

# THE EARTH

The Earth is the third planet from the Sun and is the only planet known to support life. Equally unique is the presence of a large amount of water in different conditions: liquid in lakes, rivers and oceans, frozen as ice and vapour in clouds. It gives Earth its blue colour and so our planet also is called the Blue Planet.



Rocky upper mantle  
640 km thick with  
convection streams  
which move the plates

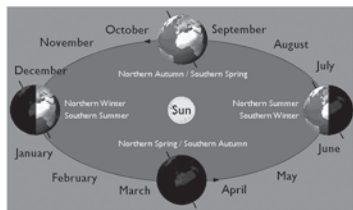
Rocky inner mantle  
2290 km thick with  
convection streams

Molten outer core  
1820 km thick

Solid inner core  
7600 km diameter

Pacific Ocean  
Part of the watershell  
Hydrosphere 4 km

Continental and  
ocean crust boundary



Earth and seasons

One revolution  
around the Sun  
lasts 365 days

South Polar icecap  
(frozen continent)

Magnetic field, shield and polar lights

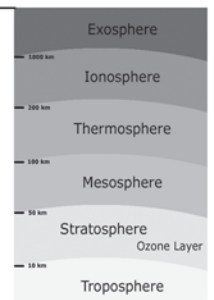
North Polar ice cap (frozen ocean)

Mid- ocean ridge  
plate boundary

Crust  
- oceanic 10 km thick  
- continental 40 km  
The crust is divided in  
about a dozen plates  
which are moving

Electrical currents in  
the core produce  
the magnetic field

~70 km thick  
Atmosphere  
composed of  
78% nitrogen  
21% oxygen  
0,9% argon  
0,03% carbon  
dioxide



Atmosphere

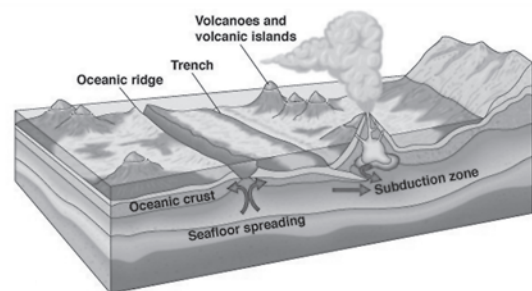


Plate tectonics



Earth's crustal plates

## Physical Data

| Property              |
|-----------------------|
| Distance from the Sun |
| Rotation period       |
| Equatorial Radius     |
| Mass                  |
| Density               |
| Satellites            |

| Earth                    |
|--------------------------|
| 150 million km           |
| 23 hrs 56 min            |
| 6378 km                  |
| $5.97 \times 10^{24}$ kg |
| 5520 kg/m <sup>3</sup>   |
| 1                        |

## For comparison

| Venus                    |
|--------------------------|
| 108 million km           |
| 243 days                 |
| 6052 km                  |
| $4.87 \times 10^{24}$ kg |
| 5240 kg/m <sup>3</sup>   |
| 0                        |

| Mars                     |
|--------------------------|
| 228 million km           |
| 24 hrs 37 min            |
| 3397 km                  |
| $6.42 \times 10^{23}$ kg |
| 3940 kg/m <sup>3</sup>   |
| 2                        |