

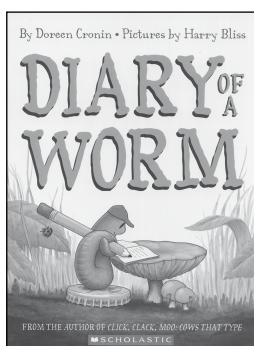
Grade Three Science Library Guide

Suggested reading approaches include Read Aloud, Shared Reading (with a small group when the text is large enough for students to see clearly), and Independent Reading.

Note:

Once the Science Library books have been read aloud or shared, you may choose to place them at the Reading Centre for students to use for Independent Reading or research. Guided Reading levels have been included where possible.

Unit 1: Exploring Soils



Diary of a Worm

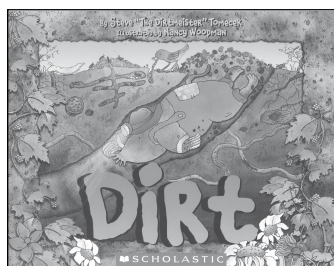
by Doreen Cronin; illustrated by Harry Bliss

This hilarious picture book tells the adventures of a worm through his daily diary entries.

Science Connections:

- living things affect and are affected by soils

Suggested Reading Approach: Independent Reading, Shared Reading (Level L)



Dirt

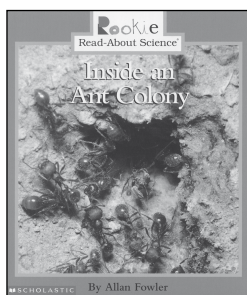
by Steve Tomecek; illustrated by Nancy Woodman

Follow the gardening star-nosed mole to get all the dirt—on dirt.

Science Connections:

- scientific terminology
- similarities and differences among soils
- components of soil
- types of soil
- absorption of water by different soils
- ways humans use soils to make useful objects

Suggested Reading Approach: Independent Reading, Read Aloud



Inside an Ant Colony

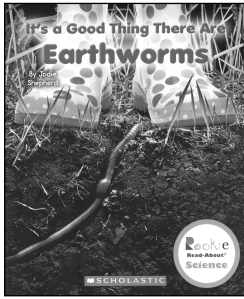
by Allan Fowler

Detailed photographs and simple text describe all the activity that occurs inside an ant colony.

Science Connections:

- living things affect and are affected by soils

Suggested Reading Approach: Independent Reading, Shared Reading (Level J)



It's a Good Thing There Are Earthworms

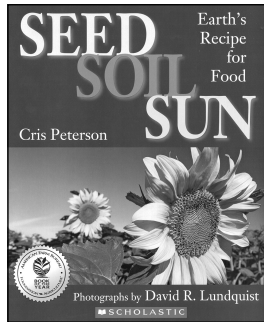
by Jodie Shepherd

Learn about the many ways that earthworms help our planet.

Science Connections:

- living things affect and are affected by soils

Suggested Reading Approach: Independent Reading, Shared Reading (Level J)



Seed, Soil, Sun

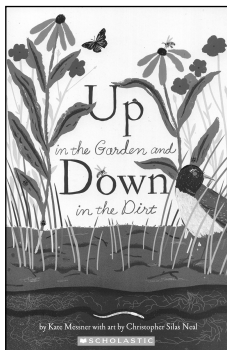
by Cris Peterson; photographs by David R. Lundquist

Vivid photographs and clear text describe the components of soil and tell how soil works with the sun to grow wonderful plants from seeds.

Science Connections:

- scientific terminology
- components of soil
- living things affect and are affected by soils
- ways humans use soils to make useful objects

Suggested Reading Approach: Read Aloud, Independent Reading



Up in the Garden and Down in the Dirt

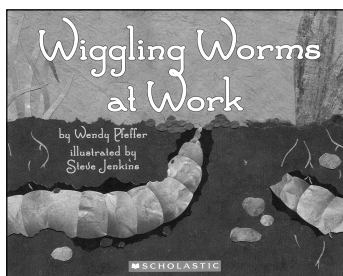
by Kate Messner; illustrated by Christopher Silas Neal

Up in the garden, the world is full of green—leaves and sprouts, growing vegetables, ripening fruit. But down in the dirt is a busy world populated by all the animals that make their home in the soil.

Science Connections:

- living things affect and are affected by soils
- ways humans use soils to make useful objects
- composting

Suggested Reading Approach: Independent Reading, Read Aloud (Level M)



Wiggling Worms at Work

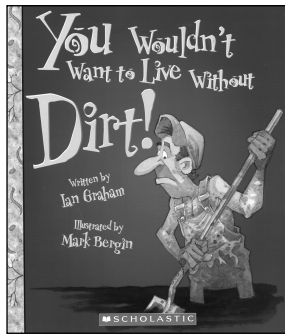
by Wendy Pfeffer; illustrated by Steve Jenkins

This engaging text describes worms and explains how they improve the quality of soil.

Science Connections:

- living things affect and are affected by soils

Suggested Reading Approach: Read Aloud, Independent Reading (Level O)



You Wouldn't Want to Live Without Dirt!

by Ian Graham; illustrated by Mark Bergin

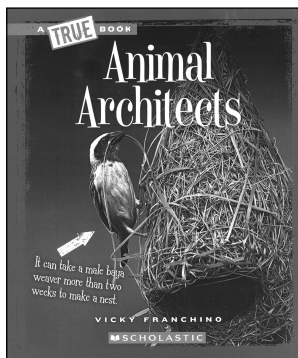
Learn about the many ways soil has been used by humans over the centuries.

Science Connections:

- scientific terminology
- components of soil
- types of soil
- effects of moving water on different soils
- soil erosion
- living things affect and are affected by soils
- ways humans use soils to make useful objects

Suggested Reading Approach: Read Aloud, Independent Reading

Unit 2: Materials and Structures



Animal Architects

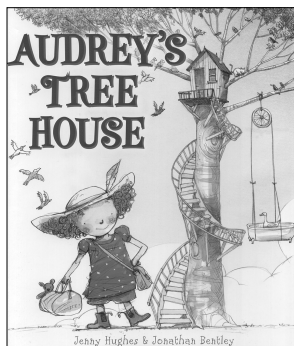
by Vicky Franchino

A fun and informative book that explores how animals build their homes and the fascinating structures they create.

Science Connections:

- natural structures
- shapes and forms that are part of natural structures
- properties of materials and their suitability for use in building structures
- overall effectiveness of structures

Suggested Reading Approach: Independent Reading, Shared Reading, Read Aloud



Audrey's Tree House

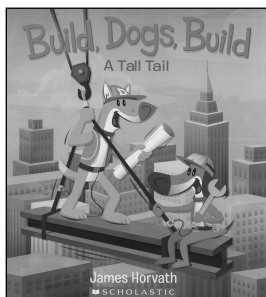
by Jenny Hughes; illustrated by Jonathan Bentley

Audrey is bigger than she was yesterday. Now she needs a bigger house. So her dad builds her one with ideal places to do all of her special activities.

Science Connections:

- designing structures
- shapes and forms that are part of human-built structures
- properties of materials and their suitability for use in building structures
- ways to join materials
- overall effectiveness of structures

Suggested Reading Approach: Independent Reading, Read Aloud



Build, Dogs, Build

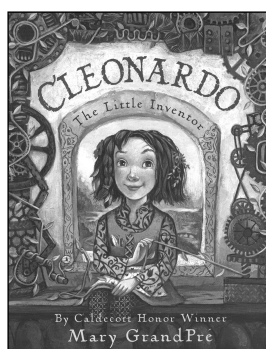
by James Horvath

Join head foreman Duke and his crew of worker dogs on a busy day of construction fun in this colourful picture book.

Science Connections:

- scientific terminology
- shapes and forms that are part of human-built structures
- ways shapes and forms help provide strength and stability
- properties of materials and their suitability for use in building structures
- ways to join materials
- designing structures

Suggested Reading Approach: Independent Reading (Level M)



Cleonardo: The Little Inventor

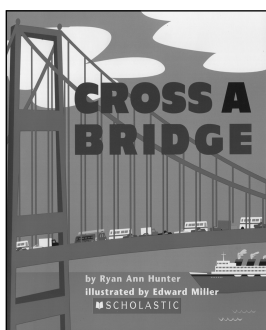
by Mary GrandPré

Cleonardo wants to be an inventor. Can her love of nature help her invent something big and important and perfect all by herself?

Science Connections:

- properties of materials and their suitability for use in building structures
- ways to join materials

Suggested Reading Approach: Read Aloud, Independent Reading



Cross a Bridge

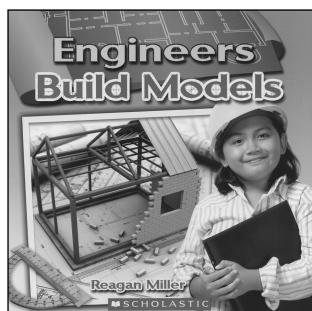
by Ryan Ann Hunter; illustrated by Edward Miller

Discover how different kinds of bridges are built and how they are used.

Science Connections:

- scientific terminology
- shapes and forms that are part of human-built structures
- ways shapes and forms help provide strength and stability
- properties of materials and their suitability for use in building structures

Suggested Reading Approach: Independent Reading (Level K)



Engineers Build Models

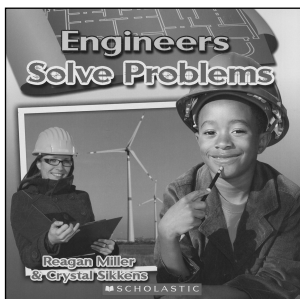
by Reagan Miller

Find out how engineers use models to help them design effective structures.

Science Connections:

- designing structures
- overall effectiveness of structures

Suggested Reading Approach: Independent Reading, Shared Reading, Read Aloud (Level O)



Engineers Solve Problems

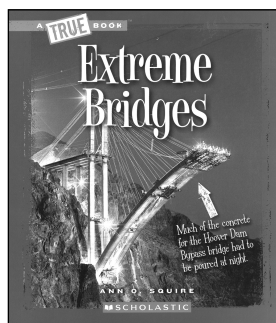
by Reagan Miller and Crystal Sikkens

The design process is explored in detail to explain how engineers approach solving problems.

Science Connections:

- scientific terminology (the design process)
- designing structures

Suggested Reading Approach: Independent Reading, Shared Reading, Read Aloud (Level O)



Extreme Bridges

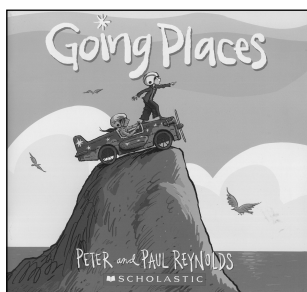
by Anne O. Squire

Learn about some of the biggest and most unique bridges in history, from how they were planned and built to how they have stood the test of time.

Science Connections:

- shapes and forms that are part of human-built structures
- ways shapes and forms provide strength and stability
- properties of materials and their suitability for use in building structures
- ways to join materials
- overall effectiveness of structures

Suggested Reading Approach: Independent Reading, Read Aloud



Going Places

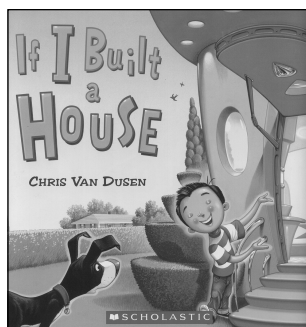
by Peter H. Reynolds and Paul A. Reynolds

Rafael gets the exact same Going Places Kit as everyone else in his class. But who says you have to build a go-cart for the race? Maya thinks there's more than one way to cross the finish line.

Science Connections:

- designing structures
- overall effectiveness of structures

Suggested Reading Approach: Independent Reading (Level M)



If I Built a House

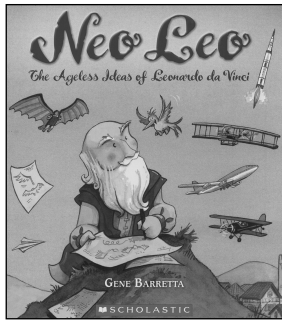
by Chris Van Dusen

Jack designs the house of his dreams, complete with a racetrack, flying room, and gigantic slide.

Science Connections:

- designing structures
- overall effectiveness of structures

Suggested Reading Approach: Independent Reading (Level L)



Neo Leo: The Ageless Ideas of Leonardo da Vinci

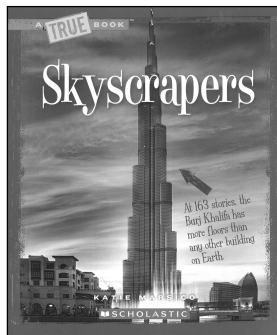
by Gene Barretta

Fascinating facts and engaging illustrations introduce Leonardo da Vinci's genius by focusing on his famous notebook sketches and the modern inventions they predicted.

Science Connections:

- shapes and forms that are part of natural and human-built structures
- ways shapes and forms provide strength and stability

Suggested Reading Approach: Read Aloud, Independent Reading (Level S)



Skyscrapers

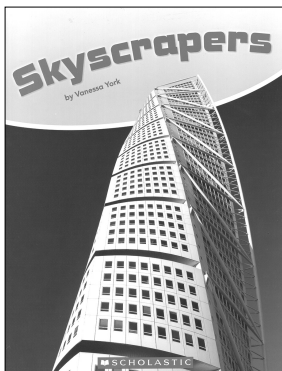
by Katie Marsico

As buildings get bigger and bigger, ever more fantastic skyscrapers are constructed.

Science Connections:

- shapes and forms that are part of human-built structures
- ways shapes and forms help provide strength and stability
- properties of materials and their suitability for use in building structures
- overall effectiveness of structures

Suggested Reading Approach: Read Aloud, Independent Reading



Skyscrapers

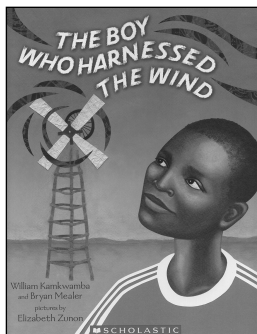
by Vanessa York

Learn about the evolution of skyscrapers and the materials used to build them.

Science Connections:

- shapes and forms that are part of human-built structures
- ways shapes and forms help provide strength and stability
- properties of materials and their suitability for use in building structures

Suggested Reading Approach: Independent Reading, Shared Reading (Level K)



The Boy Who Harnessed the Wind

by William Kamkwamba and Bryan Mealer; illustrated by Elizabeth Zunon

When fourteen-year-old William's village was hit by a drought, everyone's crops began to fail. Without enough money for food, let alone school, William spent his days in the library ... and figured out how to build a functioning windmill out of junkyard scraps that would bring electricity to his village.

Science Connections:

- designing structures

- properties of materials and their suitability for use in building structures
- overall effectiveness of structures

Suggested Reading Approach: Read Aloud, Independent Reading (Level P)



Things People Make

by Jenny Feely

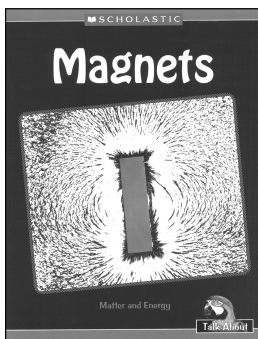
Photographs and clear text explore the properties of various materials and how these materials are used.

Science Connections:

- properties of materials and their suitability for use in building structures

Suggested Reading Approach: Independent Reading (Level L)

Unit 3: Invisible Forces



Magnets

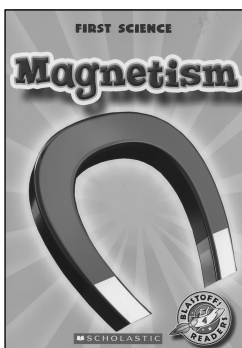
by Sandra Iversen

Readers learn what magnets are made from, what they can do, and the variety of ways they are used. Text includes a procedure to make a temporary magnet.

Science Connections:

- scientific terminology
- magnetic and non-magnetic materials
- polarity of a magnet and the orientation of its poles (opposite poles attract and like poles repel)
- magnetic field
- conditions that affect the force of magnets
- familiar uses of magnets
- procedure for magnetizing magnetic materials
- using a compass

Suggested Reading Approach: Independent Reading



Magnetism

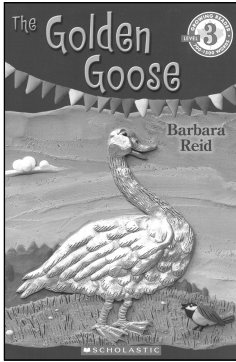
by Mari Schuh

Discover what magnetism is and learn how magnets work.

Science Connections:

- scientific terminology
- magnetic and non-magnetic materials
- polarity of a magnet and the orientation of its poles (opposite poles attract and like poles repel)
- using a compass

Suggested Reading Approach: Independent Reading (Level J)



The Golden Goose [Reader]

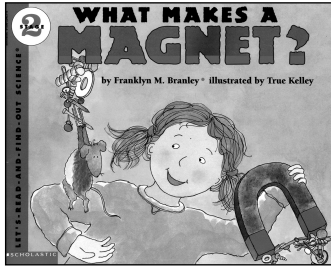
by Barbara Reid

Everyone who touches the golden goose gets stuck together! Note: This version of The Golden Goose is a different version of the digital Read Aloud and can be used for English Language Arts comparison purposes.

Science Connections:

- invisible forces

Suggested Reading Approach: Independent Reading



What Makes a Magnet?

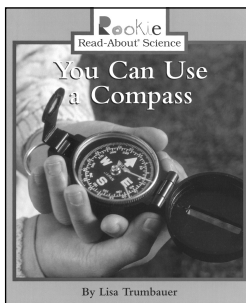
by Franklyn M. Branley; illustrated by True Kelley

Readers learn how to magnetize magnetic materials and how to make their own compass.

Science Connections:

- magnetic and non-magnetic materials
- procedure for magnetizing magnetic materials
- familiar uses of magnets
- making a compass
- polarity of a magnet and the orientation of its poles (opposite poles attract and like poles repel)

Suggested Reading Approach: Independent Reading (Level L)



You Can Use a Compass

by Lisa Trumbauer

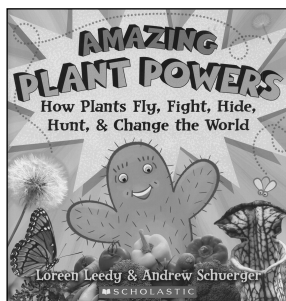
This text explains what a compass is and how it can be used to tell which way is north, south, east, and west.

Science Connections:

- using a compass
- magnetic and non-magnetic materials
- polarity of a magnet and the orientation of its poles (opposite poles attract and like poles repel)

Suggested Reading Approach: Independent Reading, Shared Reading (Level G)

Unit 4: Plant Growth and Changes



Amazing Plant Powers

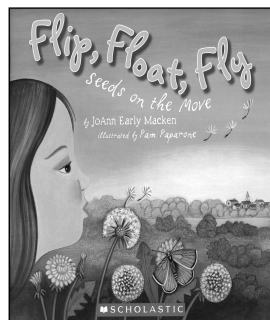
by Loreen Leedy and Andrew Schuerger

This text explains how plants adapt to the conditions in which they grow and how new plants are grown. Readers will also discover many ways that humans use plants.

Science Connections:

- scientific terminology
- parts of plants and their general function
- needs of plants (photosynthesis)
- plants are affected by the conditions in which they grow
- parts of plants that provide humans with useful products

Suggested Reading Approach: Independent Reading



Flip, Float, Fly: Seeds on the Move

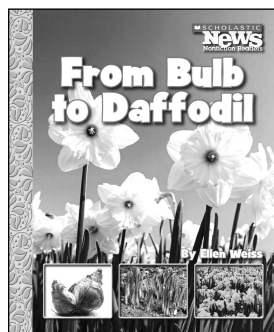
by JoAnn Early Macken; illustrated by Pam Paparone

Wonderful illustrations show the ways seeds move through the world.

Science Connections:

- life cycle of a flowering plant
- parts of plants and their general function

Suggested Reading Approach: Independent Reading



From Bulb to Daffodil

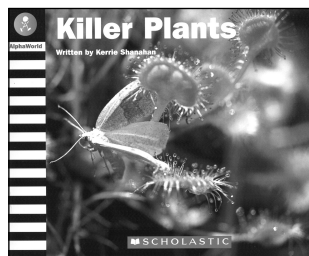
by Ellen Weiss

This text explores the life cycle of flowering plants that grow from bulbs.

Science Connections:

- scientific terminology
- parts of plants and their general function
- life cycle of a flowering plant

Suggested Reading Approach: Independent Reading, Shared Reading (Level F)



Killer Plants

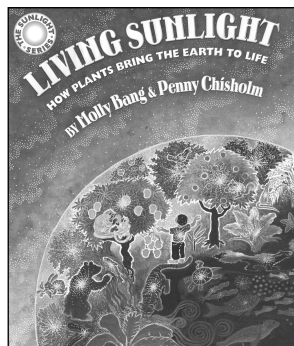
by Kerrie Shanahan

Readers learn how some plants trap and kill insects for food.

Science Connections:

- needs of plants
- plants are affected by the conditions in which they grow

Suggested Reading Approach: Independent Reading (Level J)



Living Sunlight: How Plants Bring the Earth to Life

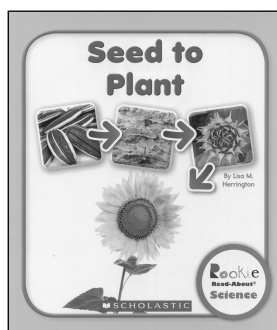
by Molly Bang and Penny Chisholm

Engaging illustrations and poetic text explore the wonder of how our sun gives life to plants and, through them, to all living things.

Science Connections:

- needs of plants (photosynthesis)
- ways in which plants are important to living things and the environment
- parts of plants that provide humans with useful products

Suggested Reading Approach: Read Aloud, Independent Reading



Seed to Plant

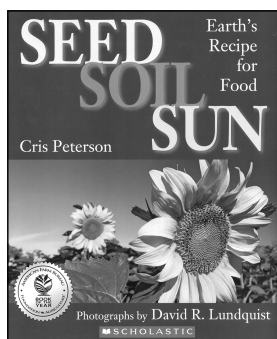
by Lisa M. Herrington

Readers learn how towering sunflowers start out life as a small black seed. They also learn about the different parts of the plant and how the parts all work together to help the plant grow and thrive.

Science Connections:

- scientific terminology
- parts of plants and their general function
- life cycles of a flowering plant
- needs of plants
- plants change throughout the seasons
- ways in which plants are important to living things and the environment

Suggested Reading Approach: Independent Reading, Shared Reading (Level J)



Seed, Soil, Sun

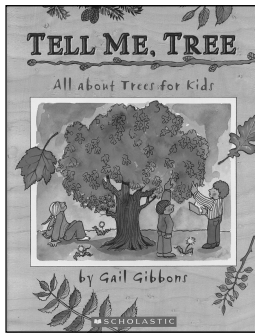
by Cris Peterson; photographs by David R. Lundquist

Vivid photographs and clear text describe the components of soil and tell how soil works with the sun to grow wonderful plants from seeds.

Science Connections:

- scientific terminology
- parts of plants and their general function
- needs of plants (photosynthesis)
- ways in which plants are important to living things and the environment
- parts of plants that provide humans with useful products

Suggested Reading Approach: Read Aloud, Independent Reading



Tell Me, Tree

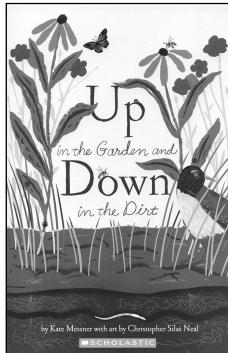
by Gail Gibbons

This text is a bright and colourful introduction to trees, leaves, and their inner workings in nature.

Science Connections:

- scientific terminology
- parts of plants and their general function
- needs of plants (photosynthesis)
- plants are affected by the conditions in which they grow
- ways in which plants are important to living things and the environment
- plants change throughout the seasons
- parts of plants that provide humans with useful products
- how our supply of useful plants is replenished

Suggested Reading Approach: Independent Reading, Read Aloud (Level O)



Up in the Garden and Down in the Dirt

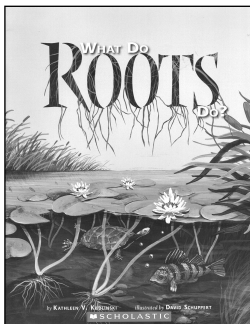
by Kate Messner; illustrated by Christopher Silas Neal

Up in the garden, the world is full of green—leaves and sprouts, growing vegetables, ripening fruit. But down in the dirt is a busy world populated by all the animals that make their home in the soil.

Science Connections:

- needs of plants
- parts of plants that provide humans with useful products
- plants change throughout the seasons

Suggested Reading Approach: Independent Reading, Read Aloud (Level M)



What Do Roots Do?

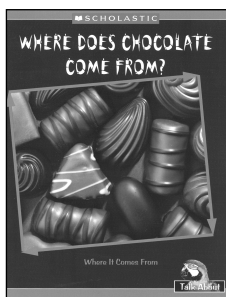
by Kathleen V. Kudlinski; illustrated by David Schuppert

Readers discover all the amazing things roots do for trees and plants.

Science Connections:

- parts of plants and their general function
- needs of plants
- parts of plants that provide humans with useful products

Suggested Reading Approach: Independent Reading



Where Does Chocolate Come From?

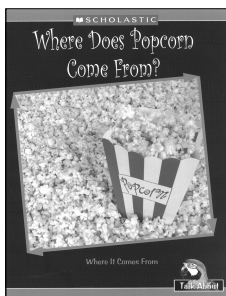
by Sandra Iversen

Simple text and clear photographs explain the process of making chocolate.

Science Connections:

- parts of plants that provide humans with useful products
- process required to obtain useful products from plants

Suggested Reading Approach: Independent Reading



Where Does Popcorn Come From?

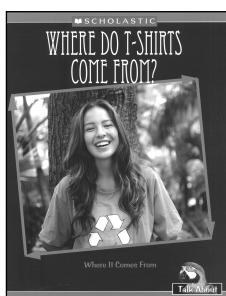
by Sandra Iversen

Simple text and clear photographs explain the process of making popcorn.

Science Connections:

- parts of plants that provide humans with useful products
- process required to obtain useful products from plants

Suggested Reading Approach: Independent Reading



Where Do T-Shirts Come From?

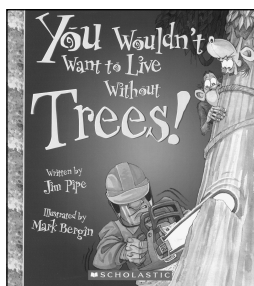
by Sandra Iversen

Simple text and clear photographs explain the process of making cotton T-shirts.

Science Connections:

- parts of plants that provide humans with useful products
- process required to obtain useful products from plants

Suggested Reading Approach: Independent Reading



You Wouldn't Want to Live Without Trees!

by Jim Pipe; illustrated by Mark Bergin

The clear, engaging text and humorous illustrations bring trees to life and stimulate the readers' curiosity about how trees affect our world.

Science Connections:

- ways in which plants are important to living things and the environment
- parts of plants and their general function
- parts of plants that provide humans with useful products
- process required to obtain useful products from plants
- plants change throughout the seasons
- how our supply of useful plants is replenished

Suggested Reading Approach: Read Aloud, Independent Reading