

The Blue Planet: Designed by a Loving Creator

Prof Stuart Burgess 25 August 2026

From its precise orbit to its life-giving atmosphere, Earth's fine-tuning seems too perfect for chance. Explore ten remarkable features that make our planet uniquely suited for life.

When astronauts went into space for the first time, one of the first things they noticed was that the Earth had a beautiful blue glow when viewed from space. This is why the Earth is called the 'blue planet'.

Despite discovering many hundreds of planets in the Milky Way Galaxy, astronomers have not found a planet anything like the Earth.

Isaiah wrote that the Earth was deliberately designed to be inhabited (Isaiah 45:18), and the psalmist wrote that the earth is full of the goodness of the Lord (Psalm 33:5). Modern discoveries have shown these statements to be wonderfully true.

Finely Tuned for Life

Some of the most important ways that the Earth is well designed for life are:

(1) It is the right distance from the Sun for producing the right amount of heat and light. The Earth also has a remarkably circular orbit, which means that the distance from the sun varies by only a tiny amount as the Earth circles the Sun. In contrast, all other known planets have elliptical orbits.

(2) It has a diameter for producing the right amount of gravity. If the Earth were much larger, then gravity would be too large, and we would feel very heavy. However, if the Earth were much smaller, then gravity would be too small and, like the moon walkers, we would find it difficult to grip the ground. The level of gravity is also just right for biological processes.

(3) It has a rate of spin for producing the right amount of night for sleeping and right amount of daylight for activities in the day. The rate of spin also produces stable weather and temperatures. If the length of day were much shorter, then there would be severe weather patterns all over the world. However, if the length of day were much longer, then the nights would be too cold and the days too hot.

(4) It has the right tilt for creating seasons. The Earth's axis is tilted by around 23.5 degrees with respect to its orbit around the Sun. This tilt is high enough to produce distinctive seasons, but not so high that excessive temperatures occur around the world as the seasons change.

(5) It has a remarkably smooth surface. Even the highest mountains and deepest oceans represent tiny variations in height compared to the diameter of the Earth. In most places on Earth, the variations in height are around 0.01 per cent of the Earth's diameter, which is an

incredibly small variation. The smoothness of the Earth is one key reason why the Earth has such stable and mild weather.

(6) Its moon is an ideal size for producing the right tides. If the moon were much larger, then there would be huge tidal waves every day. However, if the moon were much smaller, then tides would not be enough for preventing coastal waters from becoming stagnant.

(7) It has the right amount of water. The oceans make up about 70 per cent of the Earth's surface, which is ideal for creating a weather system that brings abundant clean and fresh water to the land. The oceans also supply much seafood and help to create coastlines.

(8) The earth has abundant quantities of the right materials, such as metals, which are very useful for building and technology. Renewable materials like wood are also extremely important for human existence.

(9) It has the right atmosphere for supporting life. The 21 per cent oxygen is enough for breathing animals, but not so much that it causes poisoning or fires. The 78 per cent nitrogen is just right because, unlike other gases like carbon dioxide, it does not cause global warming.

(10) It has the right brightness of sky. The Earth's atmosphere is such that light is scattered by air molecules, and this produces a beautiful blue colour right across the sky. In contrast, on places like the moon, the sky is black.

A Sky Made to Be Admired — and a Creator Who Cares

The Earth is so special that God even made billions of stars to shine light on the Earth during the night. This is why the Puritan writer Thomas Watson said that the Earth was bespangled with sun, moon and stars that the Earth's beauty might be beheld and admired.

The vast universe does not mean the Earth is unimportant, but rather it shows the Earth to be supremely important.

When Isaac Newton studied the clockwork motion of the solar system, he concluded that it could not have been produced by chance. The Earth shows not only that there is a creator, but that the creator cares deeply for mankind.

He cares so much for the world that He allowed His Son to come into the world to seek and save lost sinners such as you and me.

Activity

Draw up a chart with 10 boxes. Use the whole of an A4 sheet of paper. In each box draw a picture and list 2 summarised dot points, for each of the ten facts stated by the author.
