

Rocky planet facts

- The four rocky planets are Mercury, Venus, Earth and Mars.
- They are the closest four planets to the Sun.
- They are made of rocks and metals.
- They have a solid surface and a core which is mainly made of iron.
- They are much smaller than the gas planets and rotate more slowly.

Gas planet facts

- The gas planets are Jupiter, Saturn, Uranus and Neptune
- They are the furthest planets from the Sun.
- They each have many moons. They are much bigger than the rocky planets.
- They're balls of hydrogen and helium - you couldn't stand on the surface of the planet because it's not solid.

Solar system facts

- The Sun is a star.
- The Earth is one of eight planets that travel around the Sun.
- The planets are called Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune.
- The solar system is also home to lots of asteroids, moons, and dwarf planets such as Pluto.

Sun facts

- The Sun is a star. It gives out heat and light and makes life possible on Earth.
- The heat and light from the Sun is felt and seen on Earth.
- Stars are orbited by planets.
- The Sun is roughly spherical in shape and is much, much bigger than the Earth. 1,300,000 times bigger!

Top 10 Facts

1. Everything in the Solar System revolves around the Sun. The Sun is a star - a massive ball of hot gas that gives off light and heat.
2. There are eight planets that orbit around the Sun.
3. The closest planet to the Sun is Mercury, and the farthest away is Neptune.
4. The biggest planet is Jupiter, and the smallest planet is Mercury.
5. The Earth is the only planet that we know has creatures living on it.
6. The Earth rotates as it orbits the Sun. It takes one day to complete a rotation.
7. It takes 365 days for the Earth to complete one circuit around the Sun. We call this a year.
8. The Sun is just one of hundreds of billions of stars in the galaxy that we live in, which is called the Milky Way. The whole Universe has at least 100 billion galaxies in it.
9. You are held onto the surface of the Earth by a force called gravity. This is the same force that keeps the Earth and the other planets orbiting around the Sun.
10. Not everything in the Solar system orbits directly around the Sun. The Moon

British astronaut **Tim Peake** launched to the ISS from the Baikonur Cosmodrome in Kazakhstan. That's the same site where Yuri Gagarin launched to become the first person in space in 1961. ESA-Stephane Corvaja, 2015

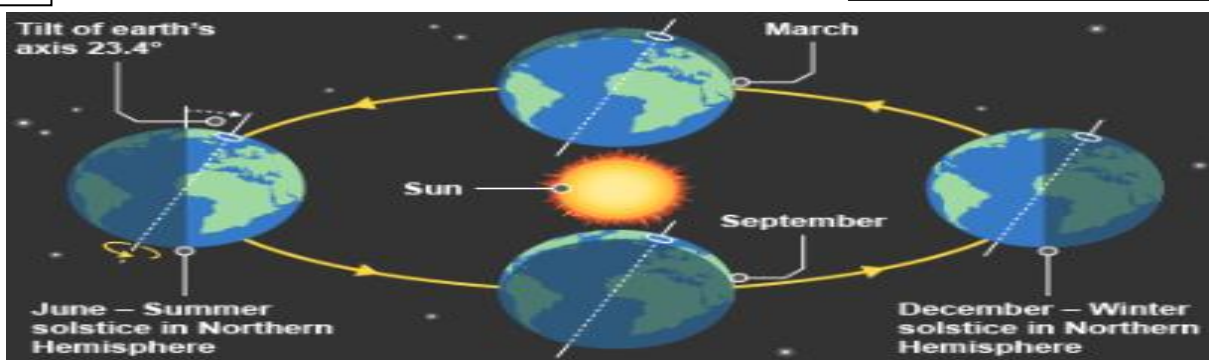


To get a rocket off the ground, its engines need to provide enough thrust to overcome gravity - the force that pulls everything back to Earth.

Space word mat

Moon phases

astronaut, universe, lunar, eclipse, asteroids, galaxy, gravity, comet, Solar System, atmosphere, meteor, stars, orbit, satellite, rocket, space shuttle, planets

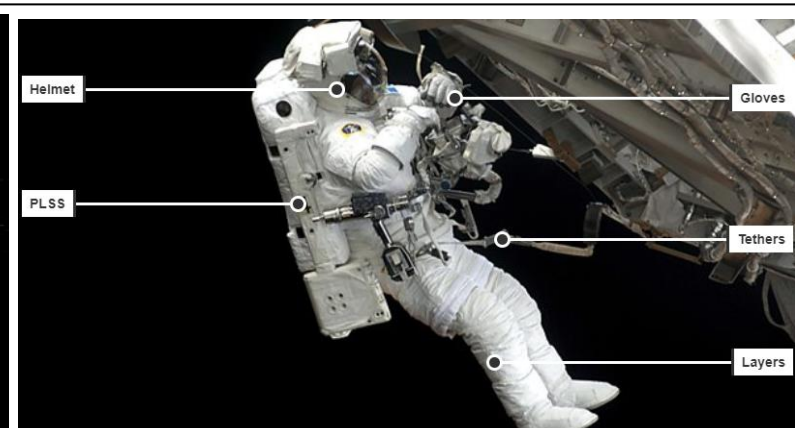
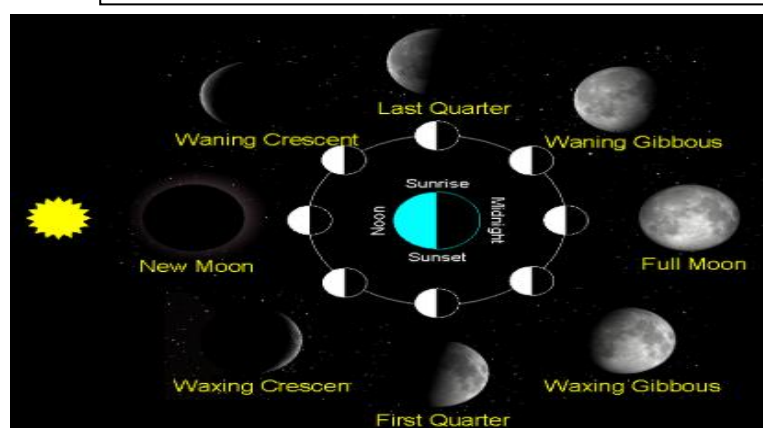


The Earth travels around the Sun in a loop that is shaped a bit like an oval. We call this the Earth's orbit. **The Earth is always spinning around** - sometimes from where you stand on the Earth you can see the Sun (this is the daytime) and sometimes the part of the Earth where you are is facing away from the Sun so it is dark (this is the nighttime). It takes 24 hours for the Earth to spin all the way around, and we call this a day.

Living in space has been described as being a bit like standing on your head. With less gravity pushing down on you, fluids tend to pool in the upper parts of your body. This gives astronauts a puffy, red face.

In Space the pull of gravity isn't as strong as on Earth. Your muscles don't need to work as hard and your bones weaken. Each crew member has a strict daily exercise routine to make sure they don't waste away.

The Moon is a ball of rock that orbits around the Earth, in the same way that the Earth orbits around the Sun. It is much smaller than the Earth and takes 28 days to complete one orbit. The Moon is 239,000 miles away and is the only place in the Solar System that man has travelled to apart from Earth. Other planets have moons too, Pluto has 66!



Your heart muscle gets weaker as well, as it requires less effort to pump blood around the body in microgravity. Astronauts also typically grow a few centimeters taller in space.

Without the earth's atmosphere to protect them, astronauts are constantly bombarded by cosmic rays. These invisible waves zap the body and increase the risk of diseases.