

Gravity

Gravity is extremely important in our universe and has been around since the beginning of the universe. Gravity is one of the main reasons our solar system behaves the way it does. Gravity isn't a force that can be seen but it is a force that pulls everything toward it. It is the varying amounts of gravity that would cause you to weigh differently on each planet or on the moon. Gravity is the force of attraction between all objects. It is gravity that causes something that falls, to fall to the ground. The amount of gravitational force is determined by the mass of an object and the distance of an object. The greater the mass and the closer the distance, the greater the gravitational force will be. The sun is a very large object and therefore the gravitational force is also very large. It is the gravity from the sun that keeps our planets and moons in our solar system in place. If it wasn't for gravity, these objects would fly off into outer space. All the planets, moons and meteoroids are drawn toward the sun's gravitational pull and the tendency of inertia. Inertia is the tendency of moving objects to go in a straight line. If it was just inertia without gravity, the earth would go in a straight line but inertia and gravity keep the earth on its orbital path as it revolves around the sun. Without inertia, the gravity would pull earth into the sun. The gravity and inertia keep our earth moving in a circular pattern around the sun. The moon's gravity pulls on earth which causes the high and low tides every day. Every single object that has mass has gravitational force!