

# Planet Earth

Diameter: 12,756 km - here: 12.8 mm

Mass:  $6.0 \cdot 10^{24}$  kg

Surface temperature: +15 °C (average)

Distance to the Sun: 150 million km - here: 150 m

Orbital period: 365.256 days

Number of moons: 1

Sponsored by:

Family Katja and Steffen Schneider, Müllrose

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## Planet Earth



Picture: (Earth - The Blue Marble)):

Author: NASA/Apollo 17 crew, taken by Harrison Schmitt or Ron Evans

[https://en.wikipedia.org/wiki/Earth#/media/File:The Blue Marble \(remastered\).jpg](https://en.wikipedia.org/wiki/Earth#/media/File:The_Blue_Marble_(remastered).jpg)

Earth is one of the planets that is not named after a Roman god or goddess (astronomical symbol:  $\oplus$ ). It is the largest of the four rocky planets and lies in the Sun's habitable (viable) zone. The earth gives us the basis for life and is the only inhabited planet in the solar system or so far the only celestial body on which life demonstrably exists. Therefore, it is often called mother earth or spaceship earth. Due to the blue colour, which is produced by the large water surface of the earth, it is called also blue planet. The presence of liquid water is one of the

special features of the Earth and distinguishes it from the other planets. Besides the normal year with a little more than 365 days, there is also the Platonic year with about 25,000 years. In this time, the earth axis circles once the surface of a cone whose axis stands perpendicularly on the orbit of the earth. The earth axis runs in this period through all signs of the zodiac. The earth has a moon, the earth moon.

**Important Data of the Earth:**

|   |  |
|---|--|
| Semi-major axis:                          | 1 AU (149.6 million km)                          |
| Perihelion – Aphelion:                    | 0.98 – 1.02 AU                                   |
| Eccentricity:                             | 0.017  |
| Ecliptic inclination:                     | 0°   |
| Sidereal orbital period:                  | 365.256 d  |
| Average orbital speed:                    | 29.78 km/s                                       |
| Equatorial diameter:                      | 12,756.32 km                                     |
| Pole diameter:                            | 12,713.55 km                                     |
| Mass:                                     | 1 mass of earth ( $5.97 \cdot 10^{24}$ kg)       |
| Mean density:                             | 5.515 g/cm <sup>3</sup>                          |
| Surface gravity:                          | 9.81 m/s <sup>2</sup>                            |
| Escape velocity:                          | 11.186 km/s                                      |
| Sidereal rotation period:                 | 23 h 56 min 4.1 s                                |
| Axial tilt:                               | 23.44°   |
| Surface pressure:                         | 1.014 bar  |
| Surface temperature (min. – mean – max.): | 184 K (–93 °C) - 288 K (+15 °C) - 331 K (+58 °C) |

Link: <https://en.wikipedia.org/wiki/Earth>

**Earth moon:**

[https://astrowis.de/wp-content/uploads/Mond\\_Erdmond\\_englisch.pdf](https://astrowis.de/wp-content/uploads/Mond_Erdmond_englisch.pdf)