### The Big Bang - The Beginning

Most astronomers believe the Universe began in a Big Bang about 14 billion years ago. At that time, the entire Universe was inside a bubble that was thousands of times smaller than a pinhead. It was hotter and denser than anything we can imagine.

Then it suddenly expanded outwards. The Universe that we know was born. Time, space and matter all began with the Big Bang. In a fraction of a second, the Universe grew from smaller than a single atom to bigger than a galaxy. And it kept on growing at a fantastic rate. It is still expanding today.

As the Universe expanded and cooled, energy changed into particles of matter and antimatter, which largely destroyed each other. But some matter survived. More stable particles called protons and neutrons started to form when the Universe was one second old.

Over the next three minutes, the temperature dropped below 1 billion degrees Celsius. It was now cool enough for the protons and neutrons to come together, forming hydrogen and helium nuclei. After another 300,000 years, it was cool enough for atoms to form. The Universe filled with clouds of hydrogen and helium gas.

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About 9.22 billion years later earth formed.

No one knows exactly how life began. It seems to involve the coming together of certain chemicals. But what changes these chemicals into life-forms is a mystery.

Studies of ancient rocks have shown that life began on Earth about 3800 million years ago. The young Earth was a water world with small areas of dry land. Many scientists think that life began in the lakes and oceans.

Lightning and ultraviolet light from the Sun may have split the hydrogen-rich gases in the atmosphere. Over time, the simple chemicals joined to become larger, more complex chemicals. Once these chemicals collected in the oceans or lakes, they formed an 'organic soup'.

One day, an accident occurred. A molecule began to make copies of itself. Earth had sprung to life.

[Taken from ESA kids]

### Genesis 1 - The Beginning

In the beginning God created the heavens and the earth. **2**Now the

earth was formless and empty, darkness was over the surface of the

deep, and the Spirit of God was hovering over the waters.

**3**And God said, “Let there be light,” and there was light. **4**God saw that

the light was good, and he separated the light from the darkness. **5**God

called the light “day,” and the darkness he called “night.” And there was

evening, and there was morning—the first day.

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**11**Then God said, “Let the land produce vegetation: seed-bearing plants and trees on the land that bear fruit with seed in it, according to their various kinds.” And it was so. **12** …God saw that it was good. **13**And there was evening, and there was morning—the third day.

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**24**And God said, “Let the land produce living creatures according to their

kinds: the livestock, the creatures that move along the ground, and the

wild animals, each according to its kind.” And it was so. **25**…And God saw

that it was good.

**26**Then God said, “Let us make mankind in our image, in our likeness, so that they may rule over the fish in the sea and the birds in the sky, over the livestock and all the wild animals,[[a](https://www.biblegateway.com/passage/?search=Genesis%201&version=NIV#fen-NIV-26a)] and over all the creatures that move along the ground.” **27**So God created mankind in his own image, in the image of God he created them; male and female he created them.

**28**God blessed them and said to them, “Be fruitful and increase in number; fill the earth and subdue it. Rule over the fish in the sea and the birds in the sky and over every living creature that moves on the ground.”

**29**Then God said, “I give you every seed-bearing plant on the face of the whole earth and every tree that has fruit with seed in it. They will be yours for food. **30**And to all the beasts of the earth and all the birds in the sky and all the creatures that move along the ground—everything that has the breath of life in it—I give every green plant for food.” And it was so.

**31**God saw all that he had made, and it was very good. And there was evening, and there was morning—the sixth day. [The Bible]