

For a free-falling object, the speed at which it falls increases by

1. 9.8 m/s ✓ ▼

every second. This value is

2. lower ✓ ▼

when the object falls from a greater altitude or height.

1. 9.8 m/s

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2. lower



What is the average gravitational acceleration of an object in free fall at the surface of the earth?



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☐ 9.8 m / s

☐ 6.67×10^{-11} m / s

☒ 9.8 m / s²



☐ 6.67×10^{-11} Nm² / kg²

The gravitational acceleration an astronaut experiences at 1,500 km above the surface of the Earth is .

(The gravitational acceleration (g) at the surface of Earth is 9.8 m/s^2 and the Earth has a mean radius (r_E) of $6.38 \times 10^6 \text{ m}$)



1. 6.4 m/s^2

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The gravitational acceleration at a distance of one Earth diameter above the surface of the Earth is .

1. $g/9$

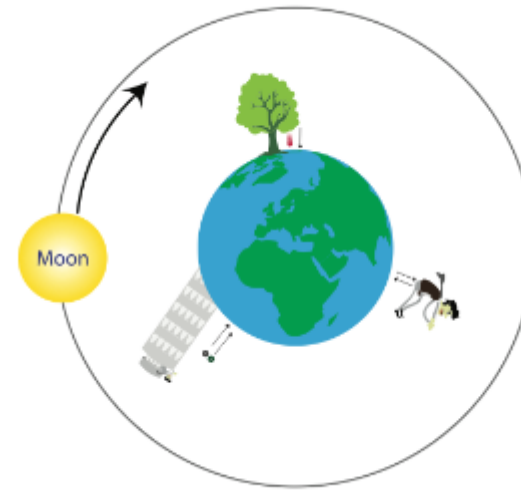
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Your weight would be the greatest at the

1. poles ✓ ▼ of the Earth.

1. poles <https://t.me/Grade10GenAdv> ✓



1. Apparent weight ✓ ▼ is a measurement of your weight when you are accelerated vertically, and not your true weight.

1. Apparent weight ✓



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