Core Knowledge
WorldWise: Content-based Learning™
Crosswalk for Kindergarten

Kindergarten Science

II. Needs of Plants and Animals
Teachers: Through reading aloud, observation, and activities such as investigating growing plants in your classroom, introduce students to the needs of living things. Students should explore the following:

A. Plants and Animals

- **A living thing is an organism.**
- **Organisms can grow, respond to environments, reproduce, and use food energy for life processes.**
- **Plants are organisms.**
    - **There are many types of plants.**
    - **Most plants have stems, roots, and leaves.**
- **Animals are organisms.**
    - **There are many types of animals.**
    - **Animals have certain parts for certain functions (structure: exoskeleton or skeleton; movement: legs, fins, wings; nutrition: mouth, digestive tract; protection: fur, shell).**

- **Plants, Their Needs, and Their Environments**
- **Plants need air, water, light, and space.**
- **Plants get what they need from their environment.**
- **Different types of plants live in different types of environments.**
- **Plants make their own food using sunlight and air.**

- **Animals, Their Needs, and Their Environments**
- **Animals need air, food, water, and shelter to survive.**
- **Animals get what they need from their environments.**
- **Different types of animals live in different types of environments.**
- **Animals get their food from eating other living things.**

- **Humans, Their Needs, and Their Environments**
- **Human beings are a type of animal.**
- **Humans need air, food, water, shelter to survive.**
- **Humans get what they need from their environment.**
- **Humans are omnivores.**

WorldWise titles to stairstep towards grade level reading	Key concept	Alignment to Core Knowledge Sequence	Instructional opportunities that serve as pivot into reading nonfiction trade books
Big Animals (A)	Big animals live in different places. The places big animals live have the things they need to survive.	C. Animals, Their Needs, and Their Environments • Different types of animals live in different types of environments.	• Graphic features: Photographs • Structure: List • Text type: Report
What Lives Here? (A)	Animals find and live in places that provide the food, shelter, and environment to raise their young that they need to survive.	C. Animals, Their Needs, and Their Environments • Animals need air, food, water, and shelter to survive. • Animals get what they need from their environments. • Different types of animals live in different types of environments.	• Graphic features: Photographs • Structure: List • Text type: Report
Plants In My Garden (A)	Gardens are places where people plant and look after plants for different reasons. Gardens can provide food, shade and beauty. All of these plants need sunlight.	A. Plants and Animals • Plants are organisms. ○ There are many types of plants. D. Humans, Their Needs, and Their Environments • Humans need air, food, water, shelter to survive. • Humans get what they need from their environment. • Humans are omnivores.	• Graphic features: Photographs, Summary • Structure: List • Text type: Report
Stripes (B)	Some animals have stripes to help them blend with their environment.	C. Animals, Their Needs, and Their Environments • Animals need air, food, water, and shelter to survive. • Animals get what they need from their environments. • Different types of animals live in different types of environments. • Animals get their food from eating other living things.	• Graphic features: Photographs • Structure: Question and Answer • Text type: Report
Food For My Pets (C)	Pets are living things. They need food and water to survive.	C. Animals, Their Needs, and Their Environments • Animals need air, food, water, and shelter to survive.	• Graphic features: Photographs • Structure: Question and answer • Text type: Recount
Food For All (C)	All living things need food to live and grow. Some animals eat plants. Some animals eat other animals.	C. Animals, Their Needs, and Their Environments • Animals need air, food, water, and shelter to survive. • Animals get what they need from their environments. • Animals get their food from eating other living things.	• Graphic features: Photographs • Graphic features: food chain • Structure: Sequential • Text type: Report
In the River (C)	Living things need food. Many animals eat plants as food.	C. Animals, Their Needs, and Their Environments • Animals need air, food, water, and shelter to survive. • Animals get what they need from their environments.	• Graphic features: Photographs • Graphic features: food chain • Structure: Question and Answer • Text type: Report
What Can They Make? (C)	Some animals build things. They build them to help to get food or to protect themselves or their babies.	C. Animals, Their Needs, and Their Environments • Animals need air, food, water, and shelter to survive. • Animals get what they need from their environments. • Animals get their food from eating other living things.	• Graphic features: Photographs, Summary • Structure: Question and Answer • Text type: Report • Key words: most
What's Inside the Eggs? (D)	Some animals hatch from eggs, and when they do, they need food to survive.	C. Animals, Their Needs, and Their Environments • Animals need air, food, water, and shelter to survive. • Animals get what they need from their environments. • Animals get their food from eating other living things.	• Graphic features: Photographs, Summary • Structure: Question and Answer • Text type: Report

Amazing Plants (F)	Plants have parts that enable them to take in water and food. Some plants can survive in harsh environments because they have the ability to store water.	B. Plants, Their Needs, and Their Environments • Plants need air, water, light, and space • Plants get what they need from their environment. • Different types of plants live in different types of environments.	• Graphic features: Photographs, Labels • Organizational features: Headings, Index • Structure: Problem and Solution, with some Cause and Effect • Text type: Report • Key words: Some
The Right Feet (G)	All birds have things in common: they have feathers, lay eggs, and have two feet. Birds have different types of feet, and they use their feet to do different things.	A. Plants and Animals • Animals are organisms. ○ Animals have certain parts for certain functions (structure: exoskeleton or skeleton; movement: legs, fins, wings; nutrition: mouth, digestive tract; protection: fur, shell).	• Graphic features: Photographs with captions, Fact Boxes, Summary • Organizational features: Index, Headings • Structure: Description • Text type: Description
Amazing Sea Lizards (I)	Sea lizards have adaptations that enable them to survive a sea habitat. Iguanas are the only lizard that finds food in the sea.	C. Animals, Their Needs, and Their Environments • Animals need air, food, water, and shelter to survive. • Animals get what they need from their environments. • Different types of animals live in different types of environments. • Animals get their food from eating other living things.	• Graphic features: Photographs with captions • Organizational features: Chapters, Headings, Index • Other features: Glossary • Structure: List, with some Cause and Effect, and Sequence • Text type: Report

Core Knowledge
WorldWise: Content-based Learning™
Crosswalk for Grade 1

Science

II. Plant and Animal Survival

A. Structure and Function in Plants and Animals

- **Plants and animals are composed of parts (structures), which they use in support of their survival.**

B. Information Processing: Plant and Animal Stimulus and Response

- **Animals and plants have parts that enable them to obtain and process information about their environment through their senses.**
- **Animals and plants respond to environmental inputs (stimuli) with behaviors that help them survive.**

C. Growth and Development

- **Adult plants and animals reproduce.**
- **Many kinds of animal parents take care of their offspring until the offspring become mature enough to care for themselves.**

D. Parents and Offspring

- **Traits are the characteristics of living things.**
- **Individuals of the same kind of animal or plant have similar traits, but they can also vary in many ways.**

WorldWise titles to stairstep towards grade level reading	Key concept	Alignment to Core Knowledge Sequence	Instructional opportunities that serve as pivot into reading nonfiction trade books
Stripes (B)	Some animals have stripes to help them blend with their environment.	A. Structure and Function in Plants and Animals • Plants and animals are composed of parts (structures), which they use in support of their survival.	• Graphic features: Photographs • Structure: Question and Answer • Text type: Report
What Can They Make? (C)	Some animals build things. They build them to help to get food or to protect themselves or their babies.	C. Growth and Development • Adult plants and animals reproduce. • Many kinds of animal parents take care of their offspring until the offspring become mature enough to care for themselves.	• Graphic features: Photographs, Summary • Structure: Question and Answer • Text type: Report • Key words: most
What's Inside the Eggs? (D)	Some animals hatch from eggs, and when they do, they need food to survive.	B. Information Processing: Plant and Animal Stimulus and Response • Animals and plants have parts that enable them to obtain and process information about their environment through their senses. • Animals and plants respond to environmental inputs (stimuli) with behaviors that help them survive.	• Graphic features: Photographs, Summary • Structure: Question and Answer • Text type: Report
Seeds On the Move (E)	Many plants grow from seeds. Different plants have features that help them to move to a new place to grow. Seeds can be moved by the wind, by animals, or by water.	A. Structure and Function in Plants and Animals • Plants and animals are composed of parts (structures), which they use in support of their survival. C. Growth and Development • Adult plants and animals reproduce.	• Graphic features: Photographs, visual flow chart, diagram • Organizational features: Headings, sub-headings • Structure: Question and Answer • Text type: Explanation • Key words: Most, all,
Wings (E)	Some animals have wings. Some animals with wings can fly, and some cannot.	A. Structure and Function in Plants and Animals • Plants and animals are composed of parts (structures), which they use in support of their survival.	• Graphic features: Photographs, Labels • Organizational features: Headings, Index • Structure: List • Text type: Report • Key words: many, but, some, all
Using Color (F)	Animals use color to attract a mate. Animals use color to stay safe. Some animals change color to hide.	A. Structure and Function in Plants and Animals • Plants and animals are composed of parts (structures), which they use in support of their survival. B. Information Processing: Plant and Animal Stimulus and Response • Animals and plants have parts that enable them to obtain and process information about their environment through their senses. • Animals and plants respond to environmental inputs (stimuli) with behaviors that help them survive.	• Graphic features: Photographs, Labels • Structure: List, with some problem and solution • Text type: Explanation • Key words: Some ·
Eyes (F)	Animals have ways of staying safe and finding food. Animals use their eyes to see their food and to see danger. Animals use their body parts in different ways.	A. Structure and Function in Plants and Animals • Plants and animals are composed of parts (structures), which they use in support of their survival. B. Information Processing: Plant and Animal Stimulus and Response • Animals and plants have parts that enable them to obtain and process information about their environment through their senses. • Animals and plants respond to environmental inputs (stimuli) with behaviors that help them survive.	• Graphic features: Photograph, visual summary • Structure: List • Text type: Explanation • Key Words: But

Amazing Plants (F)	Plants have parts that enable them to take in water and food. Some plants can survive in harsh environments because they have the ability to store water.	A. Structure and Function in Plants and Animals • Plants and animals are composed of parts (structures), which they use in support of their survival. B. Information Processing: Plant and Animal Stimulus and Response • Animals and plants have parts that enable them to obtain and process information about their environment through their senses. • Animals and plants respond to environmental inputs (stimuli) with behaviors that help them survive.	• Graphic features: Photograph with labels • Organizational features: Headings • Structure: List • Text type: Description with some compare and contrast, problem and solution • Key Words: Many, some, • Signal words and phrases: Some … other, as big as
Animal Close-Ups (G)	Animals have body parts that help them do particular things, such as get food and stay safe. Certain body parts help animals take in information from their environment.	A. Structure and Function in Plants and Animals • Plants and animals are composed of parts (structures), which they use in support of their survival. B. Information Processing: Plant and Animal Stimulus and Response • Animals and plants have parts that enable them to obtain and process information about their environment through their senses. • Animals and plants respond to environmental inputs (stimuli) with behaviors that help them survive.	• Graphic features: magnified photographs • Organizational features: Visual summary • Structure: Question and answer • Text type: Description • Key Words: Many, some
The Right Feet (G)	All birds have things in common: they have feathers, lay eggs, and have two feet. Birds have different types of feet, and they use their feet to do different things.	A. Structure and Function in Plants and Animals • Plants and animals are composed of parts (structures), which they use in support of their survival.	• Graphic features: Photographs, Labels • Organizational features: Headings, Index • Structure: Problem and Solution, with some Cause and Effect • Text type: Report • Key words: Some
In the Tree Tops (H)	Many animals need the treetops to find their food. Some animals make their homes in the treetops. Some animals fly in and out of the treetops, and some move in other ways.	A. Structure and Function in Plants and Animals • Plants and animals are composed of parts (structures), which they use in support of their survival.	• Graphic features: Photographs with captions • Organizational features: Headings • Print features: Fact boxes • Structure: List • Text type: Explanation • Key words: Some, most
Hungry, Cold, or Scared (H)	Some babies need help from their parents when they are hungry, cold, or scared. Some baby animals make noises to get their parent's attention when they need food, or if they are cold or scared.	C. Growth and Development • Adult plants and animals reproduce. • Many kinds of animal parents take care of their offspring until the offspring become mature enough to care for themselves.	• Graphic features: Photographs • Organizational features: Table of Contents, Headings, Index • Print features: Fact box • Structure: List • Text type: Report • Key Words: Some • Signal words and phrases:
Dangerous Plants (H)	Some plants are dangerous. Dangerous plants have features that can cause injury or illness.	A. Structure and Function in Plants and Animals • Plants and animals are composed of parts (structures), which they use in support of their survival. B. Information Processing: Plant and Animal Stimulus and Response • Animals and plants have parts that enable them to obtain and process information about their environment through their senses.	• Graphic features: Photographs, Labels • Organizational features: Headings • Structure: List with some problem and solution, compare and contrast, cause and effect • Text type: Description • Key Words: Some, other • Signal words and phrases: Some __ other, most __ but
Weird and Wonderful Sea Animals (H)	There are a wide range of animals that live in the sea. Sea animals have different features that help them to get the food they need and to stay safe.	A. Structure and Function in Plants and Animals • Plants and animals are composed of parts (structures), which they use in support of their survival.	• Graphic features: • Organizational features: • Structure: • Text type: Report • Key words:

Mushrooms and Toadstools (I)	Mushrooms and toadstools get food from the soil or from plants. Mushrooms and toadstools are fungi. They are not plants. Mushrooms and toadstools need plants to get their food. Mushrooms and toadstools enrich the soil.	A. Structure and Function in Plants and Animals • Plants and animals are composed of parts (structures), which they use in support of their survival. B. Information Processing: Plant and Animal Stimulus and Response • Animals and plants have parts that enable them to obtain and process information about their environment through their senses. • Animals and plants respond to environmental inputs (stimuli) with behaviors that help them survive.	• Graphic features: Photographs, diagrams • Organizational features: Chapters with headings and subheadings • Print features: Fact box • Structure: Question and answer • Text type: Report • Key words: Some, many
Shark Attack (I)	Sharks eat other animals. Finding food in the ocean is difficult. Sharks have senses that help them to find food.	A. Structure and Function in Plants and Animals • Plants and animals are composed of parts (structures), which they use in support of their survival. B. Information Processing: Plant and Animal Stimulus and Response • Animals and plants have parts that enable them to obtain and process information about their environment through their senses. • Animals and plants respond to environmental inputs (stimuli) with behaviors that help them survive.	• Graphic features: Photographs with labels and captions • Organizational features: Table of contents • Print features: Glossary • Structure: List with some problem and solution • Text type: Explanation • Key words: Some
Amazing Sea Lizards (I)	Sea lizards have adaptations that enable them to survive a sea habitat. Iguanas are the only lizard that finds food in the sea.	A. Structure and Function in Plants and Animals • Plants and animals are composed of parts (structures), which they use in support of their survival. B. Information Processing: Plant and Animal Stimulus and Response • Animals and plants have parts that enable them to obtain and process information about their environment through their senses. • Animals and plants respond to environmental inputs (stimuli) with behaviors that help them survive.	• Graphic features: Photographs with captions, Fact Boxes, Summary • Organizational features: Index, Chapters with Headings • Structure: Description • Text type: Report
Looking After Their Young (J)	Some young need a lot of care and so their parents need to look after them for a long time. Some young need looking after for a short time. Some parents do not need to look after their young at all.	C. Growth and Development • Adult plants and animals reproduce. • Many kinds of animal parents take care of their offspring until the offspring become mature enough to care for themselves.	• Graphic features: Photographs with chapters • Organizational features: Chapters and headings • Print features: Find out more boxes • Structure: Compare and contrast • Text type: Report • Key Words: Most, some
How Spiders Catch Their Food (J)	Spiders catch food in different ways. Some spiders use webs and some spiders chase their pray or hide and then go get it.	A. Structure and Function in Plants and Animals • Plants and animals are composed of parts (structures), which they use in support of their survival. B. Information Processing: Plant and Animal Stimulus and Response • Animals and plants have parts that enable them to obtain and process information about their environment through their senses. • Animals and plants respond to environmental inputs (stimuli) with behaviors that help them survive.	• Graphic features: Photographs, Labels • Organizational features: Chapters and headings • Structure: • Text type: Explanation with some problem and solution • Key Words: Some, all
How Do Plants Grow Here? (K)	Some plants can grow in very harsh environments. Plants that live in harsh environments have adaptations that enable them to absorb water and nutrients, and to withstand extreme climatic conditions.	A. Structure and Function in Plants and Animals • Plants and animals are composed of parts (structures), which they use in support of their survival. B. Information Processing: Plant and Animal Stimulus and Response • Animals and plants have parts that enable them to obtain and process information about their environment through their senses. • Animals and plants respond to environmental inputs (stimuli) with behaviors that help them survive.	• Graphic features: Photographs with labels, diagram with labels • Organizational features: Chapters with headings and subheadings, index • Print features: “Find out” boxes • Structure: Question and answer, problem and solution • Text type: Explanation, problem and solution • Key words: Some

Summer in Antarctica (L)	Antarctica changes dramatically when the short summer comes. In Antarctica, plants and animals have ways of finding food, mating, and raising their young.	A. Structure and Function in Plants and Animals • Plants and animals are composed of parts (structures), which they use in support of their survival. B. Information Processing: Plant and Animal Stimulus and Response • Animals and plants have parts that enable them to obtain and process information about their environment through their senses. • Animals and plants respond to environmental inputs (stimuli) with behaviors that help them survive. C. Growth and Development • Adult plants and animals reproduce. • Many kinds of animal parents take care of their offspring until the offspring become mature enough to care for themselves.	• Graphic features: Photographs, map, calendar, diagram with labels • Organizational features: Chapters with headings and subheadings • Structure: Description • Text type: Report
Animals of the African Grassland (M)	Animals of the African grassland need the plants that live there to survive. Plant-eating animals eat the plants that grow on the grasslands, and meat-eating animals survive by eating other animals.	A. Structure and Function in Plants and Animals • Plants and animals are composed of parts (structures), which they use in support of their survival. B. Information Processing: Plant and Animal Stimulus and Response • Animals and plants have parts that enable them to obtain and process information about their environment through their senses. • Animals and plants respond to environmental inputs (stimuli) with behaviors that help them survive.	• Graphic features: Photographs with labels, map, diagram, • Organizational features: Chapters with headings and subheadings, index • Print features: Glossary • Structure: Compare and contrast • Text type: Report

Core Knowledge
WorldWise: Content-based Learning™
Crosswalk for Grade 2

II. Organisms and Their Habitats

A. Plant Needs

- **Plants have body parts (roots, stems, leaves) to survive and grow.**
- **Plants are living organisms and typically grow in fixed locations. Though there are many different types of plants, they have common needs (air, water, minerals, light).**

B. Plant Diversity

- **Plants are diverse in size, structure, and ecological needs.**
- **Plants live in environments to which they are suited; those environments also differ:**
    - **Deciduous forests (oak trees)**
    - **Tropical forests (vines, epiphytes)**
    - **Meadows and prairies (grasses)**
    - **Deserts (cacti)**
    - **Tundra (plants of small size)**
    - **Ponds, lakes, rivers, and streams**
    - **Oceans are home to less than a dozen known species of plants.**
    - **Many plant habitats change in cycles over time—seasons—and plants are adapted to survive during those changes.**

C. Animal Needs

- **Adult plants and animals reproduce.**
- **Many kinds of animal parents take care of their offspring until the offspring become mature enough to care for themselves.**

D. Animal Diversity

- **Animals are diverse in size, shape, and ecological needs.**
- **Animals vary in their structure:**
  - **Invertebrates: without backbones (snails, insects, coral)**
  - **Vertebrates: with backbones (mammals, birds, fish, reptiles, and amphibians)**
- **Animals live in environments to which they are suited; those environments differ:**
  - **Deciduous forests (squirrels, raccoons)**
  - **Tropical forests (moles, worms)**
  - **Meadows and prairies (prairie dogs)**
  - **Deserts (lizards, scorpions)**
  - **Tundra (arctic fox, polar bears)**
  - **Ponds, lakes, rivers, and streams (fish, oysters)**
  - **Oceans (There are numerous species of animals in the world's oceans such as sea stars and whales.)**

E. Ecosystems: Plant and Animal Relationships

- **Many plants and animals live in a specific habitat.**
- **Organisms that share a given space affect each other.**
  - **Animals depend on plants for food and shelter.**
  - **Plants depend on animals (for example, pollination, seed dispersal).**
- **There are also groups of living things that are neither plants nor animals (fungi, algae, bacteria).**

WorldWise titles to stairstep towards grade level reading	Key concept	Alignment to Core Knowledge Sequence	Instructional opportunities that serve as pivot into reading nonfiction trade books
Amazing Plants (F)	Plants have parts that enable them to take in water and food. Some plants can survive in harsh environments because they have the ability to store water.	A. Plant Needs • Plants have body parts (roots, stems, leaves) to survive and grow. • Plants are living organisms and typically grow in fixed locations. Though there are many different types of plants, they have common needs (air, water, minerals, light). B. Plant Diversity • Plants are diverse in size, structure, and ecological needs. • Plants live in environments to which they are suited; those environments also differ.	• Graphic features: Photograph with labels • Organizational features: Headings • Structure: List • Text type: Description with some compare and contrast, problem and solution • Key Words: Many, some, • Signal words and phrases: Some … other, as big as
In the Tree Tops (H)	Many animals need the treetops to find their food. Some animals make their homes in the treetops. Some animals fly in and out of the treetops, and some move in other ways.	D. Animal Diversity • Animals are diverse in size, shape, and ecological needs. • Animals live in environments to which they are suited; those environments differ.	• Graphic features: Photographs with captions • Organizational features: Headings • Print features: Fact boxes • Structure: List • Text type: Explanation • Key words: Some, most
Looking After Their Young (J)	Some young need a lot of care and so their parents need to look after them for a long time. Some young need looking after for a short time. Some parents do not need to look after their young at all.	C. Animal Needs • Adult plants and animals reproduce. • Many kinds of animal parents take care of their offspring until the offspring become mature enough to care for themselves.	• Graphic features: Photographs with chapters • Organizational features: Chapters and headings • Print features: Find out more boxes • Structure: Compare and contrast • Text type: Report • Key Words: Most, some
Side By Side (L)	Lions and impala share the same habitat – the grasslands of Africa. Lions and impala have similarities and differences in how they live and survive.	D. Animal Diversity • Animals are diverse in size, shape, and ecological needs. • Animals live in environments to which they are suited; those environments differ. E. Ecosystems: Plant and Animal Relationships • Many plants and animals live in a specific habitat. • Organisms that share a given space affect each other. ○ Animals depend on plants for food and shelter. ○ Plants depend on animals (for example, pollination, seed dispersal).	• Graphic features: Photographs with captions • Organizational features: Chapters with headings and sub-headings, index • Print features: Glossary, fact boxes • Structure: Compare and contrast • Text type: Report • Key Words: After, as many as • Signal words and phrases: But, are ___ than, although
Sharing Our Yard (L)	Some animals live near or visit our yard. These animals sometimes need protecting so that they are safe in their habitats.	E. Ecosystems: Plant and Animal Relationships • Many plants and animals live in a specific habitat. • Organisms that share a given space affect each other. ○ Animals depend on plants for food and shelter. ○ Plants depend on animals (for example, pollination, seed dispersal).	• Graphic features: Photographs with captions, diagram with labels • Organizational features: Chapters with sub-headings, index • Print features: “Did you know?” boxes, glossary • Structure: Description, some sequence • Text type: Report • Key Words
Amazing Lifetimes (L)	All living things have lifetimes, and these lifetimes vary in length. Living things grow and change at different rates, and in different ways.	D. Animal Diversity • Animals are diverse in size, shape, and ecological needs.	• Graphic features: Photographs with captions, diagram with labels • Organizational features: Chapters with headings and sub-headings, index • Structure: Compare and contrast • Text type: Explanation • Key Words: All, some

Summer in Antarctica (L)	Antarctica changes dramatically when the short summer comes. In Antarctica, plants and animals have ways of finding food, mating, and raising their young.	D. Animal Diversity • Animals are diverse in size, shape, and ecological needs. • Animals live in environments to which they are suited; those environments differ	• Graphic features: Photographs, map, calendar, diagram with labels • Organizational features: Chapters with headings and subheadings • Structure: Description • Text type: Report
Animals of the African Grassland (M)	Animals of the African grassland need the plants that live there to survive. Plant-eating animals eat the plants that grow on the grasslands, and meat-eating animals survive by eating other animals.	B. Plant Diversity • Plants are diverse in size, structure, and ecological needs. • Plants live in environments to which they are suited; those environments also differ. D. Animal Diversity • Animals are diverse in size, shape, and ecological needs. • Animals live in environments to which they are suited; those environments differ.	• Graphic features: Photographs with labels, map, diagram • Organizational features: Chapters with headings and subheadings, index • Print features: Glossary • Structure: Compare and contrast • Text type: Report
Champions of the Animal World (M)	Some animals have adaptations that make them stronger or faster than other animals. This helps them to stay safe or find food. Human activity threatens the existence of many animals and some are endangered.	D. Animal Diversity • Animals are diverse in size, shape, and ecological needs. • Animals live in environments to which they are suited; those environments differ.	• Graphic features: Photographs • Organizational features: Chapters with headings and sub-headings, index • Print features: “Find out more” boxes, glossary • Structure: Description, some compare and contrast • Text type: Report • Key Words: Sometimes • Signal words: Longer than
Silkworms (M)	Living things grow and change throughout their life cycles. Some living things, such as moths and butterflies, undergo significant changes in their bodies at different stages of their life cycles. People farm silkworms for their silk.	D. Animal Diversity • Animals are diverse in size, shape, and ecological needs.	• Graphic features: Photographs with captions, close-ups, diagrams • Organizational features: Chapters with headings and subheadings • Print features: Fact boxes, glossary • Structure: Sequence • Text type: Explanation • Signal words and phrases: In ___, as soon as, after, a long time ago
Disappearing Ice (M)	The amount of pack ice in the Arctic is decreasing. Many animals that live in the Arctic are struggling to survive because there is less pack ice.	E. Ecosystems: Plant and Animal Relationships • Many plants and animals live in a specific habitat. • Organisms that share a given space affect each other. ○ Animals depend on plants for food and shelter.	• Graphic features: Photographs with captions, map, diagrams with labels • Organizational features: Chapters with headings and sub-headings • Print features: Fact boxes, glossary • Structure: Description, compare and contrast • Text type: Explanation
The Coral Reef (O)	Coral reefs are fragile environments, home to thousands of sea creatures, and some of the most complex habitats on Earth. Despite their size, coral reefs are fragile environments.	E. Ecosystems: Plant and Animal Relationships • Many plants and animals live in a specific habitat. • Organisms that share a given space affect each other. ○ Animals depend on plants for food and shelter.	• Graphic features: Photographs with labels and captions, map with labels, diagram with labels • Organizational features: Chapters with headings and sub-headings • Print features: Fact boxes • Structure: Interview with question and answer, compare and contrast • Text type: Explanation / report / argument / diary • Key Words: Most, lots, because, many, although • Signal words and phrases: Some, other

Monarch Butterflies: The Long Migration (P)	The monarch butterfly must overcome many challenges to survive seasonal changes and to find food. The monarch butterfly species survives by migrating over huge distances. The relationship between the monarch butterfly and the milkweed plant is pivotal to the butterfly's survival.	E. Ecosystems: Plant and Animal Relationships • Many plants and animals live in a specific habitat. • Organisms that share a given space affect each other. ○ Animals depend on plants for food and shelter. ○ Plants depend on animals (for example, pollination, seed dispersal).	• Graphic features: Photographs with captions, maps with labels and captions, diagram with labels, flowchart, tables, timeline • Organizational features: Chapters with headings and sub-headings • Print features: Fact boxes, glossary • Structure: List, sequence, cause and effect, question and answer • Text type: Report / explanation, newspaper article

Core Knowledge
WorldWise: Content-based Learning™
Crosswalk for Grade 3

III. Habitats and Change

A. Living Things and Their Environments

- **Living things are adapted to the environment in which they live.**
- **Adaptations promote survival.**
- **Organisms have traits that indicate they are adapted to live in their environment, and able to survive.**
- **Organisms have adaptations to specific habitats (tundra, seashore, desert and underground).**
- **Some animals form groups to help them survive in their habitats.**

B. Ecosystems and Environmental Change

- **An ecosystem is all the biotic and abiotic factors in a specific environment.**
- **Ecosystems undergo natural and human-induced changes over time.**
- **When an ecosystem changes, some organisms survive while others may not.**
    - **Describe specific evidence that shows what a habitat and a specific organism in that habitat were like before and after a significant environmental change.**
- **Humans can cause threats to the environment (air pollution: emissions, smog; water pollution: industrial waste, run-off from farming).**
- **Debate the merits of solutions for reconstructing an ecosystem after a significant environmental change.**

C. Evidence of How Organisms and Environments Have Changed Over Time

- **Fossils: Scientists analyze and interpret fossils (bones, amber, traces, impressions) for evidence of how organisms and environments have changed over time.**
- **As a past environment changed, so did the organisms that continue to live there (coral reefs, grasslands).**
- **Many organisms that once existed are now extinct.**

WorldWise titles to stairstep towards grade level reading	Key concept	Alignment to Core Knowledge Sequence	Instructional opportunities that serve as pivot into reading nonfiction trade books
Sharing Our Yard (L)	Some animals live near or visit our yard. These animals sometimes need protecting so that they are safe in their habitats.	B. Ecosystems and Environmental Change • An ecosystem is all the biotic and abiotic factors in a specific environment. • Ecosystems undergo natural and human-induced changes over time.	• Graphic features: Photographs with captions • Organizational features: Chapters with headings and sub-headings, index • Print features: Glossary, fact boxes • Structure: Compare and contrast • Text type: Report • Key Words: After, as many as • Signal words and phrases: But, are ___ than, although
Summer in Antarctica (L)	Antarctica changes dramatically when the short summer comes. In Antarctica, plants and animals have ways of finding food, mating, and raising their young.	B. Ecosystems and Environmental Change • An ecosystem is all the biotic and abiotic factors in a specific environment. • Ecosystems undergo natural and human-induced changes over time. • When an ecosystem changes, some organisms survive while others may not. ○ Describe specific evidence that shows what a habitat and a specific organism in that habitat were like before and after a significant environmental change. • Humans can cause threats to the environment (air pollution: emissions, smog; water pollution: industrial waste, run-off from farming). • Debate the merits of solutions for reconstructing an ecosystem after a significant environmental change.	• Graphic features: Photographs, map, calendar, diagram with labels • Organizational features: Chapters with headings and subheadings • Structure: Description • Text type: Report
Animals of the African Grassland (M)	Animals of the African grassland need the plants that live there to survive. Plant-eating animals eat the plants that grow on the grasslands, and meat-eating animals survive by eating other animals.	B. Ecosystems and Environmental Change • An ecosystem is all the biotic and abiotic factors in a specific environment. • Ecosystems undergo natural and human-induced changes over time.	• Graphic features: Photographs with labels, map, diagram • Organizational features: Chapters with headings and subheadings, index • Print features: Glossary • Structure: Compare and contrast • Text type: Report
Disappearing Ice (M)	The amount of pack ice in the Arctic is decreasing. Many animals that live in the Arctic are struggling to survive because there is less pack ice.	B. Ecosystems and Environmental Change • An ecosystem is all the biotic and abiotic factors in a specific environment. • Ecosystems undergo natural and human-induced changes over time. • When an ecosystem changes, some organisms survive while others may not.	• Graphic features: Photographs with captions, map, diagrams with labels • Organizational features: Chapters with headings and sub-headings • Print features: Fact boxes, glossary • Structure: Description, compare and contrast • Text type: Explanation
Busy Highways (O)	Some animals migrate long distances to feed, to raise their young, or to find better weather, and they return to the place where they began their journey. Animals can migrate through the air, in the water, and across the land. Most animals migrate in groups.	A. Living Things and Their Environments • Living things are adapted to the environment in which they live. • Adaptations promote survival. • Organisms have traits that indicate they are adapted to live in their environment, and able to survive. • Organisms have adaptations to specific habitats (tundra, seashore, desert and underground). • Some animals form groups to help them survive in their habitats.	• Graphic features: Photographs, maps, tables, diagrams • Organizational features: Chapters with headings and sub-headings • Print features: Fact boxes, “Find out more” boxes, glossary • Structure: List, sequence, problem and solution • Text type: Report, explanation
Amazing Animal Survivors (O)	Animals adapt and change to survive. Animals have adapted to live in harsh environments and in places where there is high competition for food. Some animals have highly developed senses that help them to survive.	B. Ecosystems and Environmental Change • An ecosystem is all the biotic and abiotic factors in a specific environment. • Ecosystems undergo natural and human-induced changes over time. • When an ecosystem changes, some organisms survive while others may not. ○ Describe specific evidence that shows what a habitat and a specific organism in that habitat were like before and after a significant environmental change. • Humans can cause threats to the environment (air pollution: emissions, smog; water pollution: industrial waste, run-off from farming). • Debate the merits of solutions for reconstructing an ecosystem after a significant environmental change.	• Graphic features: Photographs with captions, diagram with labels, tables • Organizational features: Chapters with headings and sub-headings • Print features: Glossary, “Find out more” boxes • Structure: List, some cause and effect, problem and solution • Text type: Report / explanation • Key Words: All, some

The Coral Reef (O)	Coral reefs are fragile environments, home to thousands of sea creatures, and some of the most complex habitats on Earth. Despite their size, coral reefs are fragile environments.	A. Living Things and Their Environments • Living things are adapted to the environment in which they live. • Adaptations promote survival. • Organisms have traits that indicate they are adapted to live in their environment, and able to survive. • Organisms have adaptations to specific habitats (tundra, seashore, desert and underground). • Some animals form groups to help them survive in their habitats. B. Ecosystems and Environmental Change • An ecosystem is all the biotic and abiotic factors in a specific environment. • Ecosystems undergo natural and human-induced changes over time. • When an ecosystem changes, some organisms survive while others may not. ○ Describe specific evidence that shows what a habitat and a specific organism in that habitat were like before and after a significant environmental change. • Humans can cause threats to the environment (air pollution: emissions, smog; water pollution: industrial waste, run-off from farming). • Debate the merits of solutions for reconstructing an ecosystem after a significant environmental change.	• Graphic features: Photographs with labels and captions, map with labels, diagram with labels • Organizational features: Chapters with headings and sub-headings • Print features: Fact boxes • Structure: Interview with question and answer, compare and contrast • Text type: Explanation / report / argument / diary • Key Words: Most, lots, because, many, although • Signal words and phrases: Some, other
Plants: The Key to Life (O)	Plants are essential for animals and people to survive. Many native plants are diminishing in number. Replanting programs and other actions are being undertaken to protect plants and restore vegetation.	B. Ecosystems and Environmental Change • An ecosystem is all the biotic and abiotic factors in a specific environment. • Ecosystems undergo natural and human-induced changes over time. • When an ecosystem changes, some organisms survive while others may not. ○ Describe specific evidence that shows what a habitat and a specific organism in that habitat were like before and after a significant environmental change. • Humans can cause threats to the environment (air pollution: emissions, smog; water pollution: industrial waste, run-off from farming). • Debate the merits of solutions for reconstructing an ecosystem after a significant environmental change.	• Graphic features: Photographs with captions, diagram with labels, tables • Organizational features: Chapters with headings and sub-headings • Print features: Glossary, fact boxes, “Find out more” boxes • Structure: List with some Question and answer • Text type: Report / explanation • Key Words: But, some, many
Going, Going, Gone? (P)	When the environment changes some animals survive or reproduce, others relocate or adapt, and some die. Humans have changed the environment, and this has led to some animals becoming endangered or extinct. Some people are helping to save threatened animal species.	B. Ecosystems and Environmental Change • An ecosystem is all the biotic and abiotic factors in a specific environment. • Ecosystems undergo natural and human-induced changes over time. • When an ecosystem changes, some organisms survive while others may not. ○ Describe specific evidence that shows what a habitat and a specific organism in that habitat were like before and after a significant environmental change. • Humans can cause threats to the environment (air pollution: emissions, smog; water pollution: industrial waste, run-off from farming). • Debate the merits of solutions for reconstructing an ecosystem after a significant environmental change.	• Graphic features: Photographs and illustrations with captions, • Organizational features: Chapters with headings and sub-headings, maps, tables, side bars • Print features: “Find out more” boxes • Structure: Question and answer, cause and effect, problem and solution • Text type: Explanation / report
Animals and Their Ancestors (P)	Animals have evolved over time and changed their features and/or behaviors as their environment has changed. Most changes have taken millions of years, but some animals have changed quickly. Some animals have not needed to adapt; they have stayed the same.	C. Evidence of How Organisms and Environments Have Changed Over Time • Fossils: Scientists analyze and interpret fossils (bones, amber, traces, impressions) for evidence of how organisms and environments have changed over time. • As a past environment changed, so did the organisms that continue to live there (coral reefs, grasslands). • Many organisms that once existed are now extinct.	• Graphic features: Photographs with captions, diagrams with labels, timeline, maps with labels • Organizational features: Chapters with headings and sub-headings • Print features: Fact boxes, glossary • Structure: Compare and contrast, sequence, cause and effect • Text type: Report / explanation
Monarch Butterflies: The Long Migration (P)	The monarch butterfly must overcome many challenges to survive seasonal changes and to find food. The monarch butterfly species survives by migrating over huge distances. The relationship between the monarch butterfly and the milkweed plant is pivotal to the butterfly’s survival.	B. Ecosystems and Environmental Change • An ecosystem is all the biotic and abiotic factors in a specific environment. • Ecosystems undergo natural and human-induced changes over time. • When an ecosystem changes, some organisms survive while others may not. ○ Describe specific evidence that shows what a habitat and a specific organism in that habitat were like before and after a significant environmental change. • Humans can cause threats to the environment (air pollution: emissions, smog; water pollution: industrial waste, run-off from farming). • Debate the merits of solutions for reconstructing an ecosystem after a significant environmental change.	• Graphic features: Photographs with captions, maps with labels and captions, diagram with labels, flowchart, tables, timeline • Organizational features: Chapters with headings and sub-headings • Print features: Fact boxes, glossary • Structure: List, sequence, cause and effect, question and answer • Text type: Report / explanation, newspaper article

Talented Animals (Q)	Animals come in many different shapes and sizes, and they have different talents and skills. Animals' special characteristics help them survive in their environment.	A. Living Things and Their Environments • Living things are adapted to the environment in which they live. • Adaptations promote survival. • Organisms have traits that indicate they are adapted to live in their environment, and able to survive.	• Graphic features: Photographs with labels and captions, sidebars, tables, maps • Organizational features: Chapters with headings and sub-headings • Print features: Fact boxes, glossary • Structure: List • Text type: Report / explanation
Shells on Their Backs (R)	Turtles and tortoises are reptiles that have many things in common, but are also different in several distinct ways. Turtles and tortoises have well developed structures and behaviors that have allowed them to survive all around the world for millions of years. Today, many turtle and tortoise species are at risk of extinction.	A. Living Things and Their Environments • Living things are adapted to the environment in which they live. • Adaptations promote survival. • Organisms have traits that indicate they are adapted to live in their environment, and able to survive.	• Graphic features: Photographs with captions, maps, tables, diagram with labels • Print features: Fact boxes, “Find out more” boxes • Structure: Compare and contrast, problem and solution • Text type: Explanation / report
Living with the Tides (S)	Tidal environments are areas of land between the high and low tides in coastal areas. Plants and animals that live in tidal habitats have adapted to survive in this environment. Tidal environments can be damaged by nature and by people.	A. Living Things and Their Environments • Living things are adapted to the environment in which they live. • Adaptations promote survival. • Organisms have traits that indicate they are adapted to live in their environment, and able to survive. B. Ecosystems and Environmental Change • An ecosystem is all the biotic and abiotic factors in a specific environment. • Ecosystems undergo natural and human-induced changes over time. • When an ecosystem changes, some organisms survive while others may not. ○ Describe specific evidence that shows what a habitat and a specific organism in that habitat were like before and after a significant environmental change.	• Graphic features: Photographs, illustrations, diagrams with labels, maps, sidebars • Organizational features: Chapters with headings and sub-headings • Print features: “Find out more” boxes, fact boxes, glossary • Structure: Problem and solution, cause and effect • Text type: Report / procedure • Key Words: Most, some

III. Structures and Functions of Living Things

A. Structure is Related to Function

- **Cells are the smallest unit of life.**
- **Unicellular organisms have only one cell.**
- **Multicellular organisms are made up of many cells.**
- **Cells make up tissues; tissues make up organs.**
- **Organs work together in organ systems.**
- **Different structures work together in systems to support survival, growth, behavior, and reproduction.**
- **At any level of organization, each internal and external structure of an organism reflects its function.**
- **Different structures work together in systems to support survival (heart and lungs in many animals; roots and stems in many plants).**
- **Some animals form groups to help them survive in their habitat.**

B. The Structure and Function of the Eyes and Ears

- **Light enters through the eye after being reflected off objects.**
    - **Structures in the eyes focus and receive the light.**
    - **The optic nerve carries electrical signals to the brain.**
- **The outer ear captures sound waves.**
    - **In the middle ear, sound waves hit the eardrum and are passed to three small bones.**
    - **In the inner ear, vibrations move tiny hairs that create nerve signals.**
    - **Auditory nerve sends signals to the brain.**

C. Stimulus, Response, and Survival

- **Stimulus is something that causes living tissue to respond.**
- **Response is the reaction an organism has to a stimulus.**
- **Organisms have sensory organs that detect different kinds of information about the environment.**
- **In most animals, sensory organs transmit information to the brain.**
- **The brain processes this information as perceptions and stores them as memories.**
- **Plants also respond to stimuli.**
- **Response to stimuli helps survival, growth, reproduction, and behavior.**

WorldWise titles to stairstep towards grade level reading	Key concept	Alignment to Core Knowledge Sequence	Instructional opportunities that serve as pivot into reading nonfiction trade books
Disappearing Ice (M)	The amount of pack ice in the Arctic is decreasing. Many animals that live in the Arctic are struggling to survive because there is less pack ice.	C. Stimulus, Response, and Survival • Stimulus is something that causes living tissue to respond. • Response is the reaction an organism has to a stimulus. • Organisms have sensory organs that detect different kinds of information about the environment. • In most animals, sensory organs transmit information to the brain. • The brain processes this information as perceptions and stores them as memories. • Plants also respond to stimuli. • Response to stimuli helps survival, growth, reproduction, and behavior.	• Graphic features: Photographs with captions, map, diagrams with labels • Organizational features: Chapters with headings and sub-headings • Print features: Fact boxes, glossary • Structure: Description, compare and contrast • Text type: Explanation
Plants: The Key to Life (O)	Plants are essential for animals and people to survive. Many native plants are diminishing in number. Replanting programs and other actions are being undertaken to protect plants and restore vegetation.	C. Stimulus, Response, and Survival • Stimulus is something that causes living tissue to respond. • Response is the reaction an organism has to a stimulus. • Organisms have sensory organs that detect different kinds of information about the environment. • In most animals, sensory organs transmit information to the brain. • The brain processes this information as perceptions and stores them as memories. • Plants also respond to stimuli. • Response to stimuli helps survival, growth, reproduction, and behavior.	• Graphic features: Photographs with captions, diagram with labels, tables • Organizational features: Chapters with headings and sub-headings • Print features: Glossary, fact boxes, “Find out more” boxes • Structure: List with some question and answer • Text type: Report / explanation • Key Words: But, some, many
Going, Going, Gone? (P)	When the environment changes some animals survive or reproduce, others relocate or adapt, and some die. Humans have changed the environment, and this has led to some animals becoming endangered or extinct. Some people are helping to save threatened animal species.	C. Stimulus, Response, and Survival • Stimulus is something that causes living tissue to respond. • Response is the reaction an organism has to a stimulus. • Organisms have sensory organs that detect different kinds of information about the environment. • In most animals, sensory organs transmit information to the brain. • The brain processes this information as perceptions and stores them as memories. • Plants also respond to stimuli. • Response to stimuli helps survival, growth, reproduction, and behavior.	• Graphic features: Photographs and illustrations with captions • Organizational features: Chapters with headings and sub-headings, maps, tables, sidebars • Print features: “Find out more” boxes • Structure: Question and answer, cause and effect, problem and solution • Text type: Explanation / report
Animal Shelters (Q)	Different animals found in different habitats have particular adaptations that help them to live in these habitats. Different animals found in different habitats are suited to their environments.	C. Stimulus, Response, and Survival • Stimulus is something that causes living tissue to respond. • Response is the reaction an organism has to a stimulus. • Organisms have sensory organs that detect different kinds of information about the environment. • In most animals, sensory organs transmit information to the brain. • The brain processes this information as perceptions and stores them as memories. • Plants also respond to stimuli. • Response to stimuli helps survival, growth, reproduction, and behavior.	• Graphic features: Photographs, diagrams with labels, sidebars, tables • Organizational features: Chapters with headings and sub-headings • Print features: Lists, glossary • Structure: Compare and contrast, sequence, diary, list, question and answer • Text type: Report / explanation / recount • Key Words: Many, some
Talented Animals (Q)	Animals come in many different shapes and sizes, and they have different talents and skills. Animals' special characteristics help them survive in their environment.	B. The Structure and Function of the Eyes and Ears • Light enters through the eye after being reflected off objects. ○ Structures in the eyes focus and receive the light. ○ The optic nerve carries electrical signals to the brain. • The outer ear captures sound waves. ○ In the middle ear, sound waves hit the eardrum and are passed to three small bones. ○ In the inner ear, vibrations move tiny hairs that create nerve signals. ○ Auditory nerve sends signals to the brain.	• Graphic features: Photographs with labels and captions, sidebars, tables, maps • Organizational features: Chapters with headings and sub-headings • Print features: Fact boxes, glossary • Structure: List • Text type: Report / explanation

Shells on Their Backs (R)	Turtles and tortoises are reptiles that have many things in common, but are also different in several distinct ways. Turtles and tortoises have well developed structures and behaviors that have allowed them to survive all around the world for millions of years. Today, many turtle and tortoise species are at risk of extinction.	A. Structure is Related to Function • Different structures work together in systems to support survival, growth, behavior, and reproduction. • At any level of organization, each internal and external structure of an organism reflects its function. • Different structures work together in systems to support survival (heart and lungs in many animals; roots and stems in many plants).	• Graphic features: Photographs with captions, maps, tables, diagram with labels • Print features: Fact boxes, “Find out more” boxes • Structure: Compare and contrast, problem and solution • Text type: Explanation / report
Living with the Tides (S)	Tidal environments are areas of land between the high and low tides in coastal areas. Plants and animals that live in tidal habitats have adapted to survive in this environment. Tidal environments can be damaged by nature and by people.	A. Structure is Related to Function • Different structures work together in systems to support survival, growth, behavior, and reproduction. • At any level of organization, each internal and external structure of an organism reflects its function. • Different structures work together in systems to support survival (heart and lungs in many animals; roots and stems in many plants). • Some animals form groups to help them survive in their habitat.	• Graphic features: Photographs, illustrations, diagrams with labels, maps, sidebars • Organizational features: Chapters with headings and sub-headings • Print features: “Find out more” boxes, fact boxes, glossary • Structure: Problem and solution, cause and effect, • Text type: Report / procedure • Key Words: Most, some
How Animals Communicate (S)	Animals have means of communicating with members of their own species and other species. The behavior of individual organisms is influenced by internal cues (e.g. hunger) and external cues (e.g. environmental changes). Humans and other organisms have senses to detect these cues.	C. Stimulus, Response, and Survival • Stimulus is something that causes living tissue to respond. • Response is the reaction an organism has to a stimulus. • Organisms have sensory organs that detect different kinds of information about the environment. • In most animals, sensory organs transmit information to the brain. • The brain processes this information as perceptions and stores them as memories.	• Graphic features: Photographs with captions, tables, sidebars, diagrams, • Organizational features: Chapters with headings and sub-headings • Print features: Lists, fact boxes, speech bubbles, glossary • Structure: Question and answer, compare and contrast • Text type: Discussion / Explanation / Report • Key Words: Most, but, if, some
Wetlands (U)	Wetlands are complex ecosystems that perform important functions. Living organisms depend on each other and the environment. Human activity has impacted severely on the health of wetlands and their wildlife.	A. Structure is Related to Function • Cells are the smallest unit of life. • Unicellular organisms have only one cell. • Multicellular organisms are made up of many cells. • Cells make up tissues; tissues make up organs. • Organs work together in organ systems. • Different structures work together in systems to support survival, growth, behavior, and reproduction. • At any level of organization, each internal and external structure of an organism reflects its function. • Different structures work together in systems to support survival (heart and lungs in many animals; roots and stems in many plants). • Some animals form groups to help them survive in their habitat.	• Graphic features: Photographs with captions, maps, tables, diagrams, sidebar • Organizational features: Chapters with headings and subheadings • Print features: Fact boxes, glossary, index • Structure: Problem and solution, sequence • Text type: Argument / explanation / report • Key Words: Most, some, many
How Do Plants Survive? (U)	Plants have structures and behaviors that enable them to survive, grow, and reproduce. Some plants have adapted so they can survive in places where one or more of their essential needs is limited. Some plants can survive in locations where it is impossible for most other livings things to do so.	A. Structure is Related to Function • Cells are the smallest unit of life. • Unicellular organisms have only one cell. • Multicellular organisms are made up of many cells. • Cells make up tissues; tissues make up organs. • Organs work together in organ systems. • Different structures work together in systems to support survival, growth, behavior, and reproduction. • At any level of organization, each internal and external structure of an organism reflects its function. • Different structures work together in systems to support survival (heart and lungs in many animals; roots and stems in many plants).	• Graphic features: Photographs with labels and captions, diagrams, sidebars, visual summary • Organizational features: Chapters with headings and sub-headings, glossary • Print features: “Find out more” boxes • Structure: Question and answer, sequence, problem and solution • Text type: Report / explanation

Saving the Amazon River (V)	The Amazon River is a unique ecosystem that is home to an amazing array of wildlife. Human activity is threatening the health of the Amazon River Basin. Some people are working to protect and save the Amazon River Basin.	A. Structure is Related to Function • Cells are the smallest unit of life. • Unicellular organisms have only one cell. • Multicellular organisms are made up of many cells. • Cells make up tissues; tissues make up organs. • Organs work together in organ systems. • Different structures work together in systems to support survival, growth, behavior, and reproduction. • At any level of organization, each internal and external structure of an organism reflects its function. • Different structures work together in systems to support survival (heart and lungs in many animals; roots and stems in many plants). • Some animals form groups to help them survive in their habitat.	• Graphic features: Photographs with captions, maps, diagram, sidebar • Organizational features: Chapters with headings and sub-headings, index • Print features: Fact boxes, “Find out more” boxes, glossary • Structure: Question and answer, cause and effect • Text type: Report • Key Words: Some • Signal words and phrases: As a result

Core Knowledge
WorldWise: Content-based Learning™
Crosswalk for Grade 5

II. Energy and Matter in Ecosystems

A. Organisms Need and Use Energy

- **Living things need chemical energy from food for all life processes.**
- **The energy in animals' food originated as energy from the sun.**
    - **Producers: use energy from the sun to make their own food**
    - **Consumers: get their food by eating other organisms**
    - **Decomposers: break down the tissues of dead organisms for food and function as recyclers**
- **Life cycles are the patterns of changes that organisms go through during their lives.**

B. Plants and Animals

- **Plants need sunlight, water, and air to grow.**
- **Plants get the substances they need for growth mainly from air and water.**
- **Photosynthesis: Plants use air, water, and the energy of sunlight to make glucose.**
- **Plants use glucose as the fundamental food for all life processes.**
- **Animals get their food energy by eating other organisms.**
    - **Herbivores: animals that eat only plants**
    - **Carnivores: animals that eat other animals**
    - **Omnivores: animals that eat both plants and animals**

C. Matter Cycles Through Ecosystems

- **Energy is transferred from the sun to producers and then to consumers.**
- **Ecosystems: the living and nonliving things in an area**
- **Producers make food; the chemical energy of food cycles moves from producers to consumers.**
- **Food chain and food web: models of how matter and energy flow through an ecosystem**
- **As matter cycles through an ecosystem, the interactions of producers, consumers, and decomposers meet the needs of living things in the ecosystem.**
- **Anything that disrupts food webs may harm an ecosystem.**
    - **Invasive plants and animals (zebra mussels or kudzu)**
    - **Humans**
    - **Environmental changes**

WorldWise titles to stairstep towards grade level reading	Key concept	Alignment to Core Knowledge Sequence	Instructional opportunities that serve as pivot into reading nonfiction trade books
Awesome Oceans (Q)	The oceans of the world are vital to all life on Earth. Many animals live together in the ocean.	C. Matter Cycles Through Ecosystems • Energy is transferred from the sun to producers and then to consumers. • Ecosystems: the living and nonliving things in an area • Producers make food; the chemical energy of food cycles moves from producers to consumers. • Food chain and food web: models of how matter and energy flow through an ecosystem • As matter cycles through an ecosystem, the interactions of producers, consumers, and decomposers meet the needs of living things in the ecosystem. • Anything that disrupts food webs may harm an ecosystem. ○ Invasive plants and animals (zebra mussels or kudzu) ○ Humans ○ Environmental changes	• Graphic features: Photographs with captions, flowchart, diagrams, tables, time line, map • Organizational features: Chapters with headings and sub-headings • Print features: Fact boxes, speech bubbles, glossary • Structure: Compare and contrast, question and answer, sequence • Text type: Report / recount / explanation / discussion / timeline • Key Words: Some
Talented Animals (Q)	Animals come in many different shapes and sizes, and they have different talents and skills. Animals' special characteristics help them survive in their environment.	C. Matter Cycles Through Ecosystems • Energy is transferred from the sun to producers and then to consumers. • Ecosystems: the living and nonliving things in an area • Producers make food; the chemical energy of food cycles moves from producers to consumers. • Food chain and food web: models of how matter and energy flow through an ecosystem • As matter cycles through an ecosystem, the interactions of producers, consumers, and decomposers meet the needs of living things in the ecosystem. • Anything that disrupts food webs may harm an ecosystem. ○ Invasive plants and animals (zebra mussels or kudzu) ○ Humans ○ Environmental changes	• Graphic features: Photographs with labels and captions, sidebars, tables, maps • Organizational features: Chapters with headings and sub-headings, • Print features: Fact boxes, glossary • Structure: List • Text type: Report / explanation
Living with the Tides (S)	Tidal environments are areas of land between the high and low tides in coastal areas. Plants and animals that live in tidal habitats have adapted to survive in this environment. Tidal environments can be damaged by nature and by people.	C. Matter Cycles Through Ecosystems • Energy is transferred from the sun to producers and then to consumers. • Ecosystems: the living and nonliving things in an area • Producers make food; the chemical energy of food cycles moves from producers to consumers. • Food chain and food web: models of how matter and energy flow through an ecosystem • As matter cycles through an ecosystem, the interactions of producers, consumers, and decomposers meet the needs of living things in the ecosystem. • Anything that disrupts food webs may harm an ecosystem. ○ Invasive plants and animals (zebra mussels or kudzu) ○ Humans ○ Environmental changes	• Graphic features: Photographs, illustrations, diagrams with labels, maps, sidebars • Organizational features: Chapters with headings and sub-headings • Print features: “Find out more” boxes, fact boxes, glossary • Structure: Problem and solution, cause and effect, • Text type: Report / procedure • Key Words: Most, some .

The Wandering Albatross (T)	Living things need food and safe places to raise their young. Physical adaptations allow animals to live in harsh environments. Wandering albatrosses have the ability to live and thrive in one of the harshest places on Earth. The main threats to the wandering albatross are loss of habitat and long line fishing.	B. Plants and Animals • Animals get their food energy by eating other organisms. ○ Herbivores: animals that eat only plants ○ Carnivores: animals that eat other animals ○ Omnivores: animals that eat both plants and animals C. Matter Cycles Through Ecosystems • Ecosystems: the living and nonliving things in an area • Food chain and food web: models of how matter and energy flow through an ecosystem • As matter cycles through an ecosystem, the interactions of producers, consumers, and decomposers meet the needs of living things in the ecosystem. • Anything that disrupts food webs may harm an ecosystem. ○ Invasive plants and animals (zebra mussels or kudzu) ○ Humans ○ Environmental changes	• Graphic features: Photographs with captions, illustrations, diagrams, maps, sidebar • Organizational features: Chapters with headings and sub-headings, • Print features: Fact boxes, glossary, index, “Try this” boxes • Structure: Question and answer, compare and contrast, description, • Text type: Explanation / report / discussion • Key Words
Wetlands (U)	Wetlands are complex ecosystems that perform important functions. Living organisms depend on each other and the environment. Human activity has impacted severely on the health of wetlands and their wildlife.	B. Plants and Animals • Plants need sunlight, water, and air to grow. • Plants get the substances they need for growth mainly from air and water. • Photosynthesis: Plants use air, water, and the energy of sunlight to make glucose. • Plants use glucose as the fundamental food for all life processes. • Animals get their food energy by eating other organisms. ○ Herbivores: animals that eat only plants ○ Carnivores: animals that eat other animals ○ Omnivores: animals that eat both plants and animals C. Matter Cycles Through Ecosystems • Food chain and food web: models of how matter and energy flow through an ecosystem • As matter cycles through an ecosystem, the interactions of producers, consumers, and decomposers meet the needs of living things in the ecosystem. • Anything that disrupts food webs may harm an ecosystem. ○ Invasive plants and animals (zebra mussels or kudzu) ○ Humans ○ Environmental changes	• Graphic features: Photographs with captions, maps, tables, diagrams, sidebar • Organizational features: Chapters with headings and subheadings, • Print features: Fact boxes, glossary, index • Structure: Problem and solution, sequence • Text type: Argument / explanation / report • Key Words: Most, some, many

The Salmon Stream (U)	An ecosystem is a whole community of living things that depend on each other for survival. Tourism needs to be managed to lessen the human impact on wilderness areas.	A. Organisms Need and Use Energy • Living things need chemical energy from food for all life processes. • The energy in animals' food originated as energy from the sun. ○ Producers: use energy from the sun to make their own food ○ Consumers: get their food by eating other organisms ○ Decomposers: break down the tissues of dead organisms for food and function as recyclers • Life cycles are the patterns of changes that organisms go through during their lives. B. Plants and Animals • Animals get their food energy by eating other organisms. ○ Herbivores: animals that eat only plants ○ Carnivores: animals that eat other animals ○ Omnivores: animals that eat both plants and animals C. Matter Cycles Through Ecosystems • Energy is transferred from the sun to producers and then to consumers. • Food chain and food web: models of how matter and energy flow through an ecosystem • As matter cycles through an ecosystem, the interactions of producers, consumers, and decomposers meet the needs of living things in the ecosystem. • Anything that disrupts food webs may harm an ecosystem. ○ Invasive plants and animals (zebra mussels or kudzu) ○ Humans ○ Environmental changes	• Graphic features: Photographs with captions, maps, diagram, illustration with labels, tables, timeline • Organizational features: Chapters with headings and sub-headings • Print features: Fact boxes, glossary, index • Structure: Sequence, compare and contrast, problem and solution • Text type: Argument / explanation / report • Key words: Some, many • Signal words and phrases: After, finally,
How Do Plants Survive? (U)	Plants have structures and behaviors that enable them to survive, grow, and reproduce. Some plants have adapted so they can survive in places where one or more of their essential needs is limited. Some plants can survive in locations where it is impossible for most other living things to do so.	B. Plants and Animals • Plants need sunlight, water, and air to grow. • Plants get the substances they need for growth mainly from air and water. • Photosynthesis: Plants use air, water, and the energy of sunlight to make glucose. • Plants use glucose as the fundamental food for all life processes.	• Graphic features: Photographs with labels and captions, diagrams, sidebars, visual summary • Organizational features: Chapters with headings and sub-headings, glossary • Print features: "Find out more" boxes • Structure: Question and answer, sequence, problem and solution • Text type: Report / explanation
Saving the Amazon River (V)	The Amazon River is a unique ecosystem that is home to an amazing array of wildlife. Human activity is threatening the health of the Amazon River Basin. Some people are working to protect and save the Amazon River Basin.	C. Matter Cycles Through Ecosystems • Energy is transferred from the sun to producers and then to consumers. • Ecosystems: the living and nonliving things in an area • Producers make food; the chemical energy of food cycles moves from producers to consumers. • Food chain and food web: models of how matter and energy flow through an ecosystem • As matter cycles through an ecosystem, the interactions of producers, consumers, and decomposers meet the needs of living things in the ecosystem. • Anything that disrupts food webs may harm an ecosystem. ○ Invasive plants and animals (zebra mussels or kudzu) ○ Humans ○ Environmental changes	• Graphic features: Photographs with captions, maps, diagram, sidebar • Organizational features: Chapters with headings and sub-headings, index • Print features: Fact boxes, "Find out more" boxes, glossary • Structure: Question and answer, cause and effect • Text type: Report • Key Words: Some • Signal words and phrases: As a result