



How many times the Sun is larger than Earth?

# How many times the Sun is larger than our Earth?

- A. 10 times larger
- B. 50 times larger
- C. 100 times larger
- D. 300 times larger

Show Answer

**Correct Answer: D (300 times larger)**

## Explanation:

The Sun is much larger than the Earth. In fact, the Sun is so large that it could hold over 1 million Earths inside of it. The diameter of the Sun is about 109 times larger than the diameter of Earth. Additionally, the mass of the Sun is about 333,000 times greater than the mass of Earth.

To put it in perspective, the diameter of the Sun is approximately 1.39 million kilometers, while the diameter of Earth is only about 12,742 kilometers. This means that the Sun is about 109 times larger than Earth in terms of diameter. In terms of mass, the Sun has a mass of approximately  $1.99 \times 10^{30}$  kilograms, while Earth has a mass of approximately  $5.97 \times 10^{24}$  kilograms. This means that the Sun is about 333,000 times more massive than Earth.

Therefore, the Sun is about 300 times larger than Earth, both in terms of diameter and mass. The size difference between the Sun and Earth is staggering, and it is essential to understand this relationship to gain an understanding of our solar system.

## The Sun and Earth

The Sun is a star and is located at the center of our solar system, while Earth is one of eight planets that orbit around it. The Sun provides the energy that allows life to exist on Earth, and its gravity keeps the planets in our solar system in



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orbit.

Despite the massive size difference between the Sun and Earth, the two are intricately connected. The Sun's energy is responsible for the Earth's climate, weather patterns, and the growth of plants through photosynthesis.

Understanding the relationship between the Sun and Earth is essential in understanding the workings of our solar system and the delicate balance that allows life to thrive on our planet.