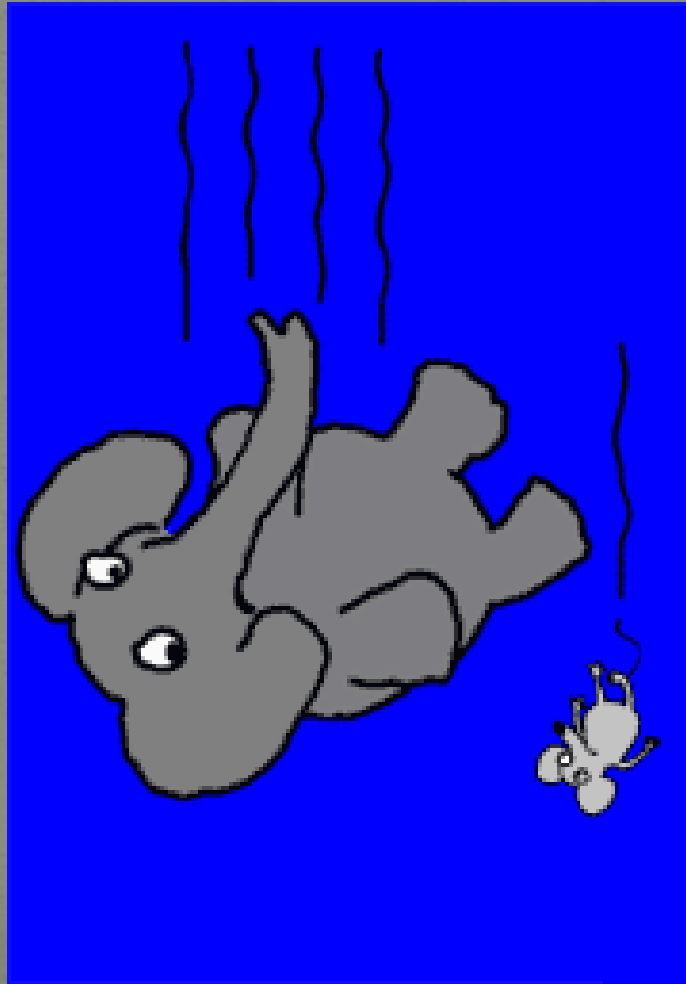


How Does Gravity Affect Motion?



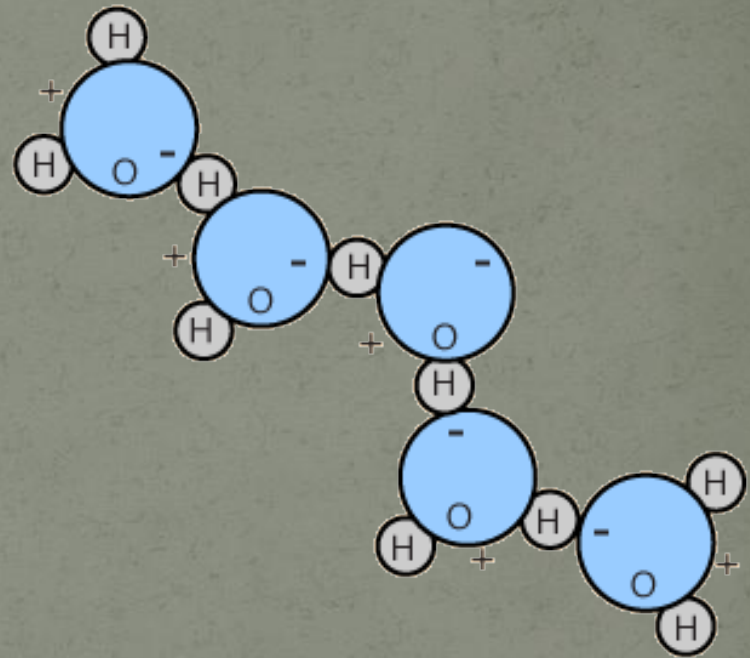
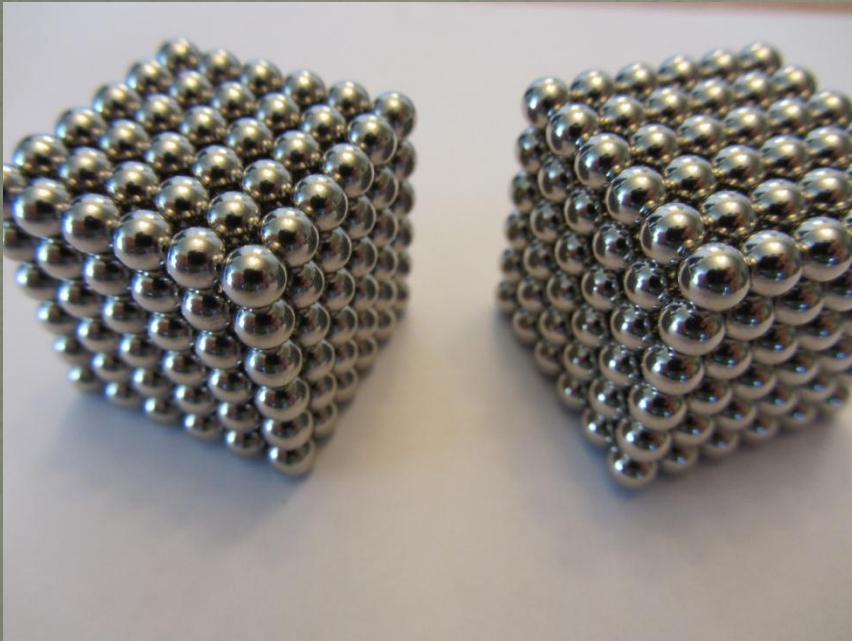
If you drop a bowling ball and a soccer ball from the top of a building, which will hit the ground first?



Everyday, you use the force of your muscles to do many things!

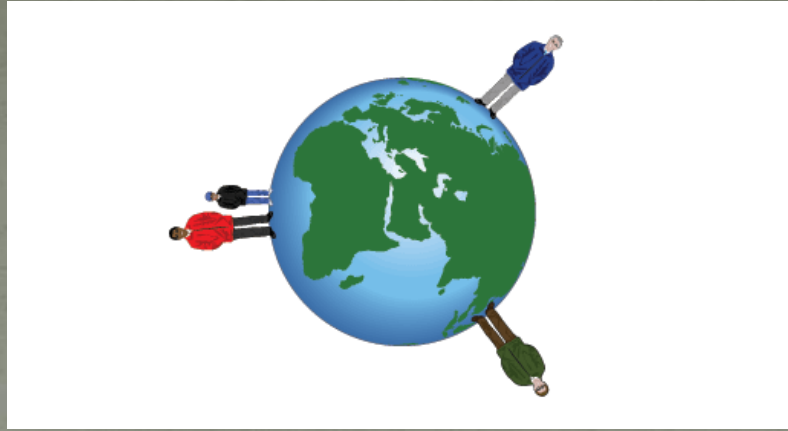


The force between electric charges is one of the most important in nature.



This balloon “sticks” to the wall because of an electric force.





gravity

the force of attraction between Earth and other objects

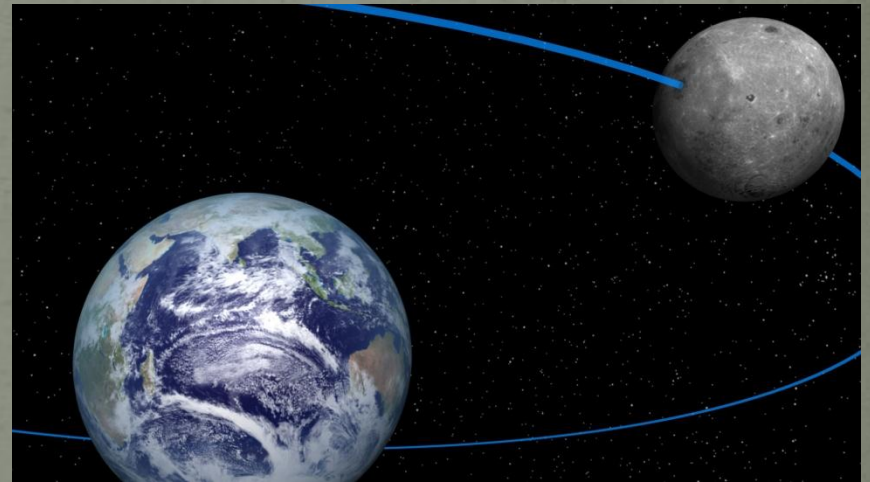
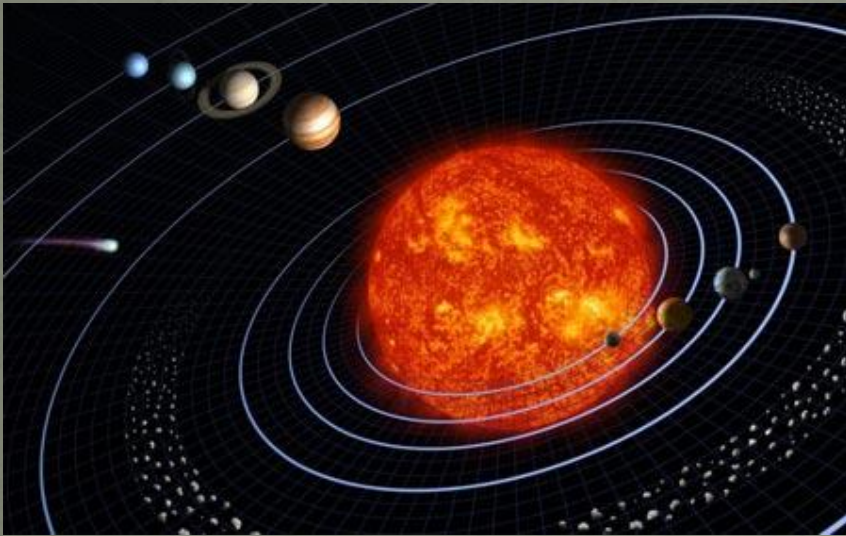
gravitation

a force that acts between all masses and causes them to attract one another

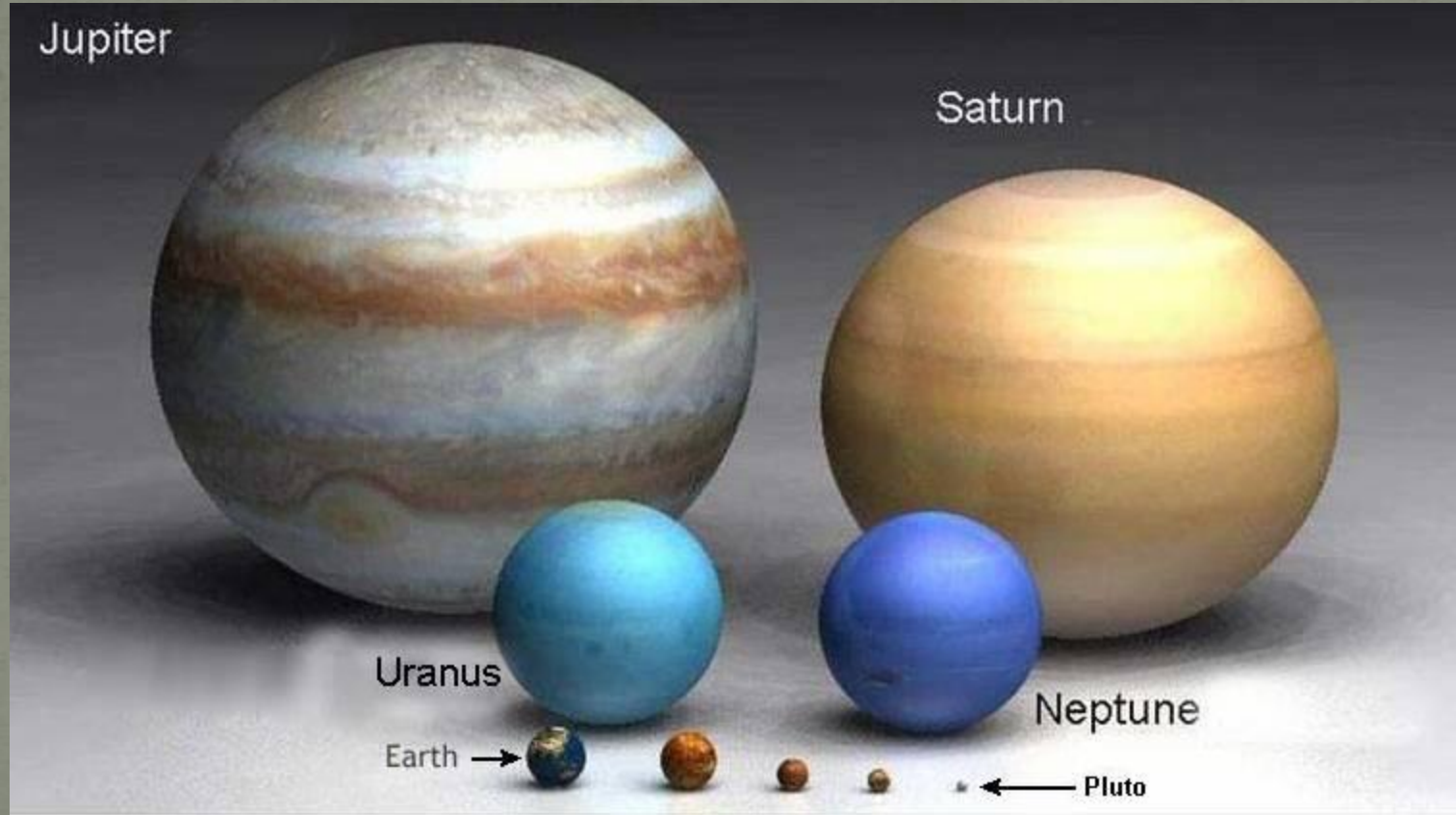
Gravitation holds...

Earth in orbit around the Sun.

The moon in orbit around Earth.



The larger and closer two masses are, the more gravitation affects them.

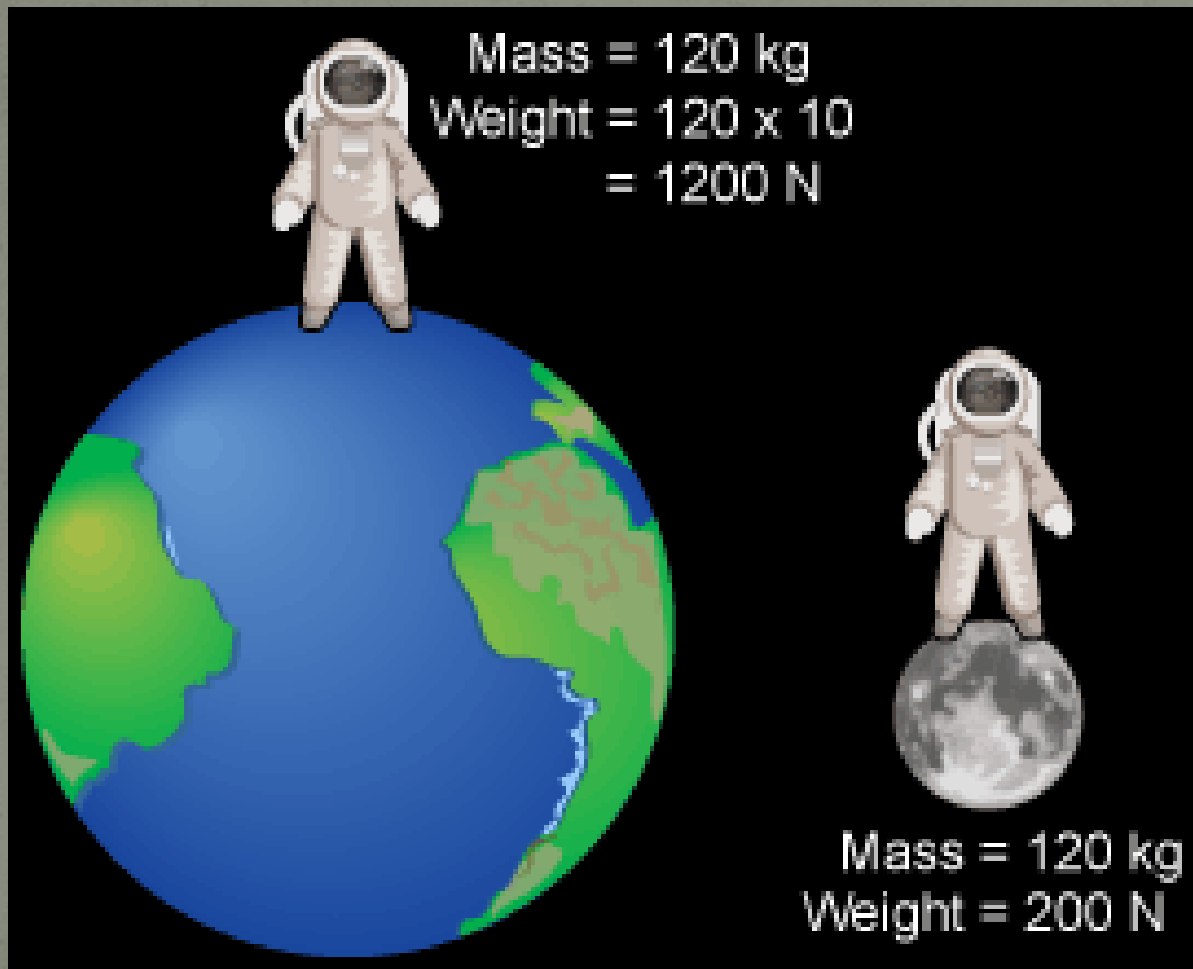


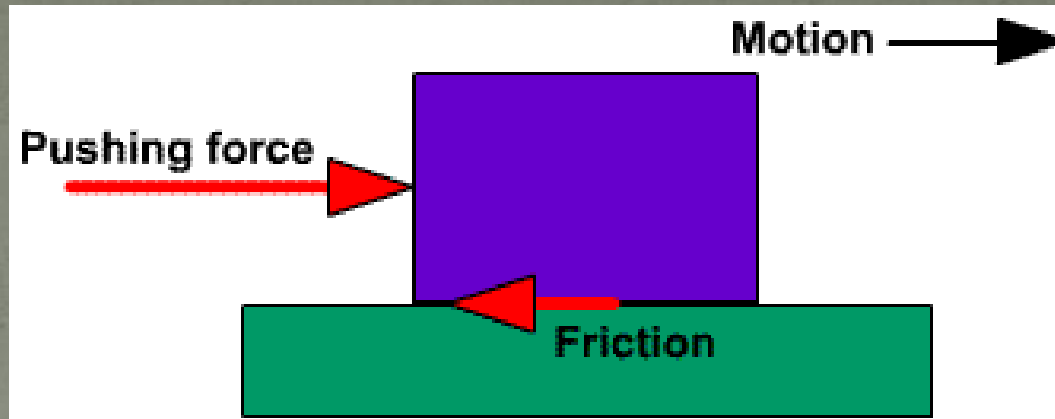


weight

the measure of the force of gravity on an object

Mass is the amount of matter in an object; it does not change in outer space.





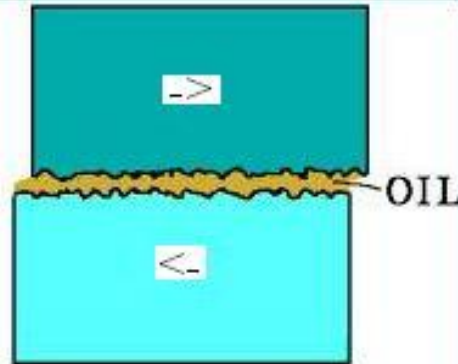
friction

a force that resists the motion of objects, relative to each other, when the objects are touching

People have come up with many ways to increase or decrease friction.



Tyre



Shoe



Ball bearing

Increase Friction

Decrease Friction

Smooother surfaces reduce friction.

