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The Moon's Pockmarked Past: Why Does Our Moon Have Craters?

The Moon, our constant celestial companion, is a familiar sight in the night sky. But have you ever wondered why it's covered in craters? In this passage, we'll take a journey to understand the fascinating story of lunar craters—how they formed, what they tell us about the Moon's history, and their role in shaping our understanding of the cosmos.

Craters: Marking the Lunar Landscape

One look at the Moon, and you'll notice its surface is peppered with craters of various sizes. These impact features are scars from ancient cosmic collisions.

The Moon's Vulnerability

Unlike Earth, the Moon lacks an atmosphere and protective magnetic field. As a result, it's exposed to space debris, such as asteroids and meteoroids, which frequently strike its surface.

The Formation of Lunar Craters

When an asteroid or meteoroid hurtles toward the Moon, it collides with incredible energy, creating an explosion upon impact. This explosion excavates material from the Moon's surface and leaves behind a crater.

Crater Varieties

Lunar craters come in various sizes and shapes. Some are small, while others are large enough to hold entire cities. The size of a crater depends on the size and velocity of the impacting object.

Lunar Craters as Time Capsules

Each crater is a time capsule, preserving a record of the Moon's history. By studying these craters, scientists can estimate the ages of different lunar regions and gain insights into the history of our solar system.