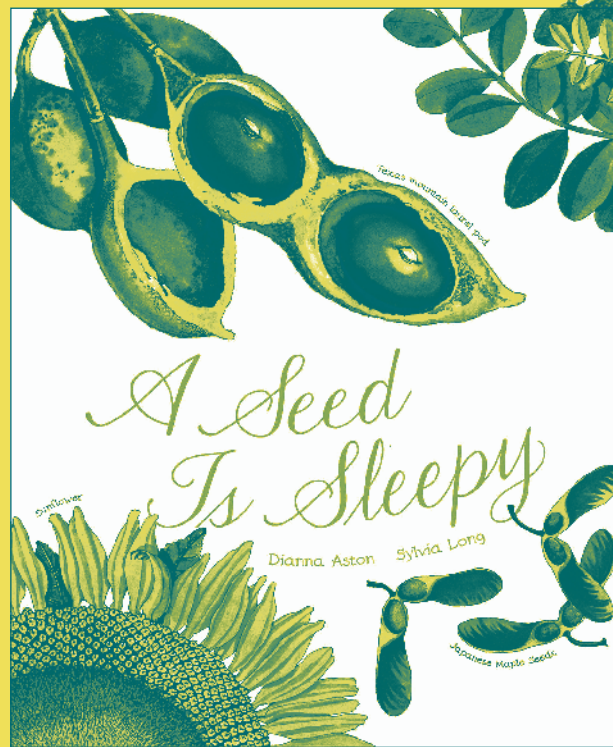
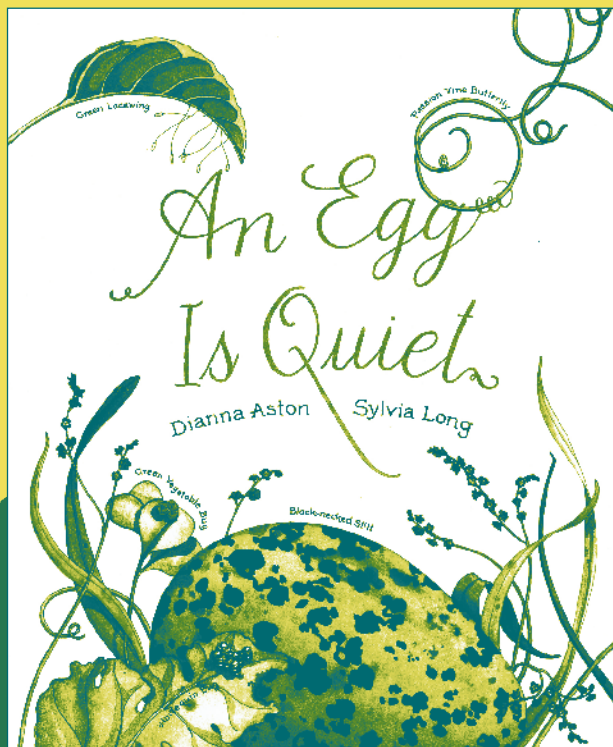




AN EGG IS QUIET A SEED IS SLEEPY

TEACHER'S GUIDE

GRADES **K-5**



chronicle books

INTRODUCTION

A SEED IS SLEEPY and AN EGG IS QUIET

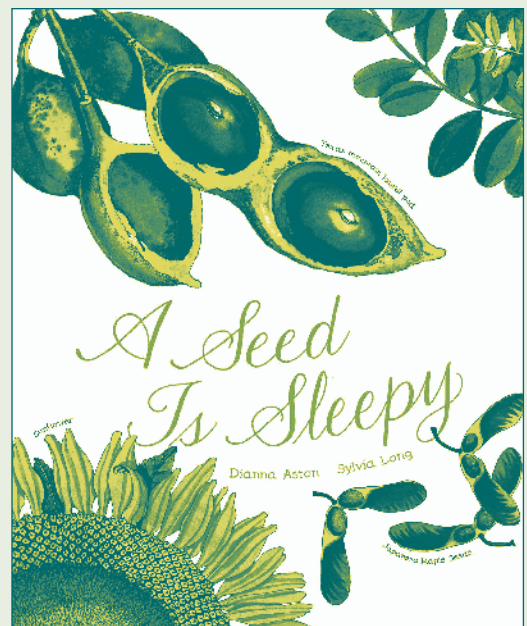
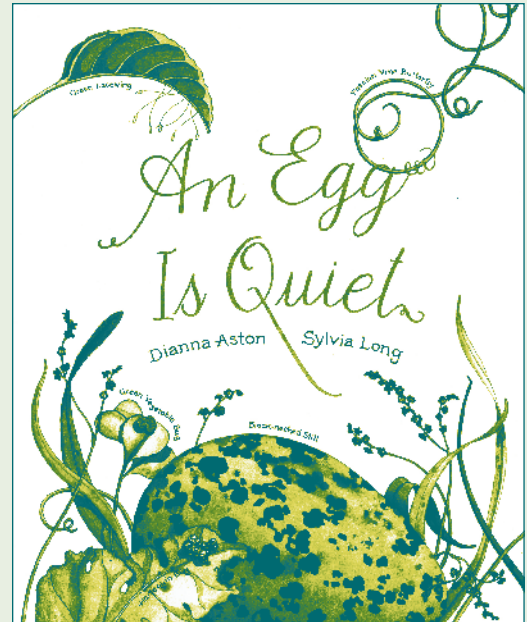
By Dianna Hutts Aston

Illustrated by Sylvia Long

Dear Teacher:

This pair of beautiful picture books opens the door for science connections, language arts extensions, art projects, reading skills building, and more. The books encourage curiosity and exploration of the natural world, while also reinforcing the pleasures of reading in kindergarten through fifth-grade classrooms, offering various levels of learning.

We've provided activities for both books, together and individually. We invite you to step inside the beautiful world presented by Dianna Hutts Aston and Sylvia Long—and, please, bring all your students along.





GENERAL OVERVIEW

THIS TEACHER'S GUIDE CONTAINS:

Pre-Planned Activities for Students

1. Reading
2. Language Arts
3. Science
4. Art
5. Language Arts/Creative Writing
6. Social Studies

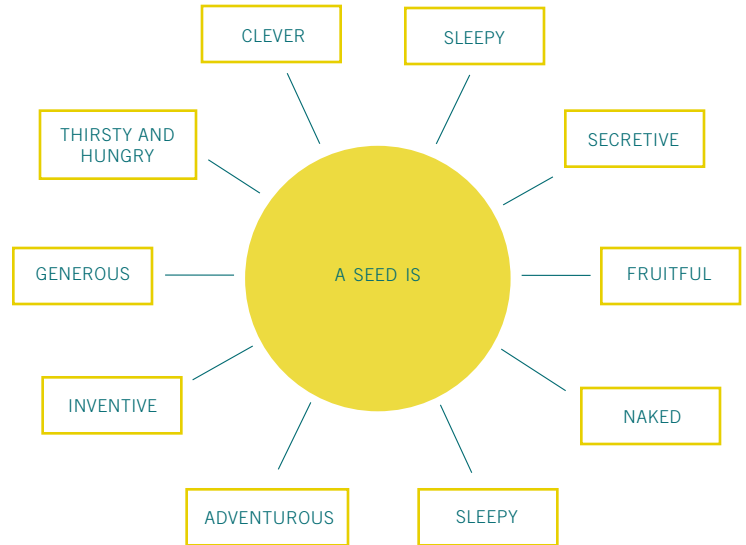
1 READING

Match the Details

Scientists are careful observers. They need to look and look again to test their observations. Reading, too, requires attention to details. For youngest readers of *A Seed Is Sleepy* and *An Egg Is Quiet*, this matching activity will support the careful paying of attention.

Each of the seeds pictured on the first two pages of *A Seed Is Sleepy* have a match in the plants pictured on the last couple of pages of the book. This is true, too, for the eggs shown on the first two pages of *An Egg Is Quiet* and the animals depicted on the last two pages of that book. Individually or as a class activity, have your kindergarteners or first graders examine the seeds or eggs and write the name of each on an index card. When every seed or egg has a card, the students should alphabetize the cards. Then they should look at the plants or animals. As they look at each one, they should go through the deck of cards, and put a check mark on it. One by one, they will connect each seed to a plant, each egg to an animal. They might also illustrate the cards with their own drawings of the seed or the plant, the egg or the animal.

The author, Dianna Hutts Aston, has told us ten things that a seed is and ten things that an egg is. Many of the words she chooses are poetic—metaphors more than literally true. Talk about the adjectives and what they mean as well as the pictures they create in your students' minds. What can your students add to the list? Brainstorm with them what they know about seeds and eggs. Add their descriptives to the list. You can use a graphic organizer like the one for *A Seed Is Sleepy* below. You can create the same organizer for *An Egg Is Quiet*.



2 LANGUAGE ARTS

Descriptive Language

Second and third graders are ready to appreciate figurative language, and this pair of books offers many opportunities for that.

A Seed Is:

- _Sleepy
- _Secretive
- _Fruitful
- _Naked
- _Big or small
- _Adventurous
- _Inventive
- _Generous
- _Thirsty and hungry
- _Clever

An Egg Is:

- _Quiet
- _Warm and cozy
- _Colorful
- _Shapely
- _Clever
- _Different sizes
- _Artistic
- _Textured
- _Fossilized
- _Giving



Bean



2 days



4 days



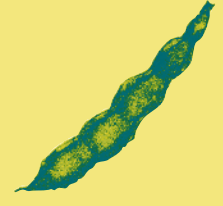
1 week



4 weeks



5 weeks



3 SCIENCE

Growing Seeds in Your Classroom

Science is all about experimenting, experiencing, and keeping good records. After reading *A Seed Is Sleepy* with the class, have the children make a list of what a seed needs in order to grow into a plant. For example, from the picture spread “a seed is clever,” they will see that a seed needs sunlight. Once they have their list, your second through fourth grade student-scientists can test this out by planting beans and other seeds under various growing conditions and in different planting media. They should make hypotheses of what they think will happen, record their observations, measure the growth or lack of growth of the seeds, test to see which hypotheses are correct, and then draw conclusions based on the results.

Brainstorm with them about how they can vary the growing conditions and planting media. Some examples are:

- Planting seeds in containers in soil with water and sunlight
- Planting seeds in containers in soil with water but placed in the dark
- Planting seeds in soil and sunlight but without water
- Planting seeds in a container with cotton, water, and sunlight
- Planting a seeds in a container just filled with water and placed in the sun

Each planting should be labeled carefully.

The children should fill out an experiment sheet for each of the plantings they make. The experiment sheet should contain:

- Name of planting
- Hypothesis (what I think will happen)
- Observations (what I saw and recorded)
- Conclusions (what I learned)

Lima beans are easy to use for this project, but your students might also try grass, zinnias, marigolds, or other flowering plants.

To the right is a sample record-keeping chart that you can reproduce for each student.

NAME OF SEED: _____

Seeds planted in soil, water, placed in dark		
Day	Growth in millimeters	Comments
Start Date:		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		

Seeds of the Food We Eat

Observation is a key to the scientific method. Your fourth and fifth graders are encouraged to be careful observers.

Make a list with the class of the many foods they eat that grow from seeds. Elicit from them what these foods are called: fruits, vegetables, and grains. Bring in as many examples as you can. Cut them open and have the class examine the seeds for size, color, texture, and shape. Everyone should contribute to completing the classroom chart below.

Foods	Color	Size	Shape	Texture
Apple				
Pear				
Green Bean				
Tomato				
Orange				
Squash				
Banana				

Foods to include (but not limited to) are:

Apple	Banana
Pear	Carrot
Peach	Potato
Green bean	Celery
Pea	Lettuce
Tomato	Orange
Squash	

The Parts of a Plant

Introduce your first or second grade class to the parts of a grown plant:

- Roots
- Stems or stalk
- Leaves
- Flowers
- Fruit

A good reference you can use for the parts of a plant can be found online at:

<http://www.mbgnet.net/bioplants/parts.html>

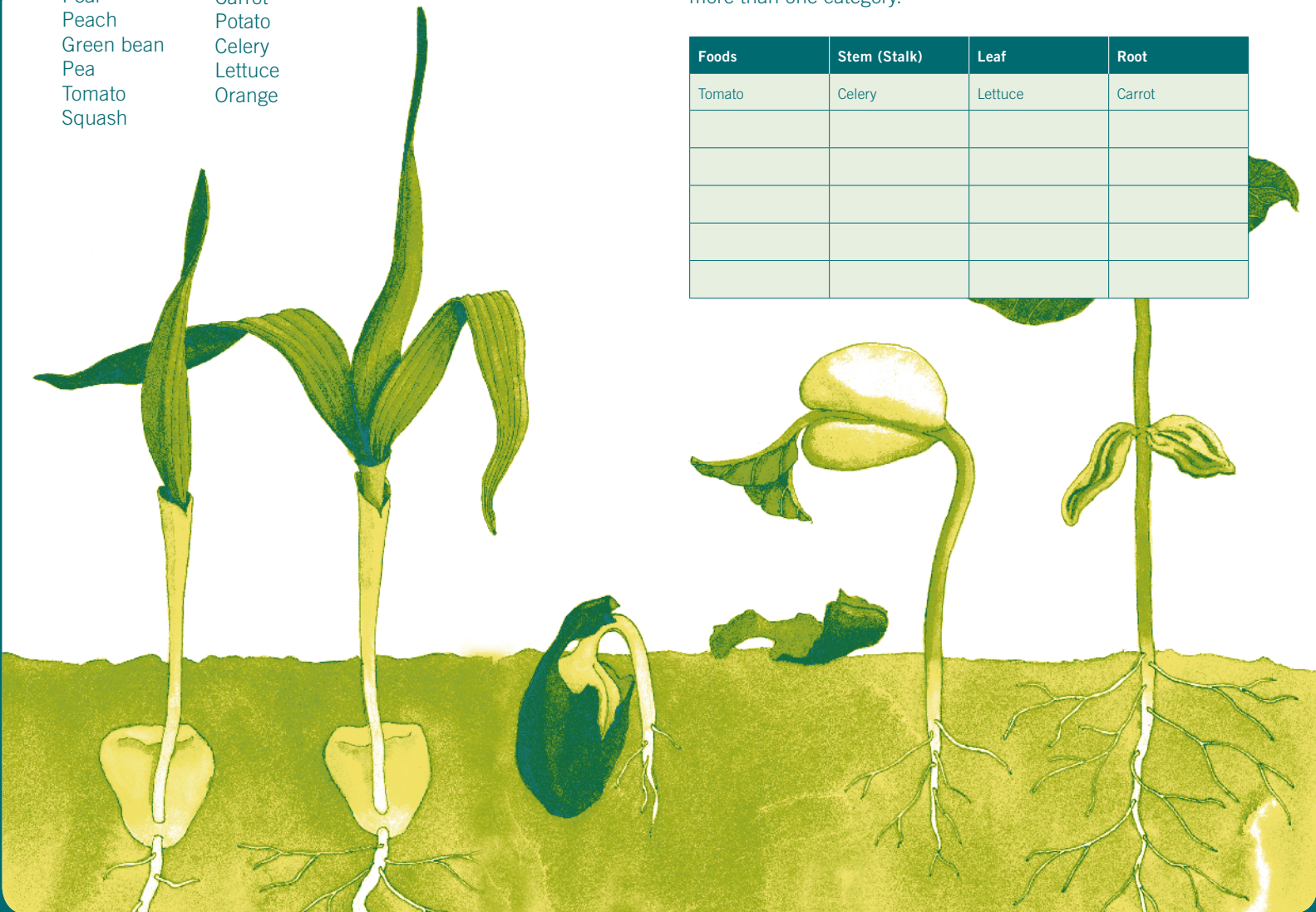
Your first and second grade students can also learn about the parts of a plant on an interactive Web site from the Howard Hughes Medical Institute at:

<http://www.hhmi.org/coolscience/vegquiz/plantparts.html>

Cut open a carrot, a celery stalk, head of lettuce, or a potato. Are there any seeds? Have the children come up with possible reasons why they can't find any seeds. Explain that different plants have different edible parts. Some are the fruit, some are the roots, some are the leaves, and some are the stalks. The children will only find seeds in the fruit part of the plant.

Have the children categorize the different foods according to where the edible form of the plant is. Some foods will be in more than one category.

Foods	Stem (Stalk)	Leaf	Root
Tomato	Celery	Lettuce	Carrot



An Egg Is Strong

In *An Egg Is Quiet*, your students learn that an egg “sits there, under its mother’s feathers.” Why can a mother bird sit on its eggs without breaking them? Have the students discuss why they think the mother does not break her eggs. Then propose the question: Can six empty eggshells support the weight of three or four heavy dictionaries? Have the students make hypotheses about the answer.

Hypothesis A: Heavy dictionaries will break the eggshells.
Hypothesis B: Heavy dictionaries will not break the eggshells.

Test these hypotheses with this experiment:

MATERIALS

- Six large eggs
- Scissors
- A cup
- Three to four dictionaries
- Masking tape

PROCEDURE

_Using a serrated knife carefully cut about a dime-size hole off the other end of the egg.

_Shake the yolk and the egg white into a bowl and set it aside. (If you have the facilities, you can use the eggs to make a giant omelet for the children.)

_Wash the shells with warm soapy water and let them dry.

_Once the egg is completely dry, apply a small piece of masking tape over the hole to cover it.

_Arrange eggshells in a square and put one dictionary on top. Does it break the eggs? Before you continue allow each student the opportunity to change his/her hypothesis if he/she wishes.

_Place the second dictionary on the eggs. Did the eggs hold up the dictionaries? Again ask the students if they want to change their minds.

_Continue placing dictionaries on the eggs. After all of them are sitting on top of the eggs, what do the children observe? They should see that the dictionaries do not break the eggshells.

Discuss with them why the eggs don’t break. The arc-like shape of the egg helps support the weight of the dictionaries. The shape of the egg is the reason it doesn’t break when a bird sits on it. Explain to the class that this is exactly the way scientists work: they make a guess or hypothesis about something; they try it out; and then they change the hypothesis if their observations prove otherwise.

Another important aspect of the scientific method is keeping records. Your students should record the experiment using this format:

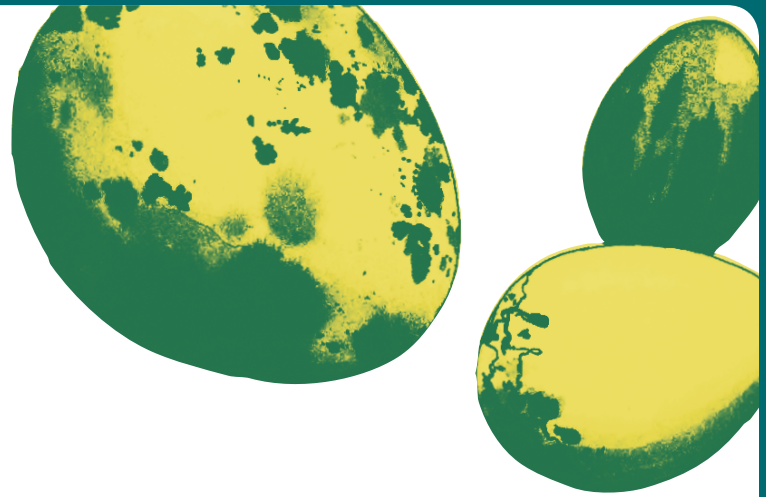
TITLE OF EXPERIMENT:

HYPOTHESIS:

PROCEDURE:

OBSERVATIONS:

CONCLUSION:



4 ART

Mexican Confetti Eggs

Don’t throw the eggshells away. When the experiment is finished recycle them into an art activity. The class can use the shells to make colorful Mexican confetti-filled cascarones. Have your students access the Internet to find out what cascarones are and what Mexican and Southwestern American children do with them. Some Web sites to look at:

<http://www.pbskids.org/zoom/activities/do/cascarones.html>

MATERIALS

- Eggshells from the science experiment plus additional eggshells for each child
- Colored tissue paper
- White glue
- Mixing container
- Water
- Scissors
- Plastic spoon
- Masking tape
- Colored construction paper
- Two egg crates

DIRECTIONS FOR EACH EGG

_Cut up or tear the colored tissue into 1-inch by 1-inch squares and set them aside.

_Carefully remove the masking tape from the edge of the eggshell.

_Cut up colored construction paper into small ¼-inch by ¼-inch squares to make the confetti.

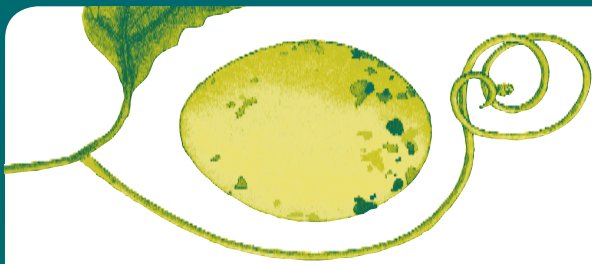
_Fill the eggshell about half-full with the confetti and replace the masking tape.

_Make a diluted solution of white glue and water (half-glue and half-water).

_Paint the white glue onto the entire eggshell and cover it with the cut-up colored tissue paper overlapping the paper until the entire egg is covered.

_Place in the egg crate to dry.

When the eggs are dry the children will have authentic cascarones. Don’t break them indoors because you’ll make a mess. Go outside and have some fun!



5 LANGUAGE ARTS/CREATIVE WRITING

Just Imagine...

What is it like to hatch from an egg? If only birds could talk!

Have your students imagine they are bird chicks ready to hatch out of an egg. What are they thinking? How are they going to get out? What are their impressions about their surroundings? Go online and observe with the class the short video of a chick hatching from the Web page of the Chicago Museum of Science and Industry, at http://www.msichicago.org/exhibit/chick/chickmov_lrg.html. Then have them each write and illustrate stories about the experience from the hatchling's point of view.

6 SOCIAL STUDIES

Food Preparation and Sharing

Your students have learned that an egg is quiet, artistic, and giving. They also know that eggs are a source of food for people, and that they are often delicious!

Students as young as kindergarteners and as grown up as fifth graders will enjoy sharing their favorite family egg recipes with their classmates. Ask your students to bring in family recipes for egg dishes from omelets, frittatas, egg salads, and custards to cakes, muffins, and some specialty breads, since eggs are necessary ingredients for many baked goods.

Gather the recipes your students bring into an EGGS-TRAORDINARY COOKBOOK by the families of your class. Parents, grandparents, and others might want to contribute stories of egg recipes from their native countries.

Have a publishing party for your recipe book. Invite the families of your students and serve some of the egg dishes.

AWARDS AND HONORS

Awards and Honors for *An Egg is Quiet*:

Publishers Weekly, ★starred review

Kirkus Reviews, ★starred review

AAAS/Subaru SB&F Prize for Excellence in Science Books

The New York Public Library's 100 Titles for Reading and Sharing

Texas Library Association's 2x2 Reading List

Children's Book Sense Pick

Praise for *A Seed Is Sleepy*:

"This introduction to seeds and plants uses simple sentences that will stretch children's minds and imaginations...a wonderful addition to units that focus not only on seeds and plants, but also on writing and the language arts."

—★ *School Library Journal*, starred review

2007 Growing Good Kids—Excellence in Children's Literature Award (sponsored by the Junior Master Gardener Program and the American Horticultural Society).

ABOUT THE AUTHOR OF THIS GUIDE

This guide was prepared by Clifford Wohl, Educational Consultant.

For more activities and a conversation with Sylvia Long and Dianna Hutts Aston visit:
<http://www.chroniclebooks.com/EggSeed/>

To request information on the author's availability for events or to request promotional materials, please e-mail:
kids@chroniclebooks.com



Dianna Hutts Aston



Sylvia Long

ABOUT THE AUTHOR AND ILLUSTRATOR

Dianna Hutts Aston spends a lot of time in her backyard looking for new eggs and investigating seeds often with the help of her children, James and Elizabeth. She lives in Texas. Her previous books include *When You Were Born*, *Loony Little*, *Bless This Mouse*, and *Mama Outside, Mama Inside*.

Sylvia Long is the illustrator of many best-selling books for children. Ms. Long's detailed paintings are inspired by her love of animals and the outdoors. She lives in Scottsdale, Arizona. Her previous books include *Sylvia Long's Mother Goose*, *Snug As a Bug*, *Ten Little Rabbits*, and *Alejandro's Gift*.