

The moon orbits the Earth in a nearly circular path and does not fall to the earth because



1. It feels the Earth's gravitational pull.
2. The net force on it is zero.
3. It is beyond the pull of Earth's gravity.
4. It is being pulled by the Sun and planets as well as by the Earth.
5. It is moving with an appropriate velocity.
6. None of the above.

# When an astronaut is floating freely inside the Space Station in orbit around the Earth



1. the gravitational force that the Earth exerts on the astronaut is zero.
2. the net (total) force on the astronaut is zero.
3. the gravitational force that the Earth exerts on the astronaut is not zero.
4. the gravitational force that the Earth exerts on the astronaut is less than the gravitational force that the Earth exerts on the Space Station.
5. the gravitational force that the Earth exerts on the astronaut is the same as the gravitational force that the Earth exerts on the Space Station.