## Core Knowledge Science Program - Domain Map

| Science Content |
|---|
| • What plants need to grow: sufficient warmth, light, and water, air, and space (land)<br>• Basic parts of common plants: seed, root, stem, branch, leaf, flower<br>• Plants do not eat food, but make much of what they need themselves<br>• Flowers and seeds: seeds as food for plants and animals (for example, rice, nuts, wheat, corn)<br>• Two kinds of plants: deciduous and evergreen<br>• Farming:<br>How some food comes from farms as crops<br>How farmers must take special care to protect their crops from weeds and pests<br>How crops are harvested, kept fresh, packaged, and transported for people to buy and consume<br>• A biography of George Washington Carver |

| ***This unit contributes to meeting or exceeding the following Next Generation Science Standards:*** | |
|---|---|
| ***K-LS1-1****. Use observations to describe* ***patterns of what plants*** *and animals (including humans)* ***need to survive****.* | ***Rationale:***<br>This unit will explicitly engage students with the **concept of what plants need to grow and survive** (DCI LS1.C). This standard is further developed across the *Animals & Their Needs* and *The Human Body: Basic Needs & Five Senses* units of this grade. This core idea may be reviewed/applied during the *Taking Care of the Earth* unit as well. |
| ***K-ESS2-2****. Construct an argument supported by evidence for* ***how plants and animals (including humans) can change the environment*** *to meet their needs.* | As with K-LS1-1, the *Plants & Farms* unit will work with other units to meet or exceed this standard. In this unit, students will gain an early understanding that **plants do not eat food, but use light and gather water and minerals from their environment to make what they need to survive.**<br>This concept of changing the environment (which also supports the progression of DCIs LS2.A and LS2.B) will be explored while studying how **farmers protect crops from weeds and pests**, **which change their environment in undesired ways.** |

***This unit offers the opportunity to foreshadow learning that will support the following Next Generation Science Standards:***

| | |
|---|---|
| ***K-ESS3-1**. Use a model to represent the relationship between **the needs of different plants** and animals (including humans) and **the places they live**.* | ***Rationale:***<br>The study of farms and farming contributes directly to the progression of DCI ESS3.A (Natural Resources), the core idea central to this Kindergarten standard. This unit also foreshadows learning in Grade 1 Unit 4 *Living Things & Their Environments,* which directly supports **K-ESS3-1** as it is written.<br>**Important Note:** As written, this standard does not fully meet the early progression for ESS3.A, which is a core idea not addressed again until Grade 4 in the NGSS. This unit provides an excellent opportunity to meet this early progression. For example, studying farms and farming can help students to understand that humans do not necessarily live in environments that provide for all of their needs. Building a model of **how crops are harvested, kept fresh, packaged and transported for people to buy and consume** will address this concept while also engaging students in modeling human's impact on the Earth and the concept of system models. |

## Potential Skills & Cross-Curricular Integrations

*The connections listed below are intended as ideas for possible integration across this unit. These skills, works of poetry, art, music, and more may help you as you create meaningful learning experiences for your students. Connections such as these can help your students make links between various disciplines and deepen their understanding of this domain.*

**POTENTIAL** CCSS Math Connections

MP.2 Reason abstractly and quantitatively. (K-ESS2-1)

MP.4 Model with mathematics. (K-ESS2-1)

K.CC.A Know number names and the count sequence. (K-ESS2-1)

K.MD.A.1 Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object. (K-ESS2-1)

K.MD.A.2 Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference. (K-LS1-1)

K.MD.B.3 Classify objects into given categories; count the number of objects in each category and sort the categories by count. (K-ESS2-1)

**POTENTIAL** CCSS ELA Connections

RI.K.1 With prompting and support, ask and answer questions about key details in a text. (K-ESS2-2)

W.K.1 Use a combination of drawing, dictating, and writing to compose opinion pieces in which they tell a reader the topic or the name of the book they are writing about and state an opinion or preference about the topic or book. (K-ESS2-2)

W.K.2 Use a combination of drawing, dictating, and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic. (K-ESS2-2)

W.K.7 Participate in shared research and writing projects (e.g., explore a number of books by a favorite author and express opinions about them). (K-ESS2-1 & K-LS1-1)

**POTENTIAL** Cross-Curricular Connections

**Potential Links:**
**ELA:** Poetry—"Mary, Mary, Quite Contrary," "Roses are Red"
Fiction—American Legends and Tall Tales, Johnny Appleseed
Sayings and Phrases—"April showers bring May flowers" and "Great oaks from little acorns grow"
**Music:** Songs— "Oats, Peas, Beans, and Barley Grow"

## Prior Knowledge

***Core Knowledge Preschool Sequence***
Scientific Reasoning and the Physical World

***Goal:*** *Demonstrate an initial understanding of the living world*

- Plants are living things

***CKLA Preschool***

- State that plants are alive
- Name the four parts of a plant (i.e., roots, stem, leaves, flowers)
- State the function of the four parts of a plant (i.e., roots soak up water; stem holds the plant up; leaves collect sunlight and air; flowers make seeds)
- Describe how a sunflower grows (i.e., seed in ground; small root grows down; seedling comes up out of ground; flower grows from stem)
- Name plants' four basic needs: sunlight, water, air, nutrients (from soil)
- State three ways that plants are important to humans and animals (i.e., they provide oxygen, food, and shelter)
- Name five foods that come from plants (e.g., apple, blueberry, banana, carrot, lettuce, etc.)

***Core Knowledge Science*** (Previously taught Kindergarten units)
**Unit 1 *Human Body: Basic Needs & Five Senses***

- Distinguish between needs and wants
- Identify the basic needs of human beings

**Unit 2 *Animals and Their Needs***

- Identify at least three basic needs of animals

## CKLA Kindergarten Objectives

*The following objectives are addressed through the Core Knowledge Language Arts program (CKLA), which builds students' background knowledge in certain domains of literature, science, and history. To learn more about how and why the Listening & Learning Strand of CKLA approaches science content through read-alouds and ELA instruction, read more about the CKLA program.*

**Domain Anthology, *Plants***

- Explain that different kinds of plants grow in different environments
- Explain that plants are living things
- Describe what plants need to live and grow: food, water, air, and light
- Identify the root, stem, branch, leaf, flower, fruit, and seed of a plant
- Explain that roots anchor the plant and take in water and nutrients
- Explain that stems support the plant and carry water and nutrients to the various parts of the plant
- Explain that the plant makes its food in its leaves
- Explain that seeds are the beginnings of new plants
- Explain the basic life cycle of plants
- Explain that some plants produce fruit to hold seeds
- Compare and contrast the fruits and seeds of different plants
- Identify the parts of specific plants that are eaten by people
- Identify the petals on a flower
- Describe how bees collect nectar and pollen
- Describe how bees make and use honey
- Describe the important role bees play in plant pollination
- Demonstrate familiarity with the tall tale "Johnny Appleseed"
- Compare and contrast deciduous and evergreen trees
- Explain that deciduous trees are a type of plant that loses its leaves in the fall and becomes dormant in the winter
- Explain that evergreen trees are a type of plant that stays green all year and does not become dormant in the winter
- Identify how deciduous trees are important to people and nature
- Identify things that plants provide to people: oxygen, food, and important products
- Describe the life and scientific achievements of George Washington Carver

**Domain Anthology, *Farms***

- Explain what a farm is
- Describe a farmer's and a shepherd's jobs
- Identify animals found on farms and the sounds animals make
- Identify buildings found on farms
- Identify machines and tools of farming
- Demonstrate familiarity with the songs "Bingo" and "Old MacDonald Had a Farm"
- Identify needs of farm animals: food, water, and space to live and grow
- Describe how farm animal babies need to be fed and cared for by their parents or people
- Explain why farmers raise animals
- Identify foods that come from animals
- Explain why farmers grow crops
- Identify crops as plants grown on farms for use as food
- Describe how some food comes from farms as crops
- Sequence the seasonal rhythm of planting, growing, and harvesting
- Describe how farmers protect their crops from drought, and pests
- Sequence events of crops from farm to store (planted, harvested, transported, packaged)

## What Students Will Learn in Future Grades

***Core Knowledge Sequence***

**Grade 1**
***Living Things and Their Environments***

- Habitats, Ocean and Undersea Life, and Special Classifications of Animals

**Grade 2**
***Cycles in Nature***

- Seasonal Cycles (seasons and life processes), Life Cycles (reproduction in plants)

**Grade 3**
***Ecology***

- Habitats, "balance of nature," food web, and ecosystems
- Man-made threats to the environment and protecting the environment

**Grade 5**
***Classifying Living Things***

- Kingdoms, Phylum, Class, Order, Family, Genus, Species, and (Variety)
- Homo sapiens
- Taxonomists
- Different classes of vertebrates

**Grade 5 continued**

***Cells: Structures and Processes***

- Structure of cells (both plant and animal)
- Plant cells, unlike animal cells, have cell walls and chloroplasts
- Cells are shaped differently in order to perform different functions
- Organization of cells into tissues, organs, and systems

***Plant Structures and Processes***

- Vascular and nonvascular plants
- Photosynthesis
- Asexual reproduction, vegetative reproduction, sexual reproduction
- Process of seed and fruit production
- Seed germination and plant growth

## Core Vocabulary

*The following list contains the core vocabulary words suggested for purposeful integration across this Kindergarten unit. **Boldfaced** terms could be introduced and/or reviewed with students using a Word Work activity, as modeled by the Core Knowledge Language Arts program (CKLA). The inclusion of the words on this list does not mean that students are immediately expected to be able to use all of these words on their own. However, through repeated exposure across the lessons, students should acquire a good understanding of most of these words and begin to use some in conversation.*

### Parts of a Plant

*plant, living, root, stem, seed, spore, leaf, flower, sprout, bulb, **bloom**, bud, cutting, blossom, shoot, needles, cone, trunk, branch, limb, fruit, pit, core, blade, petal, **pollen**, nectar, fiber, tissue, cells, slip, function, transport, anchor, absorb, germinate, **life cycle**, sapling, seedling, acorn, trait, characteristic, structure, part, piece, botany, **botanist***

### Kinds of Plants

***deciduous, evergreen**, tree, [types of trees], bush, shrub, herb, flowering, fern, conifer, weed, fruiting, vegetable, [types of fruits & vegetables], sunflower, rose, daisy, tulip, dandelion, **classification***

### Basic Needs of Plants

*important, water, air, carbon dioxide, oxygen, light, sunlight, shade, space, **soil,** ground, land, nutrients, **minerals**, nourish, energy, photosynthesis, survival, conditions, **environment**, habitat, temperature, warmth, cold, weather, dormant, climate, rain, **rainfall**, temperate, desert, forest, ocean, river*

### Farms

*farmer, **resource**, natural, grow, crop, [examples of crops], fertilizer, irrigate, protect, tend, pests, pesticide, unwanted, undesired, garden, orchard, greenhouse, barn, fresh, spoil, **sow**, **harvest**, collect, **edible**, produce, graze, herd, flock, shepherd, livestock, [examples of livestock], **package**, seal, transport, ship, consume, purchase, market, store, grocery*

## Potential Misconceptions

*Students have been shown to learn significantly more science when their teachers demonstrate strong knowledge of potential student errors, and when the teacher plans accordingly (Sadler & Sonnert, 2016). The following incorrect statements serve as a sampling of the "intuitive theories" or "alternative conceptions" that students and teachers may actively use to describe their thinking, and which might interfere with the process of learning. The details following each statement are not intended to imply the scope of instruction for this grade, but instead provide a clearer sense of what students (of all ages) often misunderstand and/or overgeneralize when investigating and describing scientific ideas.*

**Misconception: "Plants breathe by inhaling carbon dioxide and exhaling oxygen."**

Plants do not breathe. Air enters the plant through the stomata (pores) in their leaves. Both carbon dioxide and oxygen are used for different processes in plants. Photosynthesis requires carbon dioxide, while respiration (the breakdown of sugars for use in the cells) requires oxygen. While plants do release oxygen, it is a byproduct of photosynthesis and is not released through breathing.

**Misconception: "Plants get their energy from the soil through roots."**

Chloroplasts in the plant absorb the sun's energy for use in photosynthesis. Water and minerals are taken in through the roots.

**Misconception:"Leaves take in water."**

Water is taken in through the roots.

**Misconception: "Plants take in all substances they need to grow through their roots."**

Plants take in air through their leaves. Chloroplasts in the plant absorb the sun's energy for use in photosynthesis. Water and minerals are taken in through the roots.

**Key points for instruction:**

Students may not consider trees to be plants. Researchers have found that when classifying animals, elementary students tend to define/use mutually exclusive groups rather than subsets of a larger group (e.g., stating that "humans are different than animals" when a person is both human and an animal.) Similar logic may be applied when studying plants. Listen carefully for student examples as they describe their thinking and use a variety of examples when helping students to define what is and isn't a plant.

Young students may not distinguish between food, as they know it, and misunderstand that the "food" made by plants is not exactly the same as the food that they eat.

Teachers should be sure not to overgeneralize the basic parts of all plants, for example when talking about seeds and flowers. Be sure to include in your examples plants such as ferns, which have neither seeds nor flowers.

When connecting this unit to previous learning (e.g., when reviewing Unit 1 *The Human Body*), keep into consideration that some students use movement and reactions to sensation as criteria for being alive, so students may not recognize plants as being living things (Driver et al, 1994). Plants do have senses and exhibit reactions to their environments. For example, **phototropism** is the phenomenon of plants growing or bending towards a source of light to meet their needs.

## Potential Objectives for this Kindergarten Unit

*The organization of the following objectives reflects the order in which they are expected to be addressed.The proposed timing within the unit ("beginning," "middle," or "end") and aligned NGSS are also noted. In addition to daily lessons focused on each objective, days have been built into the unit for review and assessment.*

**Beginning**

- Describe how plants are used in our everyday lives
- Identify the basic parts of a plant
- Describe how plants get and store energy
- Describe how plants grow
- Sequence the life cycle of a plant
- Identify characteristics of deciduous and evergreen plants
- Classify plants as deciduous or evergreen

**Middle**

- Identify what plants need in order to live and grow
- Compare and contrast plants' basic needs (to survive) to the needs of animals and human beings
- Infer how plants may change their habitat in order to meet their needs
- Describe how George Washington Carver used plants to meet people's needs

**End**

- Identify the needs of crops on a farm
- Describe how farmers use natural resources to take care of their crops
- Identify common livestock that can live on a farm
- Describe how plants help livestock meet their needs
- Describe the process of harvesting crops to people purchasing produce to consume
- Identify ways in which we can keep food fresh



## Potential Big Guiding Questions

**Essential Questions:**

- **How are plants useful?**
- **How do farmers meet the needs of the crops they grow and the animals they raise?**

RE: Examining the parts of a plant

- How does this part of the plant [pointing to the roots, stem, branch, leaf, flower] look? (size, shape, color)
- What does this part of the plant [pointing to the stem, flower] smell like?
- How do you think this part of the plant [pointing to the stem, branch, leaf, flower] helps it grow?
- Why do you think the roots are spread out beneath the soil?
- How could soil help plants?

RE: Plants and Plant Life

- How are plants' needs different from the needs of human beings and animals? In what ways are they the same?
- In what ways are insects helpful to plants? In what ways are they harmful?
- How do plants affect their environment and other living things (human beings and animals)?

RE: Farms

- How do the needs of animals on a farm differ from wild animals? How do their needs differ from pets?
- How can farmers protect crops?
- How can we keep an apple fresh? (engineering opportunity)

## Potential Assessment Opportunities

*The following assessment tasks serve as a sampling of how students can demonstrate mastery of lesson objectives. Each aligned objective and NGSS is noted in parentheses. In addition, the proposed timing ( "beginning," "middle," or "end") is noted in order to indicate approximately when the assessment should take place.*

**Example #1: (Beginning of Unit 3)**

{**Evaluates Student Mastery of Objective:** Identify the basic parts of a plant}

**Advance Preparation:**

- Create the assessment handout by drawing an image of a plant. Draw an arrow next to the plant's roots, stem, branches, leaves, and flower. **Note:** Students will be pasting a strip of paper on each arrow. Be sure to space the arrows so there is enough room to paste each strip.
- On separate strips of paper, write (or type) the terms, "roots," "stem," "branches," "leaves," and "flower." (Each child will need a set.)
- Gather glue sticks for each student.

**Task Assessment**: Provide each student the assessment handout. Explain that they will need to identify each part of the plant. Pass out the strip of paper with the term "roots" to each student.

**T-** (holding up a strip of paper with the word, "roots") **This word says, "roots," find the arrow that points to the roots of the plant.**

Pause for a moment in order to provide students with time to scan the picture and locate the roots. Walk around the room and check to be sure every child is pointing to an arrow on their paper.

**T- Paste the word "roots" on the arrow that points to the plant's roots.**

Repeat this process with the remaining terms.

**Example #2: (End of Unit 3)**

{**Evaluates Student Mastery of Objective:** Describe how farmers use natural resources to provide food for people} (K-ESS3-1)

**Advance Preparation:**

- Create a three-dimensional model depicting how crops are harvested, kept fresh, packaged and transported for people to buy and consume. **Note:** If you prefer to create a two-dimensional model, create images illustrating each step on separate pieces of paper.
- **Note:** This assessment would be best administered to students individually or to one small group of students at a time. Consider meaningful tasks that remaining students could complete independently (and/or in small group if there is another adult in the classroom).

**Task Assessment:** Ask students to describe what is happening in each step (in no particular order). **T- I want you to use this model and describe for me how food gets to your table. Think about which step happens first.**

As the children select the first step, prompt them to describe what is happening. You also may wish to have students manipulate the pieces of the model to reflect their sequence. If students forget where they left off, guide them with returning to the beginning and talking through each step.

## Potential Activities & Procedures

*The following activities or procedures serve as a sampling of what instruction could look like in this unit. Each example was specifically designed to contribute to one or more of the aforementioned objectives. In addition, the proposed timing ("beginning," "middle," or "end") is noted in order to indicate approximately when the activity should be conducted during this unit. Aligned NGSS are noted in parentheses.*

**Example #1: (Beginning of Unit 3)**

{**Contributes to the Objective:** Identify the basic parts of a plant}

**Advance Preparation:** Variety of seedlings for every 1 to 3 students. The seedlings should be placed in clear cups (with minimal potting soil) so students can observe roots.

**Activity**: Place seedlings on student tables.

**T- We have been learning about various living things and their needs, such as human beings and animals. Today we are going to learn about another type of living thing—a plant.**

**T- Plants, like human beings and animals, have different parts. How do our legs and hands help us? How does fur help some animals? Plants have parts that help them in different ways. You are going to work with your partner to observe these parts and their different functions (how they help a plant live).**

**T- I am going to ask you questions and you and your partner are going to look at the plant to find the answers.**

*See examples of guiding questions above.*

**Example #2: (Beginning of Unit 3)**

{**Contributes to the Objective:** Classify plants as deciduous or evergreen}

**Advance Preparation:** Find images (or real samples) of a variety of deciduous leaves (e.g., maple leaf, red alder leaf, hazelnut leaf, etc.) and evergreen leaves (e.g. douglas fir needles, pine needles, spruce needles, madrone leaf, Oregon grape leaf, salal leaf, etc.).

**Activity:**

**T- How are these leaves different?** Probe by asking about the various characteristics, e.g., size, shape, texture, color. Note student responses on chart paper.

On a separate piece of chart paper, create a T-chart. Hold up a picture of (or actual) maple leaf. Affixing this leaf to one side of the T-chart, ask students to look at the other leaves.

**T- Which leaves have similar characteristics to this maple leaf?** As students identify specific leaves, ask them to describe the similar features. Note the characteristics at the bottom of the T-chart below these leaves.

Affix the remaining evergreen leaves to the other side of the T-chart.

**T- How are the characteristics of these leaves** (pointing to the evergreen leaves) **different from the leaves on this side** (deciduous) **of our chart? What patterns do you see?** Record student responses.

**T- The leaves on this side of the chart with** [ ___ ] **characteristics are examples of deciduous leaves.** Write deciduous on the top of that side of the T-chart. **And leaves that have** [ ____ ] **characteristics are examples of evergreen leaves.** Write evergreen on the top of this side of the T-chart.

**T-Today we are going to learn about deciduous and evergreen plants. I want to you to pay special attention to other patterns that are unique to deciduous plants and patterns unique to evergreen plants. We will add this information to our T-chart…**

**Example #3: (Middle of Unit 3)**

{**Contributes to the Objective:** Identify what plants need in order to live and grow} (K-LS1-1)

**Activity**: As students examine the means in which human beings (Unit 1), animals (Unit 2), and plants (Unit 3) interact with their environment, they will chart the collected data. Students will then identify patterns within the data (e.g., all animals eat food, some animals eat plants, some animals eat other animals, some animals eat both plants and other animals, etc.,). Students will use the patterns culled from the data to describe what human beings, animals, and plants need to survive.

## Websites & Media

**United States Botanic Garden** https://www.usbg.gov/take-virtual-tour

Take students on a virtual tour of the United States Botanic Garden. This living plant museum highlights the diversity of plants and demonstrates how plants can enrich human life and support the Earth's ecosystems.

**PBS Learning Video - Think Garden: Plant Structure (approximately 3 minutes)**

http://www.pbslearningmedia.org/resource/5dea21b4-6c92-46ff-982c-8650f9429c01/think-garden-plant-structure/

This video examines plant structure by taking a closer look at the root and shoot systems.

**PBS Learning Game - Sid the Science Kid: Vegetable Planting**
http://pbskids.org/sid/fablab_vegetableplanting.html

This game simulates the process of growing seedlings.

**The Story of Milk** http://www.moomilk.com/virtual-tour

This virtual tour describes for students where milk comes from and how it gets to their table.

**Egg Farm Virtual Field Trips** http://www.aeb.org/educators/farm-to-table-virtual-field-trips

Students can explore multiple poultry farms and learn about how the chickens are cared for as well as how eggs move from the farm to their tables.

## Supplemental Trade Books

*Plants and Plant Growth*

- *Big Red Tomatoes*, by Pamela Graham (National Geographic Society, 2001) ISBN 0792292219
- *Eating the Alphabet: Fruits and Vegetables from A to Z*, by Lois Ehlert (Voyager Books, 1993) ISBN 0152244360
- *Flower Garden,* by Eve Bunting and illustrated by Kathryn Hewitt (Voyager Books, 2000) ISBN 0152023720
- *From Bud to Blossom* (Apples), by Gail Saunders-Smith (Capstone Press, 2000) ISBN 1560659513
- *Growing Vegetable Soup*, by Lois Ehlert (Voyager Books, 1990) ISBN 0152325808
- *How a Seed Grows* (Let's-Read-and-Find-Out Science 1), by Helene J. Jordan (HarperTrophy, 1992) ISBN 0064451070

- *I Am a Leaf* (Hello Reader! Science, Level 1), by Jean Marzollo and Judith Moffatt (Cartwheel, 1999) ISBN 0590641204
- *I Am an Apple* (Hello Reader! Science, Level 1), by Jean Marzollo and Judith Moffatt (Scholastic, 1997) ISBN 0590372238
- *I'm a Seed* (Hello Reader! Science, Level 1), by Jean Marzollo and Judith Moffatt (Cartwheel, 1996) ISBN 0590265865
- *Jack's Garden*, by Henry Cole (HarperTrophy, 1997) ISBN 068815283X
- *Johnny Appleseed* (Rookie Biographies), by Christin Ditchfield (Children's Press, 2003) ISBN 0516278169
- *Johnny Appleseed*, by Reeve Lindbergh and illustrated by Kathy Jakobsen Hallquist (Little, Brown Young Readers, 1993) ISBN 0316526347
- *Maple Syrup* (Harvest to Home), by Lynne M. Stone (Rourke Publishing, 2001) ISBN 1589521285
- *Maple Syrup Season*, by Ann Purmell (Holiday House, 2008) ISBN 082341891X
- *Peanuts*, Pamela Graham (National Geographic Society, 2001) ISBN 0792289633
- *Plant Blossoms* (Look Once, Look Again Science Series), by David M. Schwartz (Creative Teaching Press, 1998) ISBN 1574713299
- *Planting a Rainbow*, by Lois Ehlert (Voyager Books, 1992) ISBN 0152626107
- *Potatoes*, by Beatrice Duggan (National Geographic, 2003) ISBN 0792242653
- *The Carrot Seed*, by Ruth Krauss and Crockett Johnson (HarperTrophy, 2004) ISBN 0064432106
- *The Honey Makers*, by Gail Gibbons (HarperTrophy, 2000) ISBN 0688175317
- *The Life and Times of a Peanut*, by Charles Micucci (Houghton Mifflin, 2000) ISBN 0618033149
- *The Life and Times of the Honeybee*, by Charles Micucci (Houghton Mifflin, 1997) ISBN 039586139X
- *The Reason for a Flower* (Ruth Heller's World of Nature), by Ruth Heller (Topeka Bindery, 1999) ISBN 0833590006
- *The Tiny Seed*, by Eric Carle (Aladdin, 2001) ISBN 0689842449
- *Why Do Leaves Change Color?*, by Betsy Maestro (HarperCollins, 1994) ISBN 0064451267
- *The Enormous Potato*, by Aubrey Davis (Kids Can Press, 1999) ISBN 9781550746693
- *George Washington Carver: Planting Ideas*, by Jennifer Kroll (Shell Education, 2010) ISBN 9781433315930
- *Seeds Sprout!*, by Mary Dodson Wade (Enslow Publishers, 2009) ISBN 9780766036147

*Farms and Farming*

- *A Day in the Life of a Farmer*, by Heather Adamson (Capstone Press, 2000) ISBN 0736846743
- *Barnyard Banter*, by Denise Fleming (Henry Holt and Company, 2008) ISBN 0805087788
- *Chicks & Chickens*, by Gail Gibbons (Holiday House, 2003) ISBN 0823419398
- *Fantastic Farm Machines,* by Chris Peterson and David R. Lundquist (Boyds Mill Press, 2006) ISBN 1590782712
- *Farming*, by Gail Gibbons (Holiday House, 1990) ISBN 0823407977
- *From Seed to Pumpkin*, by Wendy Pfeffer (Harper Trophy, 2004) ISBN 0064451909

- *Growing Vegetable Soup*, by Lois Ehlert (Voyager Books, 1990) ISBN 0152325808
- *Life on a Crop Farm* (Life on a Farm), by Judy Wolfman (Carolrhoda Books, 2001) ISBN 157505518X
- *Ox-Cart Man*, by Donald Hall and Barbara Cooney (Puffin, 1983) ISBN 0140504419
- *Pigs*, by Gail Gibbons (Holiday House, 2000) ISBN 0823415546
- *Potatoes*, by Beatrice Duggan (National Geographic, 2003) ISBN 0792242653
- *Sheep*, by Rachael Bell (Heinemann, 2003) ISBN 1403440409
- *The Little Red Hen Big Book*, by Paul Galdone (Clarion Books, 1985) ISBN 0899193498
- *The Milk Makers*, by Gail Gibbons (Aladdin, 1987) ISBN 0689711166
- *The Rusty*, Trusty Tractor, by Joy Cowley (Boyd's Mills Press, 2000) ISBN 1563978733
- *The Year at Maple Hill Farm*, by Alice and Martin Provensen (Aladdin, 2001) ISBN 0689845006
- *Chicks!*, by Sandra Horning (Random House, Inc., 2013) ISBN 9780307932211
- *A Day at Greenhill Farm*, by Sue Nicholson (DK Publishing, 1998) ISBN 9780789429575