How did scientists determine the age of the Earth?

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1. This jewel is proof that there is a large sea of ??water deep beneath the Earth's crust
2. The Earth used to be purple and 8 secrets of little surprise
3. It takes hundreds of thousands of years for light to travel from the center of the Sun to Earth?

The process of forming Earth in the solar system.(Video: BBC.)

Historically, many great scholars have tried to find ways to determine the age of the Earth.

In 1862, physicist Lord Kelvin gave the Earth the age of about 20 to 400 million years. He assumed that the Earth was formed from a completely molten object and based on its cooling time to draw this conclusion.

Later, scientists discovered a new method that relies on layers of rock in lithosphere as geological slices of a mountain to determine the age of the Earth. But this method has not high accuracy. Therefore, until the beginning of the 20th century, we still did not have the correct answer. But researchers believe that the age of the Earth exceeds millions of years and reaches billions of years.

The Earth was identified as being formed about 4.5-4.6 billion years ago.(Photo: NASA.)

From the late 1940s and 1950s, the method of determining age by radioisotope appeared. Some heavy chemical elements can decay into lighter elements, such as uranium decayed into lead. Scientists analyzed the Earth's crust to calculate the amount of uranium and lead, then changed these values ??together with the half-life into a mathematical equation to calculate the age of the stone.

In the 20th century, tens of thousands of radiometric age measurements were conducted. Scientists have concluded that Earth was formed about 3.8 billion years ago.

Then, the method of calculating Earth's age by determining radioactive isotopes is done by scientists on the oldest rocks on Earth. In particular, to increase accuracy, they also searched for meteorites called Chondrit, which fell to Earth to measure their radioisotopes. Scientists believe that meteorites are formed from many types of dust and small particles that have been present from the beginning of the solar system and plunged into the Earth from the beginning, so they are about the same age as our planet.

Combining these results, the scientific community now estimates that Earth, meteorites, the Moon and the entire solar system formed about 4.5-4.6 billion years ago.