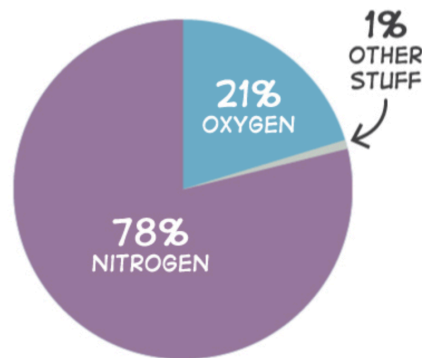


10 Interesting Things About Air

Air is mostly gas.

Air is all around us, but we can't see it. So what is air, exactly? It's a mixture of different gases. The air in Earth's atmosphere is made up of approximately 78 percent nitrogen and 21 percent oxygen. Air also has small amounts of lots of other gases, too, such as carbon dioxide, neon, and hydrogen.



Air isn't just gas.

While air is mostly gas, it also holds lots of tiny particles. These particles in the air are called aerosols. Some aerosols—like dust and pollen—are picked up naturally when the wind blows. But the air can also carry soot, smoke, and other particles from car exhaust and power plants. These are major contributors to air pollution.



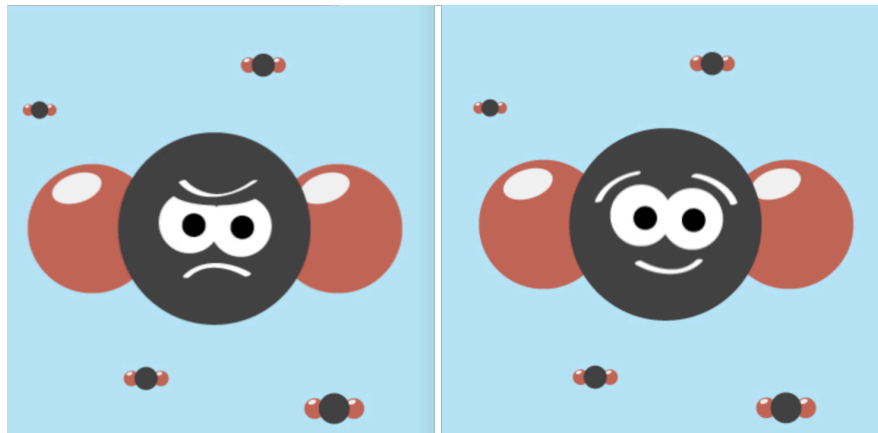
Air is important for living things.

People need to breathe, and so do lots of other animals—and plants! Breathing is part of a process called respiration. During respiration, a living thing takes in oxygen from the air and gives out carbon dioxide. This process gives animals and plants the energy to eat, grow, and live life!



Carbon dioxide in the air can be both good and bad.

When humans and animals breathe, we give off an odorless gas called carbon dioxide, or CO_2 . Plants use this gas, along with sunlight, to make food—and oxygen too! This process is called photosynthesis. However, large amounts of CO_2 are produced when cars and power plants burn coal, oil, and gasoline. This is bad because CO_2 is the most important contributor to human-caused global warming.



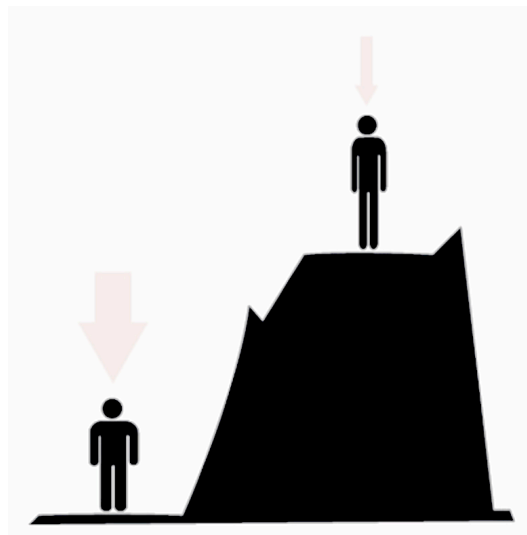
Air also holds water.

When it's a hot, muggy summer day, you've probably heard the word "humid." But what does that mean, exactly? Relative humidity is the amount of water that the air can hold before it rains. Humidity is usually measured in percentages, so the highest level of relative humidity—right before it rains—is 100 percent.



Air changes as you go up, up, up.

Air seems light, but there is a lot of it pushing down on Earth's surface. This is called air pressure. You experience high air pressure at sea level because the whole atmosphere is pushing down on you. The air pressure is low on top of a mountain because there is less atmosphere pushing down on you. That difference in air pressure can cause your ears to pop when you're taking off in an airplane or driving up a hill.



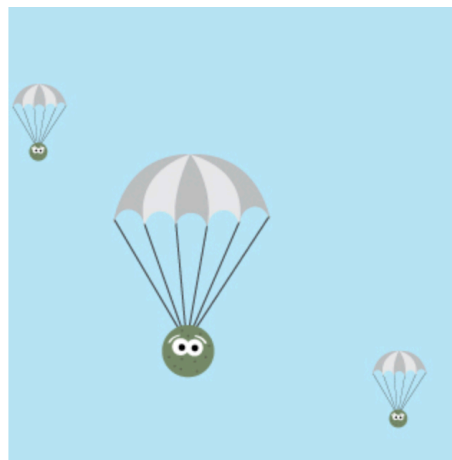
Air is a protective cushion.

On Earth, we're pretty lucky to have an atmosphere filled with air. The air in our atmosphere acts as insulation, keeping the Earth from getting too cold or too hot. Ozone, another type of gas in the air, also protects us from too much sunlight. Air in the atmosphere can also protect us from meteoroids. When meteoroids contact our atmosphere, they rub against the air and oftentimes are burned into small pieces before reaching Earth.



There is life in the air.

Lots of living things make their homes in soil and water. But did you know that living organisms can also be found hanging out in the air? These tiny microbial organisms are called bioaerosols. Although these microbes can't fly, they can travel long distances through the air — via wind, rain, or even a sneeze!



Air can move fast and far.

Even on a very still day, the air around us is always moving. But when a big wind comes, that air can really go! The fastest gust of wind ever recorded on Earth was 253 miles per hour. And as the wind picks up seeds and dust and other particles, it can carry them miles away from their original home!



Air pollution can ruin your outdoor plans.

Air pollution is measured with the Air Quality Index, or AQI. The lower the AQI, the cleaner the air is. However, if you are outside when the AQI is over 100, it's about the same as breathing in exhaust from a car all day! Things that cause poor air quality are forest fires and cities with lots of car traffic. If the AQI is higher than 100 you shouldn't spend too much time outside.



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