

Since the beginning of mankind human beings have been fascinated by space. With the help of rockets space can be explored.

ROCKETS

In order to leave earth's atmosphere a rocket has to fly at least eight kilometers per second. If the rocket is slower, force of gravity pulls it to the ground. To be able to fly so fast the rocket needs a lot of impulse force. This force comes from the combustion of fluid fuel. The gas created through the combustion is ejected through a jet and thus fuels the rocket. Most rockets consits of many little rockets, so called stages. Every stage has an own fuel tank. As soon as this tank is empty, the stage is thrown of and the next stage takes over impulsion.

Once a rocket is in space it never returns to earth. Some parts of the rocket burn up when entering earth's atmosphere, others remain astro-garbage and float through space forever.

SATELLITES

Next to spacecrafts, space stations and astronauts, rockets transport satellites to space. Satellites surround our planet on fixed lines, defined by earth's centrifugal and gravity forces. They cover a distance of 3.07 km per second. Around the clock they watch earth from outer space and send their data via radio to big satellite dishes. Thus we receive a lot of useful information for example how the weather will be the next day, or where a volcano is about to errupt.

OW B MON



All planets in our solar system surround the sun on certain orbits. For a complete round course earth needs a year, that are 365 days. At the same time earth also rotates around itself, that takes 24 hours, a day

Mercui

/enus

Ear

Saturi

Jranus

PLANET MNEMONIC

Neptune

With this practical mnemonic you can remember the order of the plantes easily:

My Very Educated Mother Just Served Us Nine Pizzas.

M - Mercury
V - Venus
E - Earth

The sun is a huge ball of gas, in whose inside gas molecules are pressed together with extremly high pressure. By the fusion of the gas molecules extreme heat emerges, that moves in waves towards earth. Sunbeams need eight minutes to reach earth. With a regular plane you would need 17 years for the same distance.

THE SUN.

LIGHT YEARS

Since planets and stars are so far away from earth in space, their distance is measured in light years. Light moves so much faster than the fastest jet. Light travels 300.000 kilometers per second. M - Mars J - Jupiter S - Saturn U - Uranus N - Neptune

The first letter of each word stands for a planet.

THE MOON

Jupiter

Mars

The moon surrounds earth with a speed of 1.023 km per second and needs 27,3 days for a complete round course. The distance to the moon is almost as long as running around earth ten times. On the moon a person is six times lighter than on earth. The moon is the only heavenly body a human being ever set foot on, that person was Neil Armstrong in 1969.

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