

## How Much Do You Weigh?

### Purpose:

To understand that weight is a measure of gravitational attraction and this force is not the same on each planet.

Gravity is a universal, natural force that attracts objects to each other. Gravity is the pull toward the centre of an object; let's say, of a planet or a satellite. When you weigh yourself, you are measuring the amount of gravitational attraction exerted on you by Earth.

For a different planet, multiply your weight by the number given in the New Weight chart.

Example for the Moon - for a person weighing 60 kilograms on Earth  $60 \times 1/6 = 10$ .

A 60 kilogram person would weigh 10 kilograms on the Moon!

### New Weight Chart

Planetary Body	Multiply your Earth weight by:	Your New Weight
Mercurv	0.4	
Venus	0.9	
Earth	1	
Moon	0.17	
Mars	0.4	
Jupiter	2.5	
Saturn	1.1	
Uranus	0.8	
Neptune	1.2	
Pluto	0.01	
Sun	28	