides.

65. Iron reacts with oxygen and water to form hydrated iron oxide (rust)

66. Metals high in the reactivity series are more reactive than those lower in the series.

67. Metals react with acids to produce a salt and hydrogen gas.

68. Lithium, sodium and potassium are alkali metals from the periodic table.

69. Sodium reacts with water to make sodium hydroxide and hydrogen.

70. Calcium carbonate is the chemical name for limestone.

71. Carbonates react with acid to make carbon dioxide gas.

72. Neutralisation is the reaction between an acid and an alkali making a salt and water.

73. Oxidation is the addition of oxygen.

74. Reduction is the removal of oxygen.

75. Decomposition is a reaction in which a compound is broken down into simpler substances usually by using heat.

76. Hydrated copper sulphate crystals are blue.

77. Hydrated copper sulphate crystals give off water when heated.

78. Anhydrous means without water.

79. A compound is a substance made from atoms of different kinds, chemically joined together.

80. Displacement is a reaction in which a more reactive element takes the place of a less reactive element in a compound.

81. Ductile means stretching a substance into a wire.

82. Galvanising means coating iron or steel with molten zinc to stop corrosion.

83. The greenhouse effect is heat being trapped by gases in the atmosphere, leading to global warming.

84. Liquids such as oil and water, which don't *mix*, are said to be immiscible.

85. If a substance can be hammered into shape it is said to be malleable.

86. When atoms join together they form molecules.

87. A physical change is a change when no new substances are formed e.g. melting. It is usually reversible.

88. A chemical change is a change in which one or more new substances are formed. It is usually irreversible.

89. A solution is saturated when no more solute will dissolve at that temperature.

90. Sulphur is a yellow non-metallic element.

91. Hydrochloric and sulphuric are common laboratory acids.

92. Magnesium burns in oxygen to form white magnesium oxide.

93. The pH scale runs from 1-14 and measures how acid or how alkaline a

substance is.

94. Sodium hydroxide is a common alkali.

95. Rocks, which contain metals, are called ores.

96. Calcium chloride is a drying agent; it absorbs water (in rusting experiments).

97. You can make a Bunsen flame smaller by turning down the gas.

98. Mercury is a metallic element, which is a liquid at room temperature.

99. Lemon juice and vinegar are both acids.

100. Ethanol is flammable, which means it catches on fire easily.