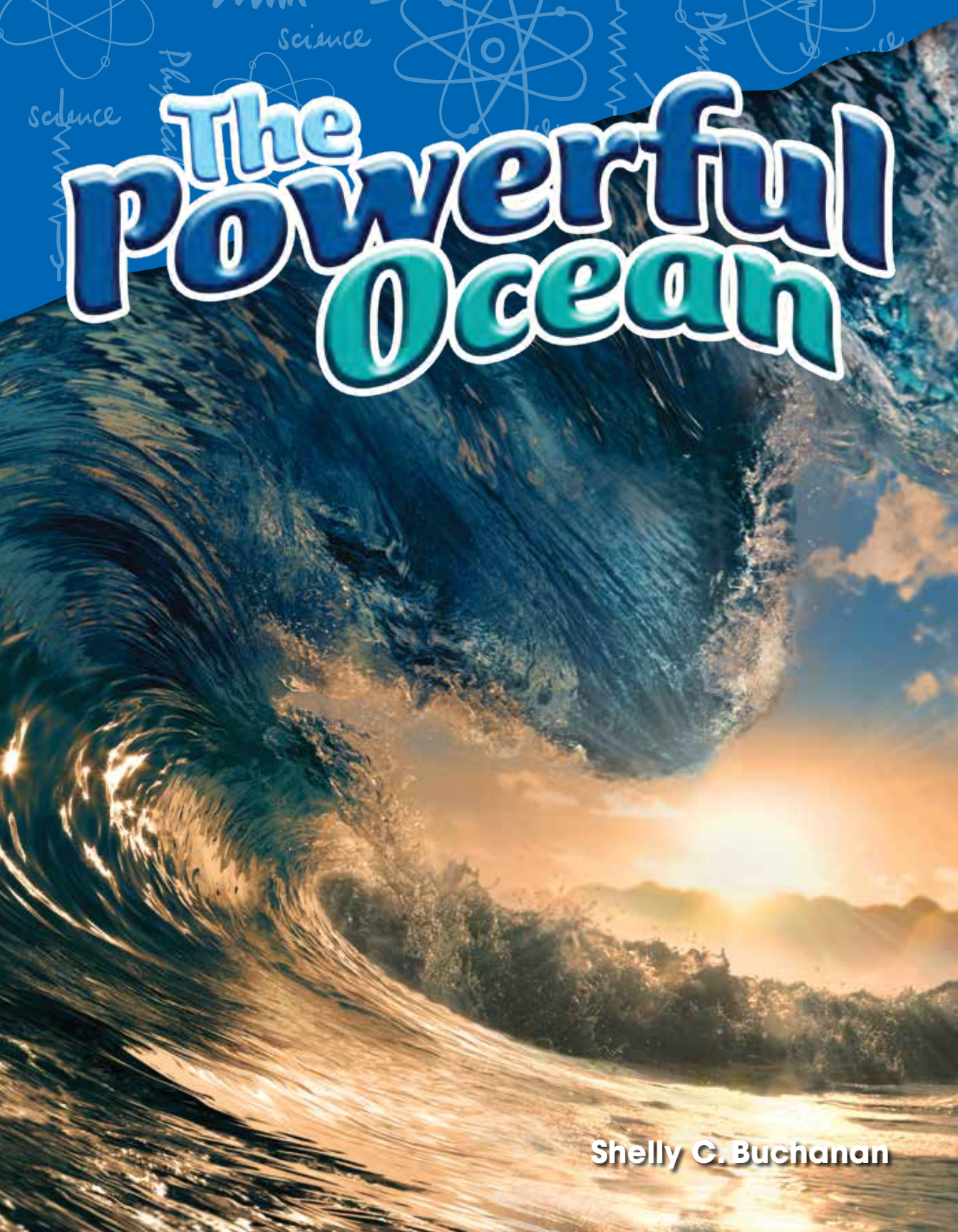
The Powerful Ocean



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Watery World

Planet Earth is a unique place. It's the only planet in our solar system with liquid water. In fact, nearly 75 percent of the place we call home is covered in water. Scientists think water was the key to developing life here. It's a wonder we call our planet *Earth*. *Water* might be a better name!

Water takes many shapes on our home planet. Lakes, rivers, seas, and ponds give our home beautiful landscapes. But the ocean is the biggest and mightiest water feature of all. Out of all the water surrounding us, 96 percent of it is found in the ocean.

Scientists continue to make amazing discoveries in these wild waters. With the use of modern technology, scientists shed light on a hidden underwater world. There's still so much more to learn. After all, we know more about space than we know about the dark depths of our own ocean. In fact, about 500 people have been to space, but only three have reached the deepest part of the ocean.

For Review Only

There may be five oceans—Arctic, Atlantic, Indian, Pacific, and Southern—but it is really one massive water body: our ocean.

Investigating Big Blue

People are making many new discoveries about the ocean. Currently, there are 47 different species of sea horses that we are aware of. Just in the past eight years, scientists discovered 14 of them.



longsnout sea horse

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When Earth was formed billions of years ago, it did not have water. Gases from volcanoes formed much of the water on Earth. Comets also brought water to the planet as they crashed. Over time, water filled the oceans. Millions of years ago, there was one massive ocean called *Panthalassa*. Earth's land was all connected in a mass known as *Pangaea*. The land changed and moved over time until it reached its current shape. And it continues to change slowly today.

Today, there are five oceans. Although they are given different names, they are all connected. This makes up the largest part of the **hydrosphere**. The hydrosphere refers to all the liquid water on Earth.

There are wonders beneath the surface of the great waters. Millions of years after the ocean was formed, life began in its waters. Oceans have a rich range of plant and animal life. Scientists have counted 230,000 species. But they suspect four times more than that are waiting to be discovered! There are even fascinating underwater landscapes. There is much more than meets the eye beneath the ocean's surface.



The Proud Pacific!

The Pacific Ocean is by far the largest of all five oceans. It contains 28 percent of Earth's water and spans over 60 million square miles. This means it's larger than all the land on Earth put together!

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Supercontinent

The world as we know it used to be one massive supercontinent. Scientists believe that Pangaea started to split because of a theory called *continental drift*. The theory states that the land split apart and drifted, forming separate continents.

Pacific Ocean

Indian Ocean

Panthalassa comes from Greek words meaning "all ocean."

Southern Ocean

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Think Like a Scientist

How do the atmosphere and water interact? Experiment and find out!

What to Get

- large glass bowl
- plastic wrap
- small bowl or cup
- small rock or weight
- water



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