

Read-Aloud Collections

# The Guidebook

Grades 1-2

Plant Life

SAMPLE

PLANTS

Updated Edition

2.0

 SCHOLASTIC



## Dear Parents and Teachers,

At Scholastic, we want to be your go-to resource for building the knowledge base children need to succeed. We've had the pleasure of working with very talented teachers and librarians to develop these curated collections, which cover many topics, such as science, social studies, literature, art, music, and even social themes, across grade levels.

**Why is reading aloud so important?** Children's ability to understand content through listening outpaces their comprehension through reading from infancy to middle-school age. Therefore, by reading aloud to children daily—without burdening them with decoding words on a page—you're able to help them learn more about interesting topics and increase their in-depth knowledge.

**Why read more than one book on a topic?** By listening to these topic-centric books read aloud in the recommended sequence, children gain deeper knowledge and repeated vocabulary exposure, which leads to accelerated vocabulary growth and increased reading comprehension. And by hearing fun, fictional reads interwoven with the nonfiction content, children remain engaged while important content is reinforced.

**Why include activities?** These activities not only extend children's learning of each collection's content, they are built to help teachers meet the Common Core State Standards and the Next Generation Science Standards. But most importantly, they're fun and cross-curricular, incorporating art, poetry, and music for a rich, integrated learning experience.

### **Why more than one collection on the same topic in each grade?**

The more children learn, the more they want to know! These collections are age-appropriate and build content coherently within a grade and from grade to grade. Studies show that children who have not had nonfiction read to them early on may be turned off by it, and their ability to understand complex texts—a skill important for college readiness—can be greatly hindered.

### **Why should teachers and parents both use Knowledge Quest!?**

As a working parent, it's hard to find time to regularly get books from the library, let alone find the best books. And if you are a home-schooling parent, high-quality books are an even greater need. As a teacher, it's hectic to juggle all the demands of your classroom while meeting the pressures of Common Core. That's why we've thoughtfully built these collections to meet the needs of both parents and teachers!

We hope your children will enjoy the Knowledge Quest! Read-Aloud Collections as much as we do!

Sincerely,

Vice President, Program Development Strategy





# Plant Life Contents

SAMPLE TABLE OF CONTENTS



<b>Introductory Note</b> .....	4
<b>Prior Knowledge</b> .....	5
<b>Read-Aloud Collection: Plant Life</b> .....	7
<b>Learning Goals &amp; Content Objectives</b> .....	8
<b>Recommended Vocabulary for Explicit Discussion</b> .....	9
<b>Read-Alouds</b> (in recommended sequence)	
What's Alive? .....	10
A Tree Is a Plant .....	11
Johnny Appleseed .....	12
This Is the Sunflower .....	13
What Do Roots Do? .....	14
Bob and Otto .....	15
Flip, Float, Fly: Seeds on the Move .....	16
The Dandelion Seed .....	17
These Bees Count! .....	18
Zinnia's Flower Garden .....	19

<b>Activity Bank</b> .....	
Quest Questions .....	
Plant Safari .....	24
Read-Aloud Image Review .....	25
How Do Seeds Travel? .....	26
Earthworm House .....	28
Plant Food Sources .....	29
Sayings Corner .....	30
Book Walk .....	32
Living and Nonliving Things .....	33
Plant Systems .....	34
Art Corner .....	35
Let's Write! .....	36
Act It Out! .....	37
Plant Needs Experiment .....	38
Plant Parts and Photosynthesis .....	40
<b>School-to-Home Connection</b> .....	43
<b>Supplemental Trade Book List</b> .....	45
<b>Read-Aloud Collections for Upcoming Grades</b> .....	46
<b>Reward Certificate</b> .....	47



# Plant Life

## Learning Goals & Content Objectives

### The Big Idea

Plants and animals rely upon each other for survival. Different environments produce a variety of unique plants, but most plants share the structural similarities of roots, stems, and leaves. Plants make their own food through photosynthesis, and in the process, release oxygen for animals to breathe. Bees play an important role in plant reproduction, and earthworms help create nutrient-rich soil for plants to thrive in. Seeds travel in many ways with the help of animals, wind, and water. Plant growth is affected by seasonal changes: many plants sprout in spring, grow throughout summer, and are ready for harvest in autumn.

### Content Objectives

By listening to these books being read aloud, and by taking part in the activities listed within this guidebook, children will be able to:

- Distinguish between living and nonliving things
- Explain that plants need air, water, nutrient-rich soil, and sunlight to grow and reproduce
- Identify different plant parts and explain their specific functions
- Explain how green plants make their own food using sunlight, air, and water
- Describe the life cycle of a plant (seed to seed)
- Describe the effects of the seasons on plant growth
- Distinguish between fruits and vegetables and identify the parts of plants that humans eat
- Describe how bees and other insects are important in the pollination of many plants
- Describe how earthworms benefit plants by creating healthy soil
- Recall that plants have adapted to grow and thrive in different environments (for example, cacti in the desert)
- Describe how seeds are dispersed and travel distances
- Recall that dead plants are absorbed back into the earth, providing nutrients for new plants
- Explain that plants are important to other living things because they provide food, shelter, and oxygen
- Describe the interconnected relationship between plants and animals
- Describe the life and contributions of Johnny Appleseed
- Demonstrate an understanding of the saying “Great oaks from little acorns grow” and the phrase “green thumb”



## Plant Life

# Recommended Vocabulary for Explicit Discussion

Some vocabulary is learned implicitly by repeated exposure through reading books on a related topic. However, it is also beneficial to explicitly discuss and teach a few words from each read-aloud.

Utilize these key terms chosen from this read-aloud collection in conversation and activities to build vocabulary and reinforce concepts.

abundant

bare

bark

beekeepers

blossoms

bouquets

branches

burrow

clusters

cycle

dandelion

dangle

delicate

die

digging

energy

flowered

fresh

gather

germination

grow

hives

honeycombs

living

moist

nectar

nonliving

orchards

parachute

patch

planting

ripe

root hairs

rootlets

roots

rotted

scattered

scents

seedlings

seedpod

settlers

soil

spread

sprouts

sunflower

taproots

trunk

tubes

worm



# Plant Life Activity Bank

The following activities reinforce the content from the read-alouds and applicable skills outlined in the **Common Core State Standards**. Choose from the activities below, in any order that suits your schedule and needs, to complement the read-aloud books in this collection.

KNOWLEDGE QUEST! Activities	Grade Level	Common Core State Standards						CCSS
		RL	RI	RF	W	SL	L	
Quest Questions pg. 23	1,2	1	1		8	2,5		
Plant Safari pg. 24	1,2					4,5	5a,5c,6	
Read-Aloud Image Review pg. 25	1,2	3,5,7	7			2		
How Do Seeds Travel? pg. 26	1,2		1,3,7		2,7,8	2,4,5		
Earthworm House pg. 28	1,2				7	4,5	6	
Plant Food Sources pg. 29	1,2					4,5	5a,5c,6	
Sayings Corner pg. 30	1,2,3	4,7	7				5a,6	
Book Walk pg. 32	1,2	5,7	5,6,7					
Living and Nonliving Things pg. 33	1,2					4	5a,5c,6	
Plant Systems pg. 34	1,2				7	4	6	
Art Corner pg. 35	1,2					4	6	
Let's Write! pg. 36	1,2				1,2,3 7,8			
Act It Out! pg. 37	1,2	2,3,7				4	6	
Plant Needs Experiment pg. 38	1,2				7,8	4	6	
Plant Parts and Photosynthesis pg. 40	1,2				7,8	4	6	

**RL** = Reading Standards for Literature

**RI** = Reading Standards for Informational Text

**RF** = Reading Standards for Foundational Skills

**W** = Writing Standards

**SL** = Speaking and Listening Standards

**L** = Language Standards

**#** = The standard number in CCSS



## Plant Life Activity Bank (continued)

The content children learn through the read-alouds and activities in this collection helps prepare them to meet the **Next Generation Science Standards (NGSS)**. The content objectives outlined for each read-aloud and the supporting activities in the Activity Bank address the disciplinary core ideas, as well as prepare children for the performance expectations of NGSS.

### Next Generation Science Standards **NGSS**

#### PERFORMANCE EXPECTATIONS

- K-PS3-1.** Make observations to determine the effect of sunlight on Earth's surface.
- K-LS1-1.** Use observations to describe patterns of what plants and animals (including humans) need to survive.
- K-ESS3-1.** Use a model to represent the relationship between the needs of different plants or animals (including humans) and the places they live.
- 1-LS1-1.** Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs.
- 1-LS3-1.** Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents.
- 2-LS2-1.** Plan and conduct an investigation to determine if plants need sunlight and water to grow.
- 2-LS2-1.** Develop a simple model that mimics the function of an animal in dispersing seeds or pollinating plants.
- 2-LS4-1.** Make observations of plants and animals to compare the diversity of life in different habitats.

#### SUMMARY OF DISCIPLINARY CORE IDEAS

##### **PS3.B: Conservation of Energy and Energy Transfer**

Sunlight warms Earth's surface.

##### **LS1.C: Organization for Matter and Energy Flow in Organisms**

Animals obtain food they need from plants or other animals. Plants need water and light.

##### **ESS3.A: Natural Resources**

Living things need water, air, and resources from the land, and they live in places that have the things they need. Humans use natural resources for everything they do.

##### **LS1.A: Structure and Function**

All organisms have external parts that they use to perform daily functions.

##### **LS3.A: Inheritance of Traits and LS3.B: Variation of Traits**

Young organisms are very much, but not exactly, like their parents and also resemble other organisms of the same kind.

##### **LS2.A: Interdependent Relationships in Ecosystems**

All organisms have external parts that they use to perform daily functions.

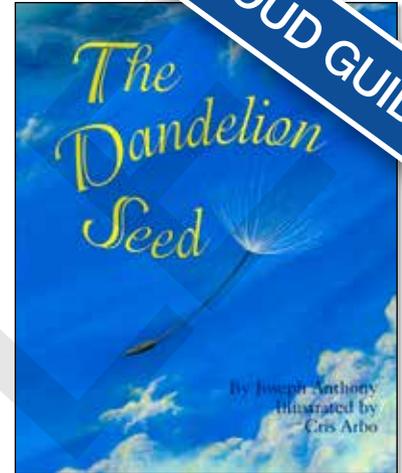
##### **LS4.D: Biodiversity and Humans**

A range of different organisms lives in different places.

## Read-Aloud Guide

### Content Objectives for Discussion:

- Explain that plants need air, water, nutrient-rich soil, and sunlight to grow and reproduce
- Identify different plant parts and explain their specific functions
- Describe the life cycle of a plant (seed to seed)
- Describe how bees and other insects are important in the pollination of many plants
- Describe how seeds are dispersed and travel distances
- Recall that dead plants are absorbed back into the earth, providing nutrients for new plants
- Explain that plants are important to other living things because they provide food, shelter, and oxygen



### Recommended Vocabulary for Explicit Discussion:

dandelion, spread, gather, flowered, delicate

### Implicit Vocabulary Exposure:

autumn, garden, died, seeds, winter, tighter, world, imagined, frightening, lonely, beautiful, wondered, belonged, landed, snow, silence, peace, covered, blanket, spring, sunshine, air, soil, leaves, roots, wide, sunlight, deep, drink, fresh, bright, leaves, deer, rabbits, sweet, nectar, bees, butterflies, ripened

### Concepts:

This heartfelt story about a dandelion seed that travels the world begins with a dead flower that has dropped its seeds to begin a new life cycle. The last remaining seed finally lets go, then travels by wind to another place, settling down and growing into a vibrant flower, taking its place as an integral part of its environment. The stunning, realistic illustrations give children an opportunity to search for the tiny seed throughout the changing seasons and landscapes. This peaceful story reiterates concepts about plant growth and death, and the purpose of leaves, roots, seeds, and flowers.

## Quest Questions

To introduce the read-alouds in this collection, share the questions below. Tell children that they are on a quest to find the answers within these books. Revisit the questions periodically as you progress in the readings, encouraging children to answer them based on their new knowledge. Once you have finished reading the entire collection, have children share all the knowledge they gained while on their knowledge quest.

- What do plants need to grow?
- What do roots do for plants?
- Are plants living?
- How do seeds travel?
- Why are bees and earthworms important to plants?
- How do plants help animals?
- Who was Johnny Appleseed?

Encourage children to reference the read-aloud texts and their personal experiences whenever possible to answer these questions. If children are able to write well independently, have them capture answers to these questions in writing. Encourage them to illustrate any details relevant to their responses.

### CCSS

---

- Ask and answer questions about key details in a text. **1RL1**, **1RI1**
- With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question. **1W8**, **2W8**
- Ask and answer questions about key details in a text read aloud or information presented orally or through other media. **1SL2**
- Add drawings or other visual displays to descriptions when appropriate to clarify ideas, thoughts, and feelings. **1SL6**
- Ask and answer such questions as *who*, *what*, *where*, *when*, *why*, and *how* to demonstrate understanding of key details in a text. **2RL1**, **2RI1**
- Recount or describe key ideas or details from a text read aloud or information presented orally or through other media. **2SL2**

## How Do Seeds Travel?

Complete a “Read-Aloud Image Review” with the book *Flip, Float, Fly: Seeds on the Move* by JoAnn Early Macken to revisit how seeds travel with the help of animals, wind, and water. Ask children to describe times they have noticed seeds traveling, such as burrs stuck to their socks, maple seeds helicoptering on windy days, or a squirrel burying an acorn. Tell children they will be conducting an experiment to demonstrate methods of seed dispersal.

**Materials:** a variety of seeds and/or fruits (e.g., coconut, avocado, squash, pine, dandelion, avocado, burdock, sandbur, maple, acorn, apple, blackberry, cattail, pussy willow, bean, cranberry, lotus, sweet gum), fabric pieces (fleece, felt, wool, or artificial fur), tub with water, spray bottle, large pieces of black construction paper, electric fan, ruler/measuring tape (optional)

Encourage children to create a chart to record their observations. Along the top, they should list methods of dispersal (wind, water, animals), and along the side, the different types of seeds included in the experiment. Have children touch and observe the seeds/fruits and record predictions about how they think each will travel. After each step below, have children record the results. Explain that one type of seed may be able to travel in various ways.

1. Place the black construction paper on a table or on the floor in front of the fan (you may need to tape down the paper). Have children drop different seeds in front of the fan and see if they travel through air and if so, where they land on the paper. (If desired, have children measure how far the seeds traveled using a ruler or measuring tape.)
2. Lightly brush the fabric pieces along the seeds to see which ones get picked up. Explain that these seeds are likely to be carried on animal fur. Discuss seeds that are encased in colorful, sweet fruit, and ask children to ponder how they travel. Explain that animals eat fruit and leave seeds behind in their droppings. In fact, many seeds cannot grow unless they pass through an animal’s digestive system. Seeds also travel when animals store them for the winter. If a squirrel forgets to dig up a buried acorn, it might grow into an oak tree.
3. Lastly, have children observe what happens to the seeds when they are placed in water. Do they sink or float? Discuss how seeds that float are likely to travel by water. Aim the fan at the water’s surface to mimic wind and waves, then spray the surface to mimic rain.

You may wish to have children write a paragraph summarizing their findings and explaining what about each seed type makes it suited for a certain kind of dispersal. If desired, have children draw accompanying illustrations of the seeds. To take this a step further, you may wish to encourage children to research other plants and their seed dispersal methods.

## How Do Seeds Travel? (continued)

### CCSS

---

- Ask and answer questions about key details in a text. **1RI1**
- Describe the connection between two individuals, events, ideas, or pieces of information in a text. **1RI3**
- Use the illustrations and details in a text to describe its key ideas. **1RI7**
- Write informative/explanatory texts in which they name a topic, supply some facts about the topic, and provide some sense of closure. **1W2**
- Participate in shared research and writing projects. **1W7, 2W7**
- With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question. **1W8, 2W8**
- Describe people, places, things, and events with relevant details, expressing ideas and feelings clearly. **1SL4**
- Add drawings or other visual displays to descriptions when appropriate to clarify ideas, thoughts, and feelings. **1SL6**
- Explain how specific images contribute to and clarify a text. **2RI7**
- Recount or describe key ideas or details from a text read aloud or information presented orally or through other media. **2SL2**



#### Help children succeed in school and in life

by reading aloud for 20 minutes a day using these content-rich collections.

## Plant Life

With this collection, children learn about plant life cycles and how plants and animals are interdependent. They discover how different environments produce different types of plants and explore in detail the functions of plant parts. They also acquire an age-appropriate foundation for the concept of photosynthesis and learn the important roles bees and earthworms play in plant growth, reproduction, and decomposition. Finally, children gain an understanding of how seeds travel and how plants are grown and harvested, learning that these things take time and patience but offer beautiful rewards.

Read the following books in sequence until the collection is completed. Choose recommended activities from the guide to suit your schedule and needs.



#### 1 What's Alive?

by Kathleen Weidner Zoehfeld  
illus. by Nadine Bernard Westcott

#### 2 A Tree Is a Plant



by Clyde Robert Bulla, illus. by Stacey Schuett

#### 3 Johnny Appleseed

by Jodie Shepherd, illus. by Masumi Furukawa

#### 4 This Is the Sunflower

by Lola M. Schaefer, illus. by Donald Crews

#### 5 What Do Roots Do?

by Kathleen V. Kudlinski, illus. by David Schuppert

#### 6 Bob and Otto

by Robert O. Bruel, illus. by Nick Bruel

#### 7 Flip, Float, Fly: Seeds on the Move

by JoAnn Early Macken, illus. by Pam Papparone

#### 8 The Dandelion Seed

by Joseph Anthony, illus. by Cris Arbo

#### 9 These Bees Count!

by Alison Formento, illus. by Sarah Snow

#### 10 Zinnia's Flower Garden

by Monica Wellington

#### It's that simple to:

- Make learning fun
- Boost vocabulary
- Build skills that meet **Common Core State Standards**

Each daily read-aloud provides one piece of the puzzle to help children on their knowledge quest to see the big picture!



[scholastic.com](http://scholastic.com)

™ & © Scholastic Inc. All rights reserved.  
Scholastic Inc. 557 Broadway, New York, NY 10012  
Retain this address for future reference.



9 780545 654319

Retail Price \$12.99