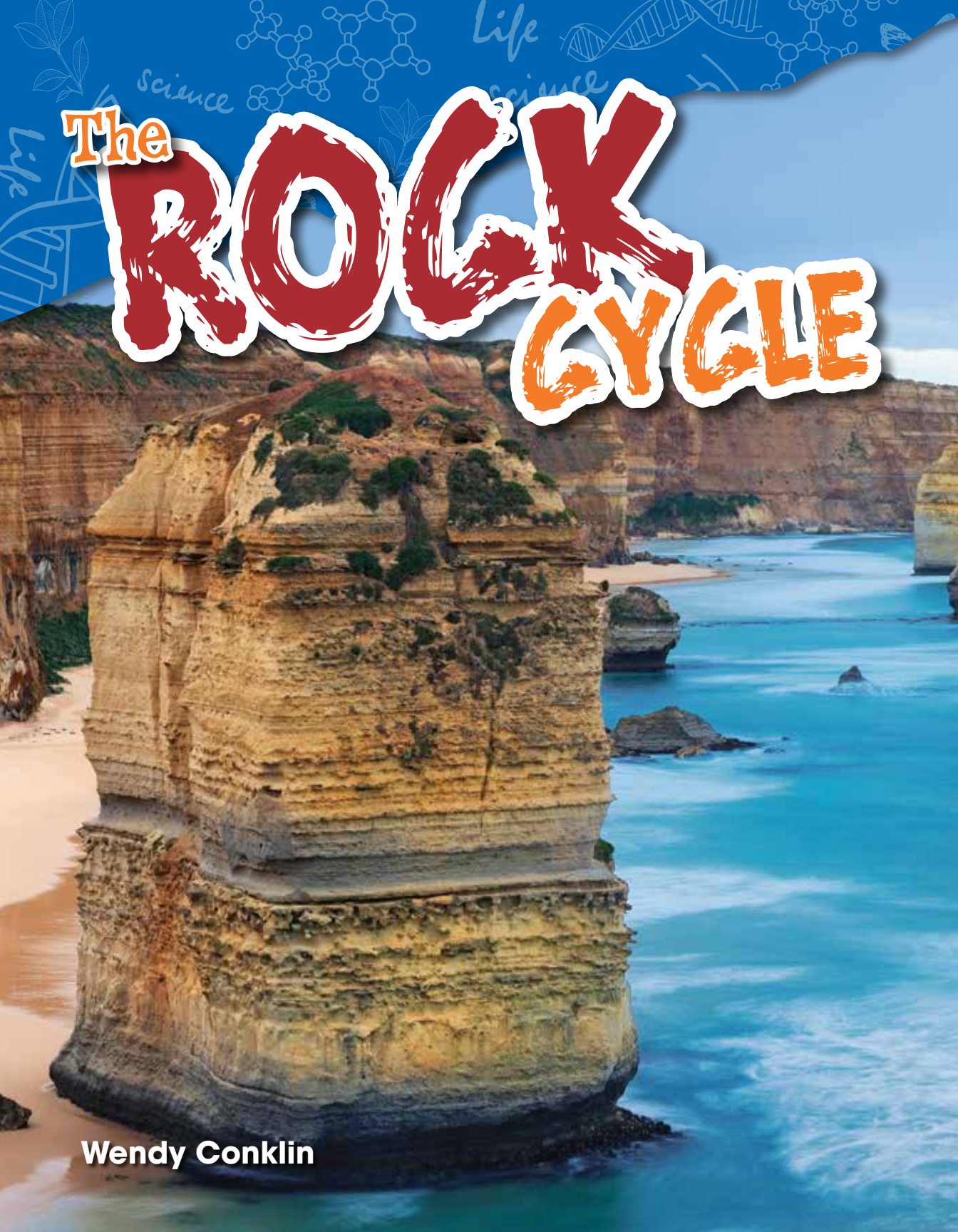
The ROCK CYCLE



Wendy Conklin

For teachers' inspection ONLY

Table of Contents

A Long Journey 4

Introducing Igneous Rock! 6

Meet Metamorphic Rock! 12

Say Hello to Sedimentary Rock! 18

Recycling Rock 24

Think Like a Scientist 28

Glossary 30

Index 31

Your Turn! 32

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A Long Journey

Have you ever had the urge to change into something else? It can be hard for humans, but rocks do it all the time! Rocks? The same rocks that look like they're just sitting there doing nothing? Yes! Rocks are constantly on the move, but the movement is so slow that it's hard for us to see. But if you could keep your eyes open for a couple million years, you could watch a mountain turn into sand!



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These drastic changes in rocks are part of the rock cycle. A cycle is a set of repeating patterns. In the rock cycle, rocks constantly form, destruct, and recycle.

There are three basic types of rock: sedimentary, metamorphic, and igneous. Over time, one type of rock can change into another. Rocks change through **weathering**, heat, pressure, and **erosion**. Rock on!



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Introducing Igneous Rock!

How exciting would it be to see a volcano blasting hot lava from its center! But did you ever wonder where this hot lava comes from and what makes it rise to the surface? And what does this have to do with the rock cycle?

It's amazing to think of Earth as one gigantic rock. Earth's outer layer is known as the *crust*. Underneath Earth's crust lies the mantle. This is a layer of extremely hot rock. Rocks that rise from the mantle melt because of the intense heat found there. This melting rock forms **magma**. Some magma stays underground. But when magma pushes up to Earth's surface, a volcano erupts.

Magma that reaches Earth's surface is called *lava*. Air causes lava to cool and harden. Finally, igneous rocks form. While it can take millions of years for other types of rock to form, some igneous rocks can take just a few hours! But why does magma rise to Earth's surface?

Volcanic Rock

The least **dense** rock on Earth is called *pumice*. Pumice is formed when lava cools quickly and air bubbles form. With so much air, the rock is less dense than water, and it can float.



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Extrusive or Intrusive

There are two types of igneous rocks: extrusive and intrusive. Extrusive igneous rocks are produced aboveground when lava hardens after a volcanic eruption. Intrusive igneous rocks are produced when magma slowly cools underground.



Pumice is used in products people use every day such as makeup and toothpaste.

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Think Like a Scientist

How does a rock change throughout the rock cycle? Experiment and find out!

What to Get

- cheese grater
- crayons
- hot plate
- ice cube trays
- paper and pencil
- small saucepan

