

Moon Gravity

Gravity is the force in the universe that pulls objects together. Any object that has mass has a gravitational pull. The larger the mass of an object, the greater the pull of gravity.

The Moon has less mass than Earth. Its gravitational pull is only about 16% of Earth's. This means that if you weigh 100 lbs. on Earth, you would only weigh 17 pounds on the Moon.

Dr. Harrison Schmidt, the last astronaut to walk on the moon said, "Walking on the moon felt like walking on a giant's trampoline -- you are only one-sixth your weight but just as strong as on Earth. One could walk with great long strides like those of a cross-country skier, gliding just above the surface and across small craters and using a well-timed toe-push to accelerate to ever-higher speeds and ever longer strides. Stopping was another matter! Just rotate so that your heels dig into the soft surface and you stop."

Future colonists on the moon would need to consider how they would change the way they moved around in this low gravity environment.

Scientists in the space station have experienced some problems with their health after being in weightless conditions. Their bones and muscles become weaker because they are not resisting the force of gravity.

Questions

1. *How is gravity on the Moon different from Earth's gravity?*
2. *How does gravity affect movement?*
3. *How does gravity affect human health?*

