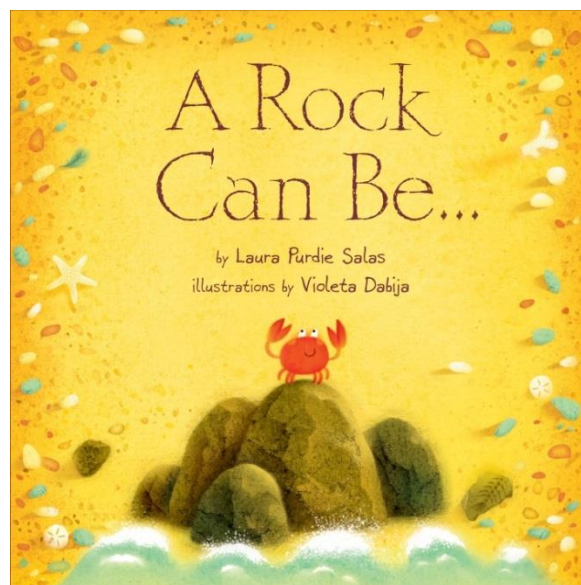


A Rock Can Be...

Teaching Guide

written by Laura Purdie Salas
illustrated by Violeta Dabija
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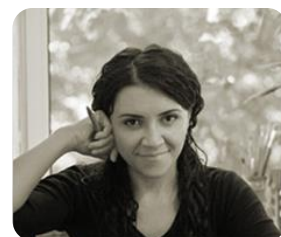
Story Summary: Rocks may seem like boring, static objects—until you discover that a rock can spark a fire, glow in the dark, and help a chicken digest its feed.

Laura Purdie Salas's lyrical rhyming text and Violeta Dabija's glowing illustrations show how rocks decorate and strengthen the world around them.

Laura Purdie Salas is a Minnesota poet and writer. She has written more than 120 books, including *Water Can Be...*, *A Leaf Can Be...*, and *BookSpeak! Poems About Books*. Her books have received many honors, such as Bank Street Best Book; IRA Teachers' Choice; NCTE Notable Children's Book; Minnesota Book Award; Riverby Award for Nature Books; Cybils Poetry Award; Eureka! Gold Medal; Charlotte Zolotow Highly Commended; and the White Ravens Award. Laura has picked up rocks from Florida beaches, Lake Superior's shores, Loch Ness, and the Austrian Alps. She has no desire to try rock climbing, however. She is a writing coach and a frequent presenter in schools and at conferences. Learn more at laurasalas.com.



Violeta Dabija lives in Moldova in Eastern Europe. She has illustrated more than 25 children's books and enjoys creating magic pictures and unique environments for her characters. Learn more at violetadabija.com.



Reviews:

Kirkus: "...economy of language and breadth of imagination suggests a broad audience for this wide-ranging and inventive exploration." [Full review](#)

School Library Journal: "Listeners meanwhile absorb delicious synonyms and adjectives for a rock that they may have originally thought of as an ordinary object."

Booklist: "...excellent classroom read-aloud, challenging children to puzzle out the ideas in the poetic phrases and to broaden their thinking about rocks."

Pre-Reading: Go on a rock walk! Where do you see them? Can you find some inside rocks? What are they used for? What about outside rocks? See if you can find rocks in their natural state and rocks that have been changed by people. As a class, **brainstorm** jobs rocks do. Post your list for later. Ask students if they like to collect rocks. Invite students to bring in favorite rocks for a show-and-tell.

Let's Look at the Book! (Learning the parts of a book)

- What is this book called? (*A Rock Can Be...*) That is the **title**.
- Who wrote this book? (*Laura Purdie Salas*) She is the writer or the **author**.
- What does an **illustrator** do? (*makes pictures*) Who is the illustrator or artist of this book? (*Violeta Dabija*)
- What is this? [point to the cover] (*the cover*) Why do books have **covers**? (*to hold the book together and keep it from getting bent and ruined*) What can we tell from the cover? (*title, author, illustrator, maybe what the book is about*)
- What do you sometimes wear when it is cool or rainy? (*a jacket*) A book has a **jacket**, too. This is the jacket. [Read the front and back jacket flaps out loud.] What does a book jacket do? (*protects the book more; tells more info about what the book is about and about the author and illustrator*)
- Do you know what page this is? [Point to the title page.] It is called the **title page**. It tells us the title, the author's name, and the illustrator's name—again! It also tells us what company made this book, and where or when it was made. This book was made by Millbrook Press in Minneapolis.

Reading: Show students the pages of the book without reading anything aloud. Let students share what they **notice**. What are the rocks doing on each page? How many of the rock jobs are already on your brainstorming list?

Next, just read and enjoy the book, without interruptions. Read slowly so students can absorb the words and pictures. Then let students **respond**. Ask what they noticed in the book. For pages the students have questions about, read them the corresponding paragraph from the back matter of the book. Add new rock jobs to your brainstorm list as kids notice them.

Reread *A Rock Can Be...* several times over a week or so, encouraging kids to join in when they can, finishing the rhyming phrases, or repeating "A rock can be..." when you gesture to them.

Highlight **vocabulary** they might not know:

- What is a stepping stone?
- What is the trim on a building?
- What does "grind" mean?
- What is a harbor?



Introduce the hyphen: There's a **punctuation** mark called a hyphen used a lot in this book. A hyphen joins words together. But sometimes it separates a word into smaller parts. [Write "flow-er" and "flower" on the board.] This page says "Volcano flow-er." What does that mean? (Rock flows out of a volcano.) Why do you think the writer used a hyphen here instead of just adding -er like she did on other words? (because you would say that word "flower," and it would be confusing)

Discussion Questions:

1. Did you know that sand is rock? Rocks start out huge, as part of the earth's crust. But they break up from earthquakes or erosion. Over thousands and millions of years, big boulders break into rocks, then pebbles, then gravel, then sand. Sand is just teeny tiny rocks.
3. Why do you think fountains and statues and garden paths might be made of rock instead of wood or metal or paper? (*It lasts a very long time. Doesn't rust or rot. Stands up to weather well.*)
4. Can you believe that fossils are actually stone? The bone actually changes into rock! And petrified wood is no longer wood. It, too, has changed into rock. Bring in a piece of petrified wood, if possible, to let students feel how heavy it is.
5. Lava is rock. It is so hot (1300-2200° F) it has melted. Inside earth, it's called magma. Once it spills out, we call it lava. It cools and hardens into igneous rock. Visitors to Hawaii Volcanoes National Park see active lava flows up close.
6. When you play hopscotch, you use a rock to mark your spot. But the chalk you draw your court with is also rock! Chalk used to be made from a soft kind of limestone. That's a sedimentary rock made when tiny seashells and sediment get pressed together over a very long time by the weight of the ocean. Today, sidewalk chalk is made of gypsum, a soft rock that gets left behind when seas evaporate.
7. Birds are not the only animals that make their homes in rock. Sometimes people live in houses made of stones, and some bats live in caves. What other animals have homes made of rock? (*bears, mountain goats, cougars*)
8. Look at the picture on the page that says "Harbor protector." How do you think those rocks protect that harbor? (*They keep big waves out and make the water calm inside the harbor.*)

Response to Story:

Math: Mighty Mountains

What is the tallest mountain in your state or country? Compare it to Mt. Everest, the world's tallest mountain (29,035 feet tall). Find the heights of 5 other mountains and create a bar graph showing all 7 in order from shortest to tallest.

Science: The Rock Cycle

Earth's rocks are constantly forming and transforming. The slabs of the Earth's crust are eroded by wind and water. Rocks grind down into sediment and wash downstream to oceans. Over millions of years, the ocean's weight presses layers of sediment into **sedimentary rock**. As sedimentary rock is pushed deeper into the earth, pressure and heat change them to **metamorphic rock**. As rocks are forced even deeper into the earth, they melt into magma. It might recrystallize into igneous rock. Or it might be drawn upward by volcanic activity. When a volcano erupts, magma flows out as lava. When lava cools and hardens, it forms **igneous rock**.

Model rock formation using Starburst candies! You'll need wax paper, 9 candies (3 each of 3 contrasting colors), and a toaster oven. Make 3 sedimentary rocks, then use 2 to make metamorphic rocks, and then 1 of those to make igneous rock (ending with 1 sample of each). Search online for "Starburst rock cycle" to find more details.

Sedimentary rock (ex: limestone mountains—U.S. Geological Survey)

Stack 3 candies on wax paper to represent layers of sediment on the ocean floor
Press down with a heavy book until pieces stick together



Metamorphic rock (ex: marble--AlejandroLinaresGarcia on Wikimedia Commons)

Heat the sedimentary rock in a toaster oven

Remove when soft, but not melted (2 minutes or so), and carefully fold and squish it



Igneous rock (ex: obsidian—public domain on Wikimedia Commons)

Put the metamorphic rock in the toaster oven until it melts completely

Pull it out and let it cool and harden



Music: Sing a Rock Cycle Song

Sing this verse Laura wrote to the tune of "Oh My Darling, Clementine."

Sand and seashells on the bottom of the ocean turn to rock.
Water presses down and glues them.
Sedimentary shale and chalk.

Rocks sink lower, pressure squeezes, and inside the earth is hot!
Swirling, melding rocks like marble--
Metamorphic's what you've got.

Sinking deeper. Getting hotter. Stones turn liquid--magma shock!
A volcano is erupting—**RRRRROOOOOOOOAAAAAARRRR**—
Lava cools to igneous rock.



As you sing the song, point out your candy rock models and show images or real examples of the three kinds of rocks.

Creative Thinking: List It!

Pick another common object, like wood or paper. What can it be? Ask questions like: What could this be used for in each season? At different times of day? How does it help people? How can it hurt people? Do creative brainstorming and factual research to complete your list.

Art: A Parent's Favorite Pet

Have students create paper or real Pet Rocks. River rocks work well. Paint them with bright acrylic paints. Request donations of googly eyes, feathers, sequins, buttons, and more. Let students decorate, name, and display their Pet Rocks.

Language Arts: A Rocky Tale

Brainstorm with your students about the lives of their Pet Rocks. (If you didn't complete the Pet Rock project, have each student choose a real rock to write about.) Have students write a story of one day from the rock's point of view. This can be pure fiction, or you can incorporate research. Example: A student with basalt could write about the day he erupted out of a volcano and scared everyone.

Reader's Theater: Put on a Show!

Assign each "rockupation" to a student (there are 22 jobs, like "Volcano flow-er" and "Night glow-er"). Let students add props (maybe the Night glow-er turns on a flashlight). Read the book aloud, with the whole class reading the three "A leaf is a leaf..." sections and each student reading and acting out an individual rock job.

Art and Research: Create a Rock Hall of Fame

Share pictures and stories of some famous rocks with your students. For instance, you might share the Great Wall of China, Devil's Tower, the Sphinx, Mt. Everest, the statue of Lincoln at the Lincoln Memorial, Mt. Rushmore, Plymouth Rock, and the Rock of Gibraltar. Brainstorm "wonder" questions about these or other famous rocks, and then research to find answers to your questions. Create a Rock Hall of Fame display with pictures and information about the various rocks.

Reading: Rhyme Time!

Point out the rhymes in *A Rock Can Be...* On the board, choose a word from the book ("bone" is an easy one to start with) and brainstorm a list of rhyming words. Depending on students' ability level, discuss the various spellings used to make the same sound. You might divide the class into small groups and assign each one a word (feel free to leave off the "-er," as in "flow," "skim," etc.). Have them brainstorm words and draw pictures of the words. Then they can share them with the class. With older students, you could start with a more difficult word like "marker." Look for words that rhyme with "mark" and see if you can turn them into rhyming words by adding an "-er" ending.

Movement: Play Hopscotch

Outside, draw several hopscotch courts with chalk. Remind students that chalk is a kind of rock! Using rocks as markers, break into small groups to play hopscotch. Challenge students to share a rock fact or a kind of rock on each turn.

Cooking: Make "Stone Soup" Trail Mix

Share the story of *Stone Soup* with your students. Then tell your students you're going to "cook" a "stone soup" trail mix as a class. Ask each student to bring in 1 cup of an ingredient to share. Get a huge mixing bowl or large popcorn tin and a big spoon. Pour in your ingredient (perhaps 2 cups of granola) first. Invite students to come up one at a time and share their ingredients into the soup. Each student stirs the soup with the big spoon. After all the ingredients are stirred together, scoop out a small cup for each student to snack on. Package any leftover mix into small snack bags to share with visitors to the classroom, keeping alive the theme of sharing with community and strangers.

Possible ingredients (you can assign or let it be random!):

- Dried fruit bits (apples, berries, peaches, etc.)
- Raisins
- Small broken pretzels
- M & M's or chocolate chips
- Mini-marshmallows
- Coconut
- White chocolate
- Popcorn
- Cheese crackers

Make a Can Be... Book!



A Rock Can Be... is a great mentor text for word choice, text structure, inferring, giving information through illustrations, and text features. Individually or as a class, create a Can Be... book. An animal or something basic, like a box or a thread, works great.

First, brainstorm the different things this object could be used for. Think outside the box! Remember, no answer is wrong. Depending on your students' age level and the depth you want to go to, this could be a creativity project or a research project.

Next, choose the strongest answers to be part of your Can Be... book, modeled after *A Rock Can Be...*

Then let each student or group create a page that includes a picture, the phrase telling what the object can be (don't worry about rhyming!), and a short explanation in prose. See the template at the end of this teaching guide.



5th-graders' books at Milaca (MN) Elem.

Once the writing and drawing are complete, bind each book in the method of your choice. Here are 5 simple ideas: <http://tinyurl.com/n4lpzo9>.



Or skip my template and create a cool graduated-page book: <http://tinyurl.com/n3xkdbm>. Arrange your pages so that with the book closed, you can read all of the things a Whatever Can Be..., and then when you lift each flap, you see the picture and explanation.

See <http://www.laurasalas.com/blog/for-teachers/can-be/> for a more detailed lesson plan for this project, including templates.

My Pet Rock

