Earth is the third [planet](http://en.wikipedia.org/wiki/Planet) from the [Sun](http://en.wikipedia.org/wiki/Sun), and the [densest](http://en.wikipedia.org/wiki/Density) and fifth-largest of the eight planets in the [Solar System](http://en.wikipedia.org/wiki/Solar_System). It is also the largest of the Solar System's four [terrestrial planets](http://en.wikipedia.org/wiki/Terrestrial_planet). It is sometimes referred to as the [world](http://en.wikipedia.org/wiki/World), the Blue Planet, or by its Latin name, [*Terra*](http://en.wiktionary.org/wiki/Terra).

Earth formed [approximately 4.54 billion years](http://en.wikipedia.org/wiki/Age_of_the_Earth) ago, and [life appeared](http://en.wikipedia.org/wiki/Abiogenesis) on its surface within one billion years. Earth's [biosphere](http://en.wikipedia.org/wiki/Biosphere) then significantly altered [the atmospheric](http://en.wikipedia.org/wiki/Atmosphere_of_Earth) and other [basic physical](http://en.wikipedia.org/wiki/Abiotic_component) conditions, which enabled the proliferation of [organisms](http://en.wikipedia.org/wiki/Aerobic_organism) as well as the formation of the [ozone layer](http://en.wikipedia.org/wiki/Ozone_layer), which together with [Earth's magnetic field](http://en.wikipedia.org/wiki/Earth%27s_magnetic_field) blocked harmful [solar radiation](http://en.wikipedia.org/wiki/Sunlight), and permitted formerly ocean-confined life to move safely to land.[[](http://en.wikipedia.org/wiki/Earth#cite_note-Harrison_2002-30) The[physical properties of the Earth](http://en.wikipedia.org/wiki/Geophysics), as well as its [geological](http://en.wikipedia.org/wiki/Geology) history and orbit, have allowed life to persist. Estimates on how much longer the planet will be able to continue to support life range from 500 million years (myr), to as long as 2.3 billion years (byr).

Earth's [lithosphere](http://en.wikipedia.org/wiki/Lithosphere) is divided into several rigid segments, or [tectonic plates](http://en.wikipedia.org/wiki/Plate_tectonics), that migrate across the surface over periods of [many millions of years](http://en.wikipedia.org/wiki/Geologic_time_scale). About 71% of the surface is covered by salt water oceans, with the remainder consisting of continents and islands which together have many lakes and other sources of water that contribute to the [hydrosphere](http://en.wikipedia.org/wiki/Hydrosphere). Earth's [poles](http://en.wikipedia.org/wiki/Geographical_pole) are mostly covered with ice that is the solid ice of the [Antarctic ice sheet](http://en.wikipedia.org/wiki/Antarctic_ice_sheet) and the [sea ice](http://en.wikipedia.org/wiki/Sea_ice) that is the [polar ice packs](http://en.wikipedia.org/wiki/Polar_ice_packs). [The planet's interior](http://en.wikipedia.org/wiki/Structure_of_the_Earth) remains active, with a solid iron [inner core](http://en.wikipedia.org/wiki/Inner_core), a liquid [outer core](http://en.wikipedia.org/wiki/Outer_core) that generates the magnetic field, and a thick layer of relatively solid [mantle](http://en.wikipedia.org/wiki/Mantle_(geology)).

Earth [gravitationally interacts](http://en.wikipedia.org/wiki/Gravitational_interaction) with other objects in space, especially the Sun and the [Moon](http://en.wikipedia.org/wiki/Moon). During one orbit around the Sun, the Earth rotates about its own axis 366.26 times, creating 365.26 [solar days](http://en.wikipedia.org/wiki/Solar_time), or one [sidereal year](http://en.wikipedia.org/wiki/Sidereal_year).The Earth's axis of rotation is [tilted](http://en.wikipedia.org/wiki/Axial_tilt) 23.4° away from the[perpendicular](http://en.wikipedia.org/wiki/Perpendicular) of its [orbital plane](http://en.wikipedia.org/wiki/Orbital_plane_(astronomy)), producing seasonal variations on the planet's surface with a period of one [tropical year](http://en.wikipedia.org/wiki/Tropical_year) (365.24 solar days). The Moon is Earth's only [natural satellite](http://en.wikipedia.org/wiki/Natural_satellite). It began orbiting the Earth about 4.53 billion years ago (bya). The Moon's gravitational interaction with Earth stimulates ocean [tides](http://en.wikipedia.org/wiki/Tide), stabilizes the axial tilt, and gradually slows the planet's rotation.

The planet is home to millions of [species](http://en.wikipedia.org/wiki/Species), including [humans](http://en.wikipedia.org/wiki/Human). Both the [mineral](http://en.wikipedia.org/wiki/Mineral) resources of the planet and the products of the [biosphere](http://en.wikipedia.org/wiki/Biosphere) contribute resources that are used to support a [global human population](http://en.wikipedia.org/wiki/World_population). These inhabitants are grouped into about 200 independent [sovereign states](http://en.wikipedia.org/wiki/Sovereign_state), which interact through diplomacy, travel, trade, and military action. [Human cultures](http://en.wikipedia.org/wiki/Culture) have developed many views of the planet, including its [personification](http://en.wikipedia.org/wiki/Anthropomorphism) as a planetary [deity](http://en.wikipedia.org/wiki/Deity), its shape [as flat](http://en.wikipedia.org/wiki/Flat_Earth), its position as [the center of the universe](http://en.wikipedia.org/wiki/Geocentric_model), and in the modern [Gaia Principle](http://en.wikipedia.org/wiki/Gaia_hypothesis), as a single, self-regulating organism in its own right.

The modern English noun *earth* developed from Middle English *erthe* (recorded in 1137), itself from Old English *eorthe* (dating from before 725), deriving from Proto-Germanic \**erthō*. *Earth* has cognates in all other Germanic languages, including Dutch *aarde*, German *Erde*, and Swedish, Norwegian, and Danish *jord*. The Earth is personified as a goddess in Germanic paganism (appearing as Jörð in Norse mythology, mother of the god Thor).

In general English usage, the name *earth* can be capitalized or spelled in lowercase interchangeably, either when used absolutely or prefixed with "the" (i.e. "Earth", "the Earth", "earth", or "the earth"). Many deliberately spell the name of the planet with a capital, both as "Earth" or "the Earth". This is to distinguish it as a proper noun, distinct from the senses of the term as a mass noun or verb (e.g. referring to soil, the ground, earthing in the electrical sense, etc.). Oxford spelling recognizes the lowercase form as the most common, with the capitalized form as a variant of it. Another common convention is to spell the name with a capital when occurring absolutely (e.g. Earth's atmosphere) and lowercase when preceded by "the" (e.g. the atmosphere of the earth). The term almost exclusively exists in lowercase when appearing in common phrases, even without "the" preceding it (e.g. "It does not cost the earth.", "What on earth are you doing?").

The **history of the Earth** concerns the development of the planet Earth from its formation to the present day. Nearly all branches of natural science have contributed to the understanding of the main events of the Earth's past. The age of Earth is approximately one-third of the age of the universe. An immense amount of biological and geological change has occurred in that time span.

Earth formed around 4.54 billion (4.54×109) years ago by accretion from the solar nebula. Volcanic outgassing likely created the primordial atmosphere, but it contained almost no oxygen and would have been toxic to humans and most modern life. Much of the Earth was molten because of extreme volcanism and frequent collisions with other bodies. One very large collision is thought to have been responsible for tilting the Earth at an angle and forming the Moon. Over time, the planet cooled and formed a solid crust, allowing liquid water to exist on the surface. The first life forms appeared between 3.8 and 3.5 billion years ago. Photosynthetic life appeared around 2 billion years ago, enriching the atmosphere with oxygen. Life remained mostly small and microscopic until about 580 million years ago, when complex multicellular life arose. During the Cambrian period it experienced a rapid diversification into most major phyla.

Biological and geological change has been constantly occurring on our planet since the time of its formation. Organisms continuously evolve, taking on new forms or going extinct in response to an ever-changing planet. The process of plate tectonics has played a major role in the shaping of Earth's oceans and continents, as well as the life they harbor. The biosphere, in turn, has had a significant effect on the atmosphere and other abiotic conditions on the planet, such as the formation of the ozone layer, the proliferation of oxygen, and the creation of soil.