

 albatros

The Wonders of AIR

Written by Petr Kostka and Jiří Dušek
Illustrated by Lia Visirin

Air is full of magic and motion! We can't see it, but it's always with us—moving, dancing, lifting, spinning.

ENJOY THE AIR!



WHAT IS AIR?

Air is invisible and easy to forget—until we take a breath! It's a mix of gases that keeps us alive, helps water move, and keeps the planet just the right temperature.

I can't live without it either! It's an invisible miracle!

INVISIBLE OCEAN OF AIR

Imagine living at the bottom of a huge ocean of air. That's what we do! Warm air rises, cold air sinks—and all around us is this swirling, invisible sea.

So many scientists have wondered what air is made of and what it does. Today we know that it has two basic chemical elements.

ON THEIR OWN, EACH IS DANGEROUS TO THE HUMAN BODY. TOGETHER, THOUGH, THEY COMBINE TO GIVE US LIFE-GIVING AIR.

O₂

OXYGEN

Found in the form of O₂ molecules, water molecules H₂O, and ozone molecules O₃—which you can smell after a storm.

N₂

NITROGEN

Helps plants grow. On its own, it's not great for us, but mixed with oxygen it makes breathable air!

AIR UNDER THE MICROSCOPE

Yummy—air soup!
Bon Appétit!

In each breath, you're also taking in dust, pollen, dead skin cells, insect bits, cosmetic particles, volcanic ash, microplastics—and even tiny space rocks called micrometeorites!

"AIR SOUP"

RECIPE FOR THE AIR WE BREATHE!
Want to make an "air soup"? Just mix lots of nitrogen (about 3/4), a good dash of oxygen, and sprinkles of water vapor, argon, carbon dioxide, and methane.

Greenhouse gases like carbon dioxide and methane keep our planet warm—but too much of them can make Earth too hot.

GREENHOUSE GASES



OXYGEN CATASTROPHE?

... OR WHERE DID OXYGEN COME FROM?

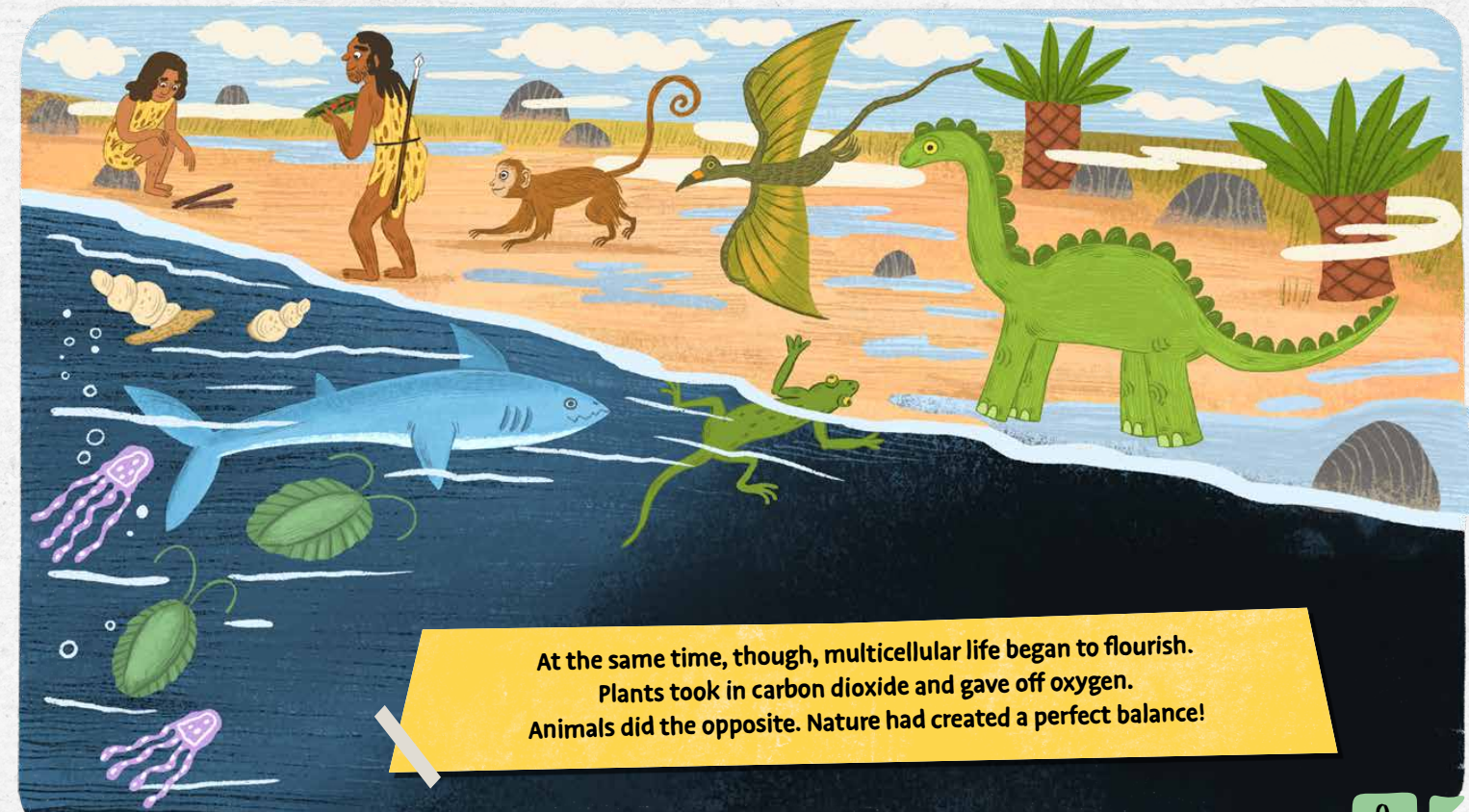
VOLCANOES ERUPTED, FILLING THE SKY WITH CARBON DIOXIDE AND AMMONIA.

Believe it or not, our beautiful, breathable atmosphere wasn't always here. About 4.5 billion years ago, Earth was surrounded by unbreathable gases—and it was extremely hot!

Some of the carbon dioxide dissolved into oceans. Some was processed by simple organisms, which—surprisingly—made oxygen as waste! The amount of oxygen in the air began to rise... fast.

AND DISASTER STRUCK!

Around 2 billion years ago, so much oxygen built up that many early life forms couldn't survive.



At the same time, though, multicellular life began to flourish. Plants took in carbon dioxide and gave off oxygen. Animals did the opposite. Nature had created a perfect balance!

AMAZING ATMOSPHERE

Earth is wrapped in a giant blanket of air called the atmosphere. It's like a soft, invisible shield that keeps us safe, warm, and breathing. If Earth were the size of an apple, the atmosphere would be thinner than its skin!

Up, up,
and up we go!

AS YOU CLIMB HIGHER, THE AIR
GETS THINNER—THAT'S WHY
MOST CLIMBERS USE OXYGEN
TANKS.

OUTER SPACE: BEYOND THE ATMOSPHERE

EXOSPHERE

Where artificial satellites fly. The edge of space. This topmost layer slowly fades into outer space. It's where many satellites orbit.

435-6,200 MILES (CAN REACH 3,100°F)

THERMOSPHERE

The world of auroras. Though it feels freezing to us, this layer is super-hot, thanks to the Sun's energy. It's where magical auroras dance.

50-435 MILES (UP TO 2000°F)

MESOSPHERE

Mysterious and cold! Brr, it's so cold here! It's the least explored part of the atmosphere. This is where meteors—tiny bits of cosmic dust—burn up as “shooting stars.”

31-50 MILES (AS COLD AS -184°F)

STRATOSPHERE

Ultraviolet filter. Military and spy planes soar in this calm, almost cloudless layer. Home to the ozone layer, which protects us from harmful rays.

7.5-31 MILES (AS COLD AS -103°F)

TROPOSPHERE

Our world. This is where we live. It's rich in water vapor, filled with clouds, weather, and all life. Balloons and planes fly here too.

0-7.5 MILES

And don't forget
the ionosphere! It overlaps
with other layers and helps
radio signals bounce
across long distances!

LUNGS OF THE PLANET

Which makes more oxygen: the rainforests or the oceans?

ABOUT HALF OF THE OXYGEN IN OUR ATMOSPHERE COMES FROM THE SEA.

It used to be thought that the Amazon, the biggest rainforest on Earth, was the planet's "green lung." But scientists now say oceans are the true champions. They're full of phytoplankton—tiny organisms that photosynthesize and release oxygen, just like plants.

i

EVEN THE OCEAN FLOOR PRODUCES OXYGEN!

BUT WE STILL NEED TO PROTECT RAINFORESTS!

They're home to rare animals found nowhere else, and they do make a lot of oxygen—most of which is used up by the creatures living there.

I always thought it was the other way around! Anyway... I love them both!

GODS OF AIR

Since the beginning of time, people have been searching for an answer to the question of what makes the wind blow. And so, in different civilizations and at different times, a whole host of wind gods have emerged. Like the wind, the wind gods are unpredictable, difficult to control, and full of mischief.

SINCE ANCIENT TIMES, PEOPLE BELIEVED WIND CAME FROM POWERFUL GODS. HERE ARE A FEW:



MAUI

Maui, the Polynesian trickster hero, was known for his adventures, one of which involved trying to catch all the winds on his travels. He succeeded with most, but the gentle breeze known as Fisaga remained elusive, forever slipping through his grasp as a reminder of nature's untamable forces.



AETHER

In Greek mythology, Aether personified the pure, clear air of the upper atmosphere where the gods resided. This ethereal substance was considered vital for divine life, and it was believed that Zeus, in particular, enjoyed dwelling in Aether's realm, breathing its untainted air.

HURACÁN

Huracán, the god of wind, storms, and fire in ancient Mayan mythology, lived in the mists and storm clouds above the oceans. His name is the source of the word "hurricane," and he was said to appear at the start of the hurricane season, bringing fierce winds and destruction with him.



STRIBOG

The wind god of the ancient Slavs, Stribog's name comes from the Old Slavonic word "stri," meaning "sharp." He was believed to control the winds, both gentle and fierce. According to folk legend, his wife Melusine was a beautiful woman with flowing hair, whose mournful wails were said to echo like a lamentation, heralding the arrival of storms.

And let's not forget the Phoenix—a magical bird that rises from the ashes!



THOR

Thor, the Norse god of thunder, wielded his mighty hammer Mjolnir to summon storms and hurl lightning at his foes. His power over the sky and storms earned him his title as the God of Thunder, protector of both gods and humans from the chaos of nature's fury.



FENG PO PO

In Chinese mythology, Feng Po Po, also known as "Madame Wind," was the goddess who controlled the winds. Often depicted riding a tiger through the clouds, she embodied courage and strength. With a sack full of winds, she would keep them contained on calm days, but if angered, she unleashed powerful storms to show her fury.

CARRIED BY AIR

Flying is all about overcoming
GRAVITY
—the force that pulls us down.

Air transport helps us take to the skies, and there are many ways we use air to stay up!

The first balloon flight with a man on board was launched on November 21, 1783, by the Montgolfier brothers in France.

BALLOONS

Hot air balloons float because they are filled with hot air, which is lighter than the cooler air around them. When the air inside cools, the balloon falls back down.

PARACHUTES

Skydivers and gliders use rising air currents to lift them up, like an invisible elevator.

GLIDERS

Gliders are aircraft that rely on air currents to stay aloft. They have no engines and use rising air to stay in the sky, making long, quiet flights.

PARAGLIDERS

Paragliders are lightweight, non-motorized aircraft that use the wind to glide. They are controlled by harnessing air currents and are often used for recreational flying and sport.

KITES

Kites were first made in Ancient China. They float on air currents and can be used for fun, for religious purposes, and for military operations. They even help with weather forecasting.

WINDMILLS AND WIND FARMS

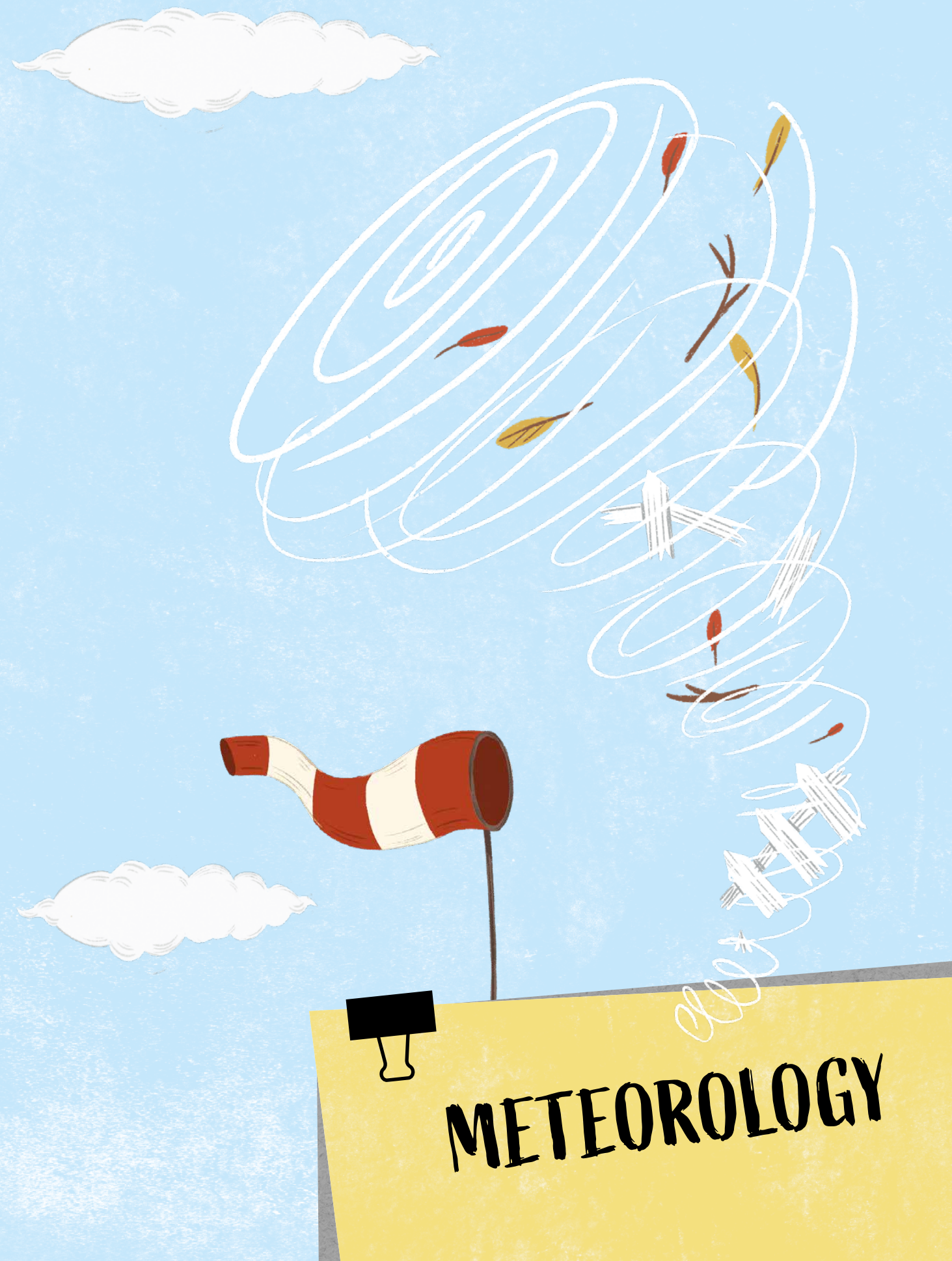
In the past, windmills helped grind grain, pump water, and more.

Today, wind turbines convert wind into electricity, a clean and renewable energy source.

You can find beautiful windmills in the Netherlands, and there are more and more wind farms all over the world, especially near coastlines and on hills.

WHERE DOES THE WIND BLOW?

Wind turbines generate electricity, but they're large, noisy, and only work when the wind blows. However, they provide a clean, infinite energy source. Wind farms are growing worldwide, especially by the sea, on plains, and atop hills.



The Wonders of AIR

BREATHE IN THE MAGIC OF AIR!

From flying animals and swirling storms to ancient wind gods and invisible molecules, this beautifully illustrated book reveals the amazing world of the air around us.

Young readers will learn how sound travels, how birds stay in flight, why the sky looks blue, and how we can protect the air we breathe.

Perfect for curious kids aged 6–10 who love science, nature, and big questions.

6+

TARGET GROUP



ECO EDUCATION



FUN TO READ



VOCABULARY



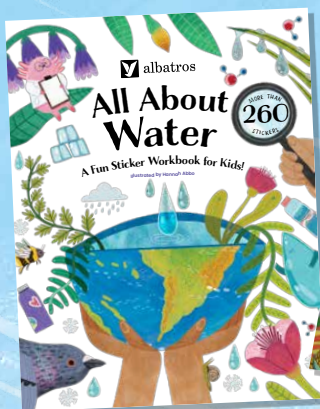
LEARNING

CHECK OUT OTHER BOOKS IN THIS SERIES!

Educational book



Sticker workbooks



ID: A707W2F0012175



albatros

www.albatrosbooks.com

Authors: Petr Kostka and Jiří Dušek

Illustrator: © Lia Visirin, c/o Advocate Art, 2025

© Albatros, an imprint of

Albatros Media Group, 2026

All rights reserved.

FSC logo