

Metazoan Any animal made up of more than one kind of cell. Often used as a term for the multicellular marine animals that appeared in a short space of geologic time during the Cambrian period 500 to 570 million years ago.

Meteorite A mass of mineral or 'rock matter that reaches the Earth's surface from space.

Micro-evolution Small-scale evolutionary changes, such as that of the peppered moths changing from light forms to dark forms over a few generations. (See Macro-evolution.)

Microspheres (Microscopic spherical chemical systems that are similar in a primitive way to living cells.

Missing links A popular (not scientific) term for hypothetical, transitional, or intermediate forms between apes and humans.

Molecular genetics The study of inheritance at the molecular level.

Monomers Molecular subunits which can be chemically linked to form a polymer.

Morphology Study of the structure or form of an organism.

Mutation An inherited change resulting from modification of the hereditary material in the reproductive cells.

Natural selection The explanation which Charles Darwin proposed for the process of evolution. Its basic premise is that those plants or animals best adapted to their environment tend to survive and consequently to pass on more of their genes to the next generation.

Naturalistic causes Pertaining to the belief that all events and phenomena may be attributed solely to natural laws of science.

Neanderthal man A stockily built type of Homo sapien that lived in Europe and parts of Asia between about 100,000 years ago and 35,000 years ago.

Nebula A cloud of gas, dust and particles in space.

Neutrino An uncharged (electrically neutral) particle emitted in the process of beta decay. Currently thought to travel at the speed of light and to be massless.

Nucleic acid Any of several organic acids characteristic of the nucleus of living cells. DNA (deoxyribonucleic acid) is the best-known example.

Nucleotide A section or building block of a DNA or RNA molecule; consists of a phosphate group, a pentose sugar, and a purine or pyrimidine.

Nuclear force The force of interaction that binds the protons and neutrons into the atomic nucleus

holding the nucleus together. Also known as the strong force.

Nuclear fusion Combining of light elements to form heavy elements with a resultant release of energy due to a mass deficit.

Nuclide A single kind of atom with a particular atomic number and mass number.

Ooze A soupy sedimentary deposit at the bottom of a body of water; more specifically used to describe those deposits laid down on the bottom of deep oceans that contain the shells of small marine organisms.

Open system As used in this book, this term describes a philosophic view of the Universe that presupposes there is more to reality than what can be proven by the strict application of the scientific method. (See closed system.)

Organic compound A chemical compound in which hydrogen or nitrogen is directly united with carbon.

Oscillating Universe A theory that the Universe eternally oscillates between expansion (starting with a Big Bang) and contraction (resulting in a Big Crunch).

Outgassing The large-scale emission of volatile substances (water vapor, carbon dioxide, etc.) from the interior of a planet to the surface through volcanic activity.