

Earth is a medium-sized planet orbiting a star (the Sun) at a distance of approximately 150,000,000 km





The Atmosphere

Earth's **atmosphere** is the layer of **gases** extending upward for hundreds of kilometers.

R. C. Brit

The Atmosphere

The atmosphere is made up of about 78% nitrogen gas and 21% oxygen gas.

The remaining <1% of the atmosphere includes argon, water vapour, carbon dioxide and a variety of other gases.

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The Atmosphere

The atmosphere is critical to life on Earth. It acts like a **blanket** and moderates surface **temperatures**.

The insulation prevents excessive heating during the **day** and cooling during the **night**.

The Atmosphere

The Earth's global average surface temperature is **15°C**.

Without an atmosphere, the global average surface temperature would be -18°C



















Lovelock suggested that Earth could **respond** to **changes** in its environment and maintain relatively consistent internal conditions over long periods of time - just like a living **cell**.



The Gaia Hypothesis

The Gaia hypothesis is not widely accepted as a rigorous scientific concept.

However, many people feel that thinking of Earth as a living thing may encourage and promote a more caring attitude toward our planet and the life it supports.













components, such as temperature, wind, water, minerals and air.















community of **bacteria** and fungi living in a rotting log is also an **ecosystem**.







