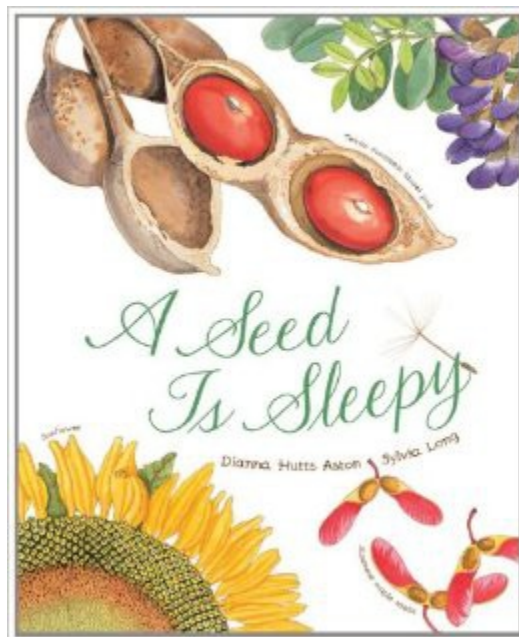


**Literature Guide for Dianna Hutts Aston and Sylvia Long's**

**A Seed is Sleepy**



*By Robin M. Huntley*

## Summary

Filled with beautiful, intricately detailed illustrations of fascinating seeds from around the world, A Seed is Sleepy is a visual treat. Paired with rich adjectives that succinctly describe the unique and interesting qualities of a wide variety of seeds, the watercolor illustrations give the book an almost guide-like quality, allowing readers to examine the fine detail of each seed depicted. Readers of all ages can easily fall in love with the book which, rather than telling a story, focuses on teaching those who peruse its pages about the life cycle of seeds.

Not your average seeds-to-plants life cycle book, A Seed is Sleepy includes seeds familiar to American readers like dandelion, sunflower, pumpkin, and corn, and includes many rare and/or unfamiliar seeds from far-flung locales, including monkey's comb, Guyanese wild coffee, hog plum, and the extinct date palm. The depth with which the science of seeds is considered within the book makes it appealing to readers of literally any age – even adults will love it!

Additionally, within the pages are three separate stories and three levels of depth with which to read. Large, swirling cursive crosses the pages, introducing each spread with a single descriptive sentence; young readers can easily understand these sentences and the length of the story when read in this way fits the attention span of a young reader well. Many pages also include a secondary smaller sentence or two (also written in cursive) to explain the meaning of the adjective included in the page's larger text. When seeds are described as secretive, for example, readers can read an almost footnote-like sentence that explains that seeds do not reveal themselves too quickly – further explaining the word choice and teaching readers the meaning of what may have been an unfamiliar vocabulary word. Finally, older readers and/or those using the story as a source of scientific information can read a third piece of writing that explains the science behind the quality described on each spread. The secretive seed pages, for example, include small text that explains that seeds wait anywhere from a few months to an entire decade before sprouting.

The detail with which seeds of many types are explained makes A Seed is Sleepy ideal for use

as a science text rather in addition to its role as a piece of literature. While the book doesn't include an index for locating specific species within its pages, its illustrations can serve as a reference for learning about the shape, size, and habits of nearly 40 different fascinating seeds.

A Seed is Sleepy is a valuable resource for learning about science, art, and language. Used as a catalyst for investigations of plants and seeds, A Seed is Sleepy could inspire a wide variety of activities and expeditions; used as an example of great writing, A Seed is Sleepy could inspire explorations of interesting vocabulary and organizational structures for writing. The engaging nature of the book's pages make it ideal for sparking learning of any kind!

### **Critical Thinking Questions**

The questions listed are meant to be used to spark discussion and curiosity amongst readers of A Seed is Sleepy. The questions can (and should) be asked while the book is being read, rather than after readers have made their way through the entire book. The questions will help readers to make close observations, articulate their thoughts, and use appropriate descriptive language. Additionally, the critical thinking questions will help readers to process scientific information presented within the book.

- Look at the seeds on the book's front end pages. What do the seeds on these pages have in common? What is different between them? Have you seen any of these before?
- Compare the seeds to the plant they'll grow into (using illustrations inside the book or the plants on the final end pages). Do the plants look like you imagined they would? Do they have any similarities to their seeds?
- Why do you think most seeds grow inside a protective covering? What advantage might that give them in nature?
- Consider the seeds of an evergreen. Why might these trees not need to rely on protective coverings for their seeds?

- Some seeds have special qualities that make it possible for them to travel once they have separated from their plant. What seeds in the story can do this? How do you know?
- Which of these seeds are edible, or are used to grow food for humans?
- Compare your own life cycle to the life cycles of various seeds shown in the book. Which seed are you most like?
- The book describes seeds as being clever, but they don't have brains. What does it mean if something that cannot think is clever?
- Do all seeds need the same conditions in order to grow? Are there certain conditions that all seeds need in order to grow?

### **Mini-Lesson**

Designed with 8- and 9-year old readers in mind, this mini-lesson is focuses on both science and language skills. Students will combine their ability to make close observations with their knowledge of vocabulary (and ability to use dictionaries and thesauri) in order to learn about the specific qualities of seeds and to acquire new vocabulary.

### *Seed Sort*

- 1.* The first portion of this activity can take place a day in advance in order to shorten the lesson's length. Take readers outside to search for seeds. This is is an especially good activity during the fall and early winter, when plants are dead or dying and have dried, making their seeds not only obvious but easily accessible. Readers should collect as many different kinds of seeds and/or seed-holding pods as possible. Readers can also spend time indoors collecting seeds from foods, and might choose to add leftover seeds from gardening projects as well. The wider variety of seeds found the better.

2. Explain to readers that they will be practicing sorting seeds based on their qualities. They will need to look closely at each seed in their collection, and will be using the adjectives included in the book to create their seed categories – sleepy, secretive, fruitful, naked, adventurous, inventive, generous, ancient, and clever. (Note: there are additional adjectives, such as thirsty and awake, that could be used for the activity if younger readers or readers working to acquire English language skills are participating.)
3. Before sorting, students should look up each adjective from the story in a thesaurus in order to generate a short list of words that have related meanings (3-5 is sufficient). Then, students should look up these new words in a dictionary (if necessary) in order to understand their meaning. These newly acquired words, along with the original, will dictate which seeds belong in which category.
4. Readers should begin to sort their seeds into categories. Sorting should be done slowly and carefully, and sound decision making may require that some seeds and/or seed pods are dissected so that their insides may be revealed. This will be especially useful for finding specific seeds to represent an adjective like “fruitful,” which technically applies to all seeds. A fruitful seed might be one that looks like it has lots of potential, or a pod that is filled with a great many seeds.
5. After all seeds have been sorted, readers should choose one category to zoom in on. They will consider the seeds that they sorted into the category, and should reflect on why they chose to place them there. Notes can be made in order to keep track of thoughts.
6. Readers can create a visual to explain their thought process, emulating the style of A Seed is Sleepy. Drawings can be done in pencil, then colored with watercolors in order to truly echo the book. On a large sheet of paper, readers should draw and label each of the seeds in their chosen category (this may require the use of field guides). Then, they can add text to their illustration in order to share the adjectives that describe the category and to explain how those

words match the seeds that have been included.

### **Extension Activities**

Each of the following activity suggestions are designed to support readers in not only deepening their understanding of the book, but in connecting the information shared within its pages to the world around them. Readers can use the activities outlined here in order to make their studies of a book written generally about a broad subject place-based and specific to their own lives. Loosely written so as to allow for adaptability, the activities have been designed with readers of many ages in mind – many activities are marked with a specific age group, but all can be adapted for use with readers of any age.

#### *Fibonacci (10+)*

Explore the Fibonacci sequence and the Golden Ratio in order to explore math and nature simultaneously. Readers can explore the theory behind both concepts, and can begin to wrap their minds around the idea that math is a language that describes the world, rather than the world being an expression of math. The Fibonacci sequence describes the numerical pattern in which petals, seeds, and seed pockets grow, while the Golden Ratio describes the exact placement of each of these things. Searching for nature treasures such as pine cones and sunflower heads can lead to observation of a real-life example of this genius evolutionary phenomenon which allows plants to pack seeds into their cones, pods, and flowers as efficiently as possible!

For support in exploring Fibonacci and the Golden Ratio, look to Hilltown Families' archived post, *Fibonacci Sequence and Golden Ratio Drive Nature-Based Education* (<https://hilltownfamilies.wordpress.com/2014/07/21/fibonacci-sequence/>)

#### *Seed Web (5+)*

Much like a food web, a seed web explores the adventures that a seed goes through during its lifetime. The most entertaining and involved seed webs will be ones in which the seeds considered are edible, either by humans or, more interestingly, by animals. Blueberry seeds, for example, grow in a blueberry in a barren and they are perhaps eaten by a bear who, in turn, deposits the seeds in a scat pile in the woods where eventually they grow into a new cluster of bushes. Once a seed's life has been followed through a web from start to finish, begin to consider other ways in which seeds of the same type could carry out their own lives – what else might eat them? Where might they end up? What if there's a human farmer involved who picks them and sells them to a grocery store many states away? All of these questions (and more!) can be considered in order to create a complex seed web that connects to many other bigger concepts.

### *Seed Museum*

Collect seeds from plants found in the local landscape in order to create a seed museum! This activity is best when done in the fall, when the plants themselves are preparing to let go of their seeds. Dry seeds and seed pods will retain their color, shape, and size best after being collected, but green (or otherwise not yet dried) seeds and pods can be collected as well, and can be observed throughout their process of drying. Seeds should be identified, put into display containers, and labeled with their common and scientific names, along with the location in which they were found and the date when they were collected. The best ways to display seeds in a museum are glass jars, small plastic baggies (re-used is best), clear plastic recycled food containers, and magnifying “bug boxes.” Some flat seeds can be displayed inside of old picture frames, with their name, location, and date written on the matting. Another method of displaying and preserving seeds is putting them inside contact paper or packing tape, but this method can sometimes lead to the seeds eventually breaking down due to chemicals in the adhesive.

### *Seed Bank*

Collect seeds from edible plants (wild or cultivated), dry them, and create your own seed bank! Not only is the creation of a seed bank a fantastic way to learn about the seeds that grow our food, but it's a big step on the path to self sufficiency and community resiliency. Seed banks help to ensure that food can be easily accessible in the future, and are also used to help preserve rare and heirloom varieties of fruits and vegetables. While a home seed bank doesn't have to be fancy, it can be quite extensive! Challenge yourselves to collect as many varieties as possible, and perhaps learn about the many wild edibles available in the local landscape in order to make your bank grow!

### *Seed Snacks*

Visit a local grocery store's bulk section and make observations about the types of seeds that are sold there. While some seeds are clearly marked as being such (sunflower, chia, flax), other seeds aren't quite so obvious (chick peas and rice). Explore the many different types of edible seeds, and purchase a small amount of a few different kinds of seeds to try at home. Choose seeds that aren't familiar, or varieties of familiar seeds that you haven't tried before (new beans or grains, for example). Research where in the world it is that each of these edible seeds come from, and learn about the process through which the seed came to your grocery store and then to your mouth.

### *The Art of Illustration*

Using [A Seed is Sleepy](#) for inspiration, set out into nature for some plein air art time! Gather interesting nature treasures – seeds or otherwise – and explore them thoroughly. Use watercolors, just like in the book, to create illustrations of each of your treasures. This activity can be used to encourage readers to look closely, and to explore a new artistic medium.