

# Module 1 – Origin of the Universe

Student: \_\_\_\_\_

What do you know about the origin of the universe and our planet?

## Origin of the Universe and the Planet



*What is the universe? It consists of everything we call matter, stars, galaxies and others, but surprisingly only 10% of it is matter and 90% is dark space.*

The most accepted theory that explains the origin of the universe states that it all started 14 billion years ago. Back then, there was a **tiny** particle, like an atom, which was very hot and dense. This particle exploded causing the universe to form; **matter** started to expand and created millions of galaxies. The galaxy we live in is called the Milky Way.

Our planet is approximately 4.5 billion (4,567,000,000) years old. Its origin is still a mystery today, but some theories exist. The “Core Accretion Theory” states that at the beginning, our solar system was rotating **dust** and gases. Then, the primitive sun’s gravity attracted these materials and they all started **spinning** around it. Some clouds formed and became solids. Our planet was formed by a solid metal core, a liquid **mantle**, and a thin but hard crust.

Source: <https://bit.ly/2Z12wgc> | <https://bit.ly/2wziNJo> | <https://bit.ly/2WgauSO>

### Culture

Many cultures have different views about the creation of the universe and the Earth. For instance, China has a legend about a bored giant who shook the universe causing a huge explosion that created lots of stars and planets. Ancient Egyptians believed the god Ra created the universe with his body fluids.

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## VOCABULARY

Match the words with the correct definition.

Tiny fine powder made from a particular substance

Matter the middle layer of the Earth that is between the top crust and the inner core

Dust very small

Spin the thing that forms physical objects and occupies space

Mantle to turn around repeatedly

