

How Much Do You Weigh On Other Planets?

Gravity is a universal, natural force that attracts objects to each other. Gravity is the pull toward the center of an object. When you weigh yourself, you are measuring the amount of gravitational attraction exerted on you by the Earth. The Moon has a weaker gravitational attraction than the Earth – the Moon’s gravity is only $1/6^{\text{th}}$ of the Earth’s gravity. So, you would weigh less on the Moon than you do on the Earth. How much would you weigh on the Moon and on other planets?

1. Write your weight (or an estimate) here: _____
2. For a different planet, multiply your weight by the number given in the “New” Weight Chart
3. Follow the example and fill in the blanks in the “New” Weight Chart. Show your work.

Example:

On the Moon a person weighing 60 pounds on Earth would weigh only 10 pounds

$$60 \times 1/6^{\text{th}} = 10 \text{ or } 60 \times 0.17 = 10$$

"New" Weight Chart

Planet	Multiply your Earth weight by:	Your "new" weight
Mercury	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	