

alpha particle	a helium nucleus given off by a radioactive nucleus
andesitic volcanism	a type of silica-rich explosive eruption named after the Andes Mountains
asthenosphere	that part of the upper mantle beneath the rigid lithosphere that is plastic enough for rock flowage to occur
beta particle	an electron given off by a radioactive nucleus
conservative boundary	a transform boundary between crustal plates where no new crusts forms and no old crust is destroyed; also known as a passive boundary

continental drift

the formation and break up of continents caused by the movement of landmasses on the surface of the Earth

daughter isotope

the element formed during radioactive decay of the parent isotope

electron

the negatively charged particle that orbits the atomic nucleus. The chemical properties of elements depend on the number and arrangement of these electrons

exponential growth

a very rapid increase in numbers

fohn wind

a warm, dry wind on the opposite side of a mountain range from where the wind comes; as the air moves over the mountain range and down the other side, the air sinks and warms, causing clouds to vanish; this results in dry air that not only decreases rainfall but also increases evaporation on the other side of the mountains

gamma radiation

that part of the electromagnetic spectrum with the shortest wavelength

gondwana

an ancient continent believed to have existed during the Palaeozoic and Mesozoic times that eventually split up to form Australia, India, Antarctica, Africa and South America

half-life

the time it takes for half a sample of radioactive atoms to decay

laurasia

the ancient landmass that comprised the present day continents of North America, Europe and Asia

law of cross-cutting relationships

if rock layers are crossed by another layer at an angle, the cross-cutting layer will be the youngest

law of superposition	in a sequence of sedimentary rocks or lava flows, each layer is younger than the one beneath it and older than the one above it
mid-oceanic ridge	a mountain range or deep valley running under the world's oceans
neutron	an atomic particle found in the nucleus of atoms that has almost the same mass as a proton but no electrical charge
pangaea	the crescent-shaped supercontinent made up of all the present continents fitted together to form one large landmass; plate tectonics is believed to have split pangaea into laurasia and gondwana and later into the present-day continents
parent isotope	during radioactive decay, the isotope that emits a particle to form a different daughter isotope

plate tectonics

the theory that the surface of the earth is divided into a number of constantly moving crustal plates; this crustal plate movement can be used to explain the present positions of the continents and hence the present distribution of living things

proton

a positively charged particle found in the nuclei of all atoms; it has a single positive charge that just balances the negative charge of an electron and has a mass almost the same as a neutron

qualitative

descriptive rather than numerical

radioisotope

an isotope of an element that emits radioactive particles

radiometric dating

the determination of ages of rocks, minerals and once living material by measuring the levels of certain radioactive elements

relative age

the use of the terms era, period or epoch of the geological times scale; for example, to say a fossil is Devonian says it is older than fossils found in the Carboniferous but younger than a fossil from the Silurian

subduction

the process by which one crustal plate descends beneath another, such as along a deep ocean trench

trench

a long, narrow and usually steep-sided depression, such as in the ocean floor where one plate of the earth's crust is sliding over another
