

Excel File!

- [1] Your weight (lbs) _____
- [2] Your mass (kg) _____ (divide your weight in lbs by 2.2)
- [3] Calculate your weight in Newtons on each object (your mass in kg * g value).
- [4] Convert your weight to pounds by multiplying your weight in Newtons by 0.2248
- [5] Use [this link](#) to check your answers.
- [6] Compare the gravity on other planets to earth.

Object	g value m/s ²	[3] Weight (N)	[4] Weight (lbs)	[6] $\frac{g_{\text{object}}}{g_{\text{earth}}}$	[8] Jump Height
Mercury	3.61				
Venus	8.83				
Earth	9.8			1	
Moon	1.6				
Mars	3.75				
Jupiter	26				
Saturn	11.2				
Uranus	10.5				
Neptune	13.3				
Pluto	0.61				
Sun	274				

[7] Measure your vertical jump height on earth in meters ____.

[8] Calculate jump height on other planets by dividing jump height on earth by the value obtained in box [6] for each location.

[9] On what planet is your weight and jump height very similar to that on earth?

[10] Do you think conditions on that planet are similar to those on earth?

[Lunar Jump](#)