

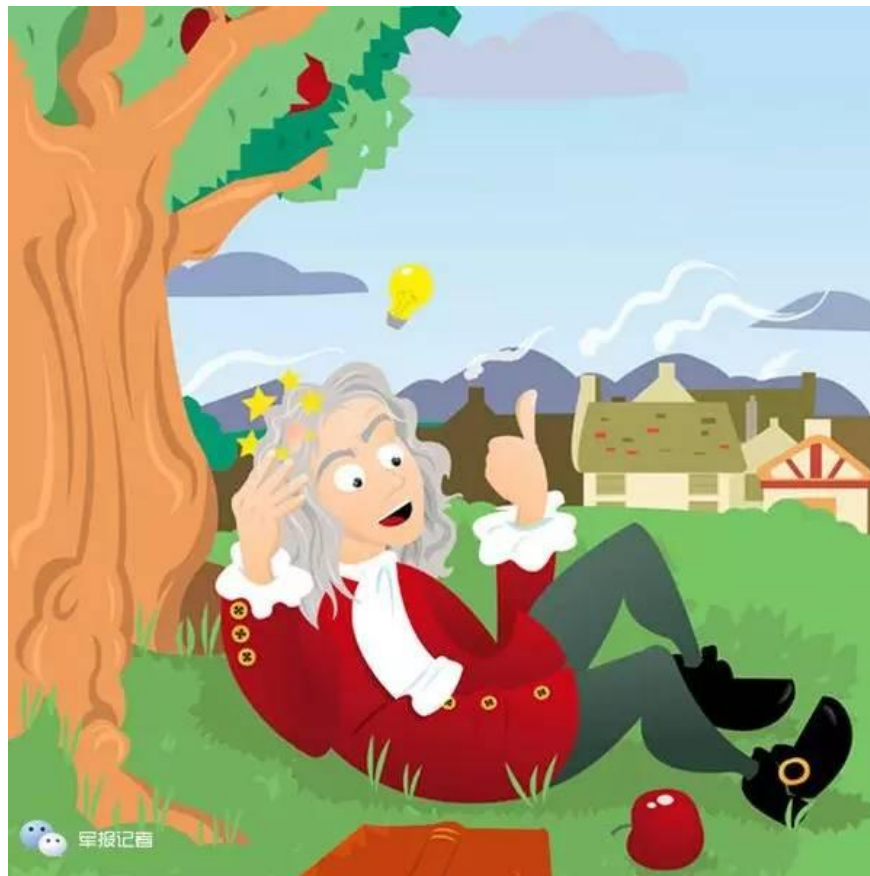
Can ants survive if they fall from the roof of the building?

When an object falls freely from above, it will immediately fall below vertically due to the impact of the Earth's gravity. But with the small ant, what will happen if it falls from the roof of the building?

When an object falls freely from above, it will immediately fall below vertically due to the impact of the Earth's gravity. But with the small ant, what will happen if it falls from the roof of the building?

1. Why can this man jump from 7,600 meters to the ground without parachutes
2. Miraculous survival after free fall from a height of more than 5000 meters

First, let's find out about the first free fall in search of answers to this interesting question.



Thanks to the gravity of the Earth we and everything on the ground can stand. It is because of that that if you throw something in the sky, sooner or later it will fall to the ground.

Gravity was discovered by Newton by the apple falling from the tree in the 17th century.

When an object is dropped freely without any impact other than gravity down, due to the gravity of the Earth, it will immediately fall vertically downwards.

Here, we consider two cases:

Vacuum environment

At that time, the free fall is not affected by the friction of the environment, so under the impact of gravity, any object falling from above will have a gradual increase in velocity with acceleration $\sim 9.8 \text{ m / s}^2$ with the same time.

Specifically, whether a ball weighs a ton or a chicken feather, when released freely, they will touch the ground at the same time! This means that the free fall will not depend on the weight of the object.

Falling on Earth (with significant drag of air)

In addition, air also provides the necessary oxygen for humans and plants and animals. But it is also the reason that the free fall on Earth changes from vacuum.



The movement and resistance of the air makes the free fall on Earth change from vacuum. They can help the falling velocity of an object increase with an acceleration of less than 9.8 m / s^2 , or not increase, or even sound when a wind helps the object fly.

Thus in an environment with resistance, the fall depends: resistance, movement direction of the air (wind) and shape of the object. This means that objects will fall to the ground with different time.

Return to the original question: Can an ant survive if it falls from the roof of a building?



With ants and small animals, the resistance of the air causes their velocity to fall very slowly, even their acceleration may be negative due to the wind blowing up.

Therefore, ants are almost not scratched when falling from the roof of the buildings.

You finished reading the article "**Can ants survive if they fall from the roof of the building?**" edited by the [TipsMake](#) team. We hope this article has provided you with many useful tech tips and tricks. You can search for similar articles on tips and guides. Thank you for reading and for following us regularly.