

Ozone screen The shielding barrier that helps protect the Earth from the Sun's lethal radiation. The highly concentrated layer of ozone (a molecule containing three atoms of oxygen, O₃) that exists 15.5-20 miles (25-32 km) above the surface of the Earth.

Paleoanthropologist One who is engaged in the multidisciplinary study of human ancestors.

Paleobotany The study of fossil plants.

Paleozoic era The geologic era that includes the Cambrian, Ordovician, Silurian, Devonian, Mississippian, Pennsylvanian, and Permian periods, and is characterized by the appearance of marine invertebrates, fish, land plants, and primitive reptiles.

Pangaea Name for the great theoretical proto-continent from which all present continents have broken off by the mechanisms of seafloor spreading and continental drift.

Panthalassa The world ocean that surrounded the ancient continent of Pangaea.

Peptide A bonded compound of two or more amino acids. Linked peptides form polypeptides which, in turn, join to form proteins.

Phanerozoic Relating to that part of geological history when larger, more visible forms of life existed; generally refers to the Paleozoic, Mesozoic, and Cenozoic eras taken together.

Photons Particles of light; the massless particles that transmit electromagnetic radiation. (See electromagnetic force.)

Photosynthesis Synthesis of sugar from carbon dioxide and water by living organisms using light from the sun as energy. Oxygen is given off as a by-product.

Phylum (plural: phyla) A major taxonomic division of animals or plants ranking below a kingdom and above a class.

Plankton Floating organisms, usually microscopic, that exist in fresh or salt water.

Plasmas Highly ionized gases composed of approximately equal numbers of positive ions and electrons.

Plate tectonics The theory that the Earth's rigid, outer shell is divided into large structural pieces or plates which move relative to one another to produce earthquake belts, mountain chains, and other major geologic features.

Polymer A large molecule consisting of a chain of small molecules bonded together by repeated linking reactions.

Polypeptide See Protein.

Positron The positively charged antiparticle of the electron.

Prebiotic Before life.

Precambrian era The oldest geologic era of the Earth's history denoting the time prior to 570 million years ago, and characterized by the appearance of primitive forms of life.

Primates The order of mammals that includes lemurs, lorises, bushbabies, monkeys, apes, and man; generally characterized by large brains, prehensile hands, and five digits on hands and feet.

Primordial atmosphere Atmosphere thought to have existed in the early stages of the Earth; thought to have contained little or no free oxygen and much carbon dioxide.

Primordial soup A popular term to denote a soupy mixture of organic chemical compounds from which biologic life may have been constructed.

Prokaryote A cellular organism that lacks a true cell nucleus. Examples are blue-green algae and bacteria.

Prosimian A suborder of widely distributed primates characterized by small size and primitive brain development; includes the lemurs, lorises, and tarsiers.

Protein A long polypeptide chain composed of amino acids. A molecule containing many amino acid units linked together is called a polypeptide. A large polypeptide is called a