

## By Gravitation

1. Which force is responsible for stability of our universe?  
→ Gravitational force.

2. Which force is required to maintain a body in uniform circular motion?  
→ Centripetal force.

3. What is gravity?

→ Attraction of one object towards another object is called as gravity.

4. How is the weight of an object related to its mass?

$$\rightarrow w = mg$$

Weight of an object is related to its mass through acceleration due to gravity.

5. Mass of a boy on earth is 40kg, what is the mass on the moon?

→ a) Mass of a boy on earth = 40kg.

Mass on the moon = 40kg (mass remains constant every where on the universe).

6. What is the effect of shape of earth on value of 'g'?

→ Due to spherical shape of earth on value of 'g' remains constant.