



# Cool Facts Every Kid Should Know About Our Awesome Planet

More Reasons to #LoveThePlanet



People and Planet



# Cool Facts About Our Planet



People and Planet



## Earth is an amazing place to live and play, and it's the only one we've got.

Here are some interesting and fun facts about our home planet that you might have wondered about – and that grown-ups don't always know.

## How old is Earth?

Earth is about 4.5 billion years old. That's so old that it's hard to imagine. Think about the dinosaurs, which went extinct 65 million years ago. They're young compared to the Earth itself. We know how old Earth is because scientists are able to determine the age of our planet's oldest rocks. Studying the science of Earth's origins is a great way to learn about how our planet works.



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## What causes the seasons?

Do you know why it's warm in summer and cool in winter? The reason is that different parts of our planet are tilted toward or away from the sun at different times of year. The Northern Hemisphere (which includes places like North America, Europe, and Asia) is tilted most toward the sun in June, when summer starts. However, if you live in the Southern Hemisphere (which includes South America, Australia, and southern Africa), summer starts in December, when that part of the world is tilted most toward the sun. A lot of people incorrectly think summer is warmer because Earth moves closer to the sun, but now you know the real reason.

## How is Earth able to support life?

All life on Earth requires water to survive, and our planet is just the right distance from the sun for water to be in liquid form. If Earth were too close to the sun, the water would boil away. If it were too far away, the water would freeze into ice. Many other factors support life too: For example, Earth has a magnetic field and a layer of air called ozone that protect life

from dangerous radiation from the sun. Plants use the sun to get energy and convert carbon dioxide gas into oxygen (a process called photosynthesis), and all animals (including humans) use oxygen to breathe. It's a complete system in which one type of life makes another type possible, but they all need water. Think about that next time you fill your glass.

## How much water is on Earth?

About 70% of Earth's surface is covered by water. Most of this water (about 97%) is in oceans and seas (salt water). The rest is in the form of lakes, rivers, glaciers, and water vapor or underground (fresh water). The result is that even though Earth has a lot of water, less than 1% of it is drinkable fresh water. Many places suffer from water shortages, especially if they don't get a lot of rain. That's one reason it's important to conserve water.



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## Which kind of water is more important, salt water or fresh water?

Both are critically important. People need to drink clean fresh water every day to stay healthy. And even though people can't drink salt water, we still need the ocean to live. Most of the oxygen we breathe comes from photosynthetic life in the ocean, and a lot of people depend on ocean life for food. Water pollution is a serious problem and harmful to the plants and animals that live there. For example, some scientists estimate that in a few years, there will be more plastic waste in the ocean than fish! When you take action to reduce waste and pollution to keep our water resources clean, you're doing something that's really important to life on Earth, including humans.

## How many animal species are on Earth?

Scientists have counted about 1.2 million species, but they think millions more have not yet been discovered. Many of the uncounted species are in the oceans, which even today remain mostly unexplored. Other uncounted species live in rain forests. Unfortunately, pollution, deforestation, and climate change are causing species to become extinct before we can learn how amazing they are. The United Nations estimates that about 150 species are lost every day. If you decide to study plants and animals in the wild, you may find ones that no one has ever seen before and may be able to help save them too.



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## Is the Earth really getting warmer?

Yes. Over the last 100 years, Earth's average temperature has increased by about 1.5°F (0.8°C). That might sound like a small number, but it makes a big difference on the scale of a whole planet. For example, warmer air can hold more water, so rainstorms and snowstorms can become more intense. A small increase in temperature can also cause weather patterns to change, resulting in melting glaciers, droughts, and more wildfires. Plus, coral reefs are very sensitive to ocean temperatures, and many are already dying.

When people burn oil, gas, and coal, more carbon dioxide gas goes into the air, which traps more of the sun's heat. Because of this, scientists think that temperatures may increase by an additional 0.5°F to 8.6°F (0.3°C to 4.8°C) by the end of the century. That's a wide range and represents a lot of potential damage, which is why it's important to keep the increase as low as possible. Helping to reduce warming is a cool thing to do.

## How to learn more:

If you'd like to learn more about climate change, visit National Geographic Kids <https://kids.nationalgeographic.com/science/article/climate-change> (Explore/Science).

Caregivers and teachers, for suggestions on teaching our children to protect the planet, see this article on OneGreenPlanet. <https://www.onegreenplanet.org/animalsandnature/things-we-need-to-teach-our-children-about-protecting-the-planet/>