11 Chemistry 1 The Chemical Earth - Part 1

1.	**allotropes**	different forms of an element; they may have different physical or chemical properties
2.	**atmosphere**	the envelope of gas, vapour and aerosol particles surrounding the Earth, forming constituent in the environment of most forms of terrestrial life
3.	**atomic number**	the number of protons in the nucleus of an atom, defining the chemical element
4.	**balanced equation**	an equation using chemical symbols, having equal numbers of each atom on both sides
5.	**biosphere**	the region of the Earth inhabited by living things, including air, land and water
6.	**chemical changes**	changes that lead to a new substance being formed
7.	**compound**	a substance formed when two or more chemical elements are chemically bonded together in the same ratio
8.	**covalent molecules**	atoms linked by chemical bonds with sharing of electrons e.g. oxygen, carbon dioxide
9.	**covalent network substance**	a substance with covalent bonds between atoms extending in a 3-dimensional network e.g. diamond, silicon oxide
10.	**decomposition**	a chemical reaction when a compound splits up into elements or simpler compounds
11.	**electrolysis**	the chemical reaction occurring when an electric current passes through a liquid; often used for obtaining pure elements
12.	**electron**	an elementary particle of an atom, found in shells surrounding the nucleus
13.	**element**	a substance composed of atoms of the same atomic number, incapable of being broken down to simpler substances displaying the same properties
14.	**empirical formula**	a formula giving the proportions of the elements present in a compound but not the actual numbers or arrangement of atoms
15.	**gravimetric analysis**	a set of methods for quantitatively determining a sample based on mass
16.	**hydrosphere**	all the water of the Earth, in the oceans, rivers, lakes etc.
17.	**ion**	an atom or group of atoms that has become electrically charged by the gain or loss of electrons e.g. Cl-, Na+
18.	**ionic compounds**	a substance with attraction between positive and negative ions e.g. NaCl
19.	**ionic equations**	chemical equations that show the formation of ions by the loss or gain of electrons
20.	**isotopes**	atoms of the same element that have the same atomic number but different mass number i.e. they have the same number of protons, but a different number of neutrons