

Book Reviews

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The following book reviews were written by NCSTA members and teachers. We hope to make this an ongoing feature in The Science Reflector. If you are an author who has a book you would like reviewed or a teacher who would like to write a review, please [contact Beth Harris](#).

[Challenging Science and Literacy Activities for K-9 Students: The Cricket Chronicles](#)

[The Sheltering Cedar](#)

[Cool Chemistry Concoctions: 50 Formulas that Fizz, Foam, Splatter and Ooze](#)

For more reviews and correlated activities check out the [Science Literature Database from UNC-Wilmington](#).

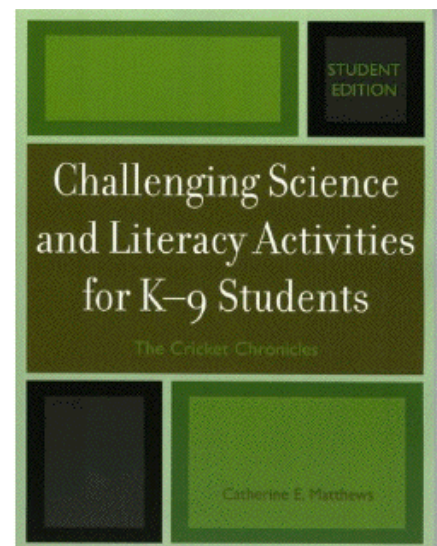
Challenging Science and Literacy Activities for K-9 Students: The Cricket Chronicles

Catherine E. Matthews, published by Rowman and Littlefield Education, 2006,
ISBN 9781578863587 or 1578863589 – Student Edition
ISBN 9781578864966 or 1578864968 - Teacher Edition

The Cricket Chronicles employs the study of crickets to help students learn about different science concepts such as naming conventions, habitats, anatomy, predators, and prey. It also has integrated activities dealing with language arts such as reading books related to crickets and writing stories about crickets. In addition it also has activities related to social studies such as ethics, learning about crickets in the United States as well as the rest of the world. At the end of the book students can use their science, language arts, and social studies skills to present a summative report about crickets.

The Cricket Chronicles also includes a teacher's edition which helps the teacher prepare for the various activities detailed in the student edition. It lets teachers know how to actually catch the crickets, what to do with them when you are finished, the objective for each activity, the various materials needed for activities, the time that is needed to carry out the activity, any necessary background information, and other possible activities. It is very helpful and it is like having a mentor by your side.

The author states that the book is suitable for elementary and middle school students. In terms of the North Carolina Standard Course of Study, I see it as only fitting directly in the sixth grade science level under competency goal seven which relates to population dynamics and to lesser extent under competency goal four which deals with the cycling of matter. I can see how it could relate to all middle school grades in terms of competency goal one which deals with scientific inquiry. *The Cricket Chronicles* would be a great resource for an extracurricular middle school class that could supplement the middle school curriculum. I see the greatest benefit for *The Cricket Chronicles* being at the elementary level where a homeroom teacher could use the book in its entirety and easily integrate science, language arts, and social studies.



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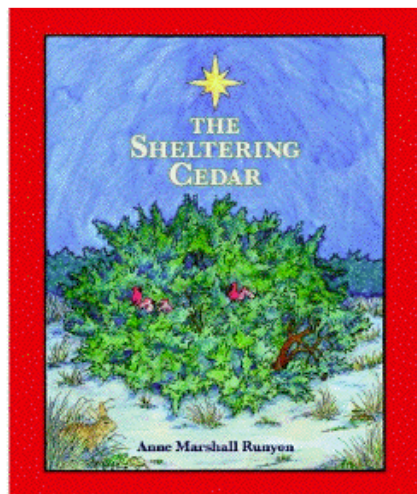
The Sheltering Cedar

Anne Marshall Runyon, Portal Press, 2008,
ISBN 978-1-933454-02-3 or 2007926202

Author's website: <http://www.annerunyon.com/>

Website to download paper sculptures: <http://www.theportalpress.com/cedar.htm>

This colorful picture book belongs in every Kindergarten and First Grade classroom in North Carolina. It tells the story of a red cedar tree that shelters various animals during a Christmas Eve nor'easter on Ocracoke Island. It's a perfect fit to Kindergarten science competencies focusing on the behaviors of common animals (Goal 1) and observation of weather events (Goal 2). First grade teachers will also find the book useful in illustrating local environments that support the needs of common North Carolina plants and animals (Objective 1.04). At the end of this simple but beautiful story, a human family demonstrates how to care for animals by putting out appropriate foods for wild birds. Domesticated animals are also shown throughout the book.



Many teachers will recognize Anne Runyon's artwork from *Wildlife in North Carolina* magazine where she is a regular contributor to the Wild Notebook section for children. Anne's first picture book features her signature watercolors, which are rich in detail and have a childlike quality. Young readers will enjoy exploring the illustrations and imagining themselves in each scene. Although some marine animals are shown, the main characters are common animals seen across North Carolina. Thus, children who have never visited the ocean can easily relate to the story. Inside the sheltering cedar are five cardinals, four ladybird beetles and three egg cases of praying mantises. And, below the tree – "Two toads, cold and slow, rest among the roots, buried in the soft, cool sand." The text, averaging one sentence per page, is sparse and poetic.

The last page of the book provides information on red cedar trees with illustrations of male and female cones. Since cedar trees are common, teachers can bring in samples of needles and cones for children to touch and smell as they read the story. The book also provides a website where paper sculptures and other activities related to the story can be downloaded free. I was enthralled with the paper sculptures and spent one morning happily creating all three. The sculptures require some fine motor skills that might be beyond the average Kindergarten student, but would be appropriate for parent and child working together.

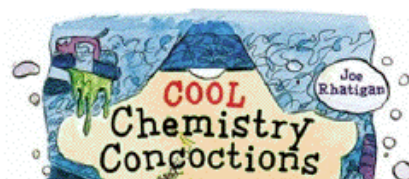
Anne Marshall Runyon lives in Garner, North Carolina, and her family owns a home on Ocracoke Island. She is intimately familiar with North Carolina habitats and wildlife. Her artwork embellishes educational exhibits at the N.C. Zoo, the N.C. Museum of Natural Sciences, Wake County Parks and North Carolina State Parks.

Marti Kane
Centennial Campus Center for Wildlife Education
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Cool Chemistry Concoctions: 50 Formulas that Fizz, Foam, Splatter and Ooze

Joe Rhatigan and Veronika Alice Gunter, illustrated by Tom LaBaff, Lark Books, 2007
ISBN 1-57990-882-9

Cool Chemistry Concoctions was written for the middle school student, appealing to their inquisitive and inventive minds, while addressing North



Carolina eighth grade science competency goal four. This book could be used by teachers and students alike.

Rhatigan and Gunter bring *Cool Chemistry Concoctions* to life introducing the main characters, Jessie and Tidy Tim. Like most good science books, it begins with an introduction to chemistry and basic lab rules. Basic Chemistry is then explained through examples that might be found in a student's room such as old pizza and dirty socks. Science vocabulary is introduced, making connections with vocabulary while keeping within the context of Jessie and Tim.



Fifty-five different concoctions are presented in *Cool Chemistry Concoctions*. Each concoction lists the materials needed and procedures to follow. Most importantly, the concoctions come with simple explanations as to why and how they work. This could be very helpful for students and teachers needing basic information concerning specific topics.

Real world illustrations are dispersed throughout the book. For example, why the Egyptians used salts to preserve bodies, and how, in the 1800s, soap made of animal fat and wood ashes worked were used to enhance and support the concoctions. Each example was accompanied by its history, and why it works. These examples show the relationship between science and everyday life. The reader can gain an understanding of how chemistry has been constant throughout history and therefore can be replicated today.

Cool Chemistry Concoctions is well organized from the catchy introduction to the index of concoctions. This book should be part of every eighth grade science teacher's resources. The information contained within, when used with the North Carolina state competencies, can enhance the teaching of chemistry. Students do not just need to learn chemistry; they need to understand it and be able to apply it to daily life. The concoctions in this book make basic chemistry concepts interesting and fun. The more students are engaged and enjoy learning, the more they will retain.

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