

TITLE	OH STANDARDS ADDRESSED	GR LEVEL	LEXILE LEVEL	BOOK SUMMARY	VOCABULARY
Alexander Graham Bell * ISBN 0022858679 6 PK ISBN 0022865810	PS-1, ST-1, ST-2	K	490	<i>Alexander Graham Bell</i> describes the life and inventions of Alexander Graham Bell. It explains how Bell applied scientific ideas to invent the telephone. Basic information about sound and how it travels are also included.	experiment transmitter vibrate
All About Magnets ISBN 0022846514 6 PK ISBN 0022864385	SI-10	M	580	<i>All About Magnets</i> describes properties of magnets and Earth's magnetic field. It also explains that magnets are used for navigation, in computer disks, in maglev trains, and in the space shuttle.	magnetic magnetic field poles
Animal Parents ISBN 0022846328 6 PK ISBN 0022864210	LS-1, LS-7	H	610	<i>Animal Parents</i> describes how various animals care for their young. A variety of fish, birds, reptiles and mammals are discussed in this book.	hatch instinct survive
Animals in Danger ISBN 0022859357 6 PK ISBN 0022865586	LS-3, ST-1	G	440	<i>Animals in Danger</i> identifies factors that endanger animals, such as pollution and destruction of habitat. Measures that can be taken to help endangered animals are also described.	DDT habitat hatch
Apple Trees ISBN 002284631X 6 PK ISBN 0022864202	LS-5, LS-7, LS-9	L	640	<i>Apple Trees</i> describes how apple trees change with the seasons, identifies the functions of roots, stems, and leaves, describes the process of photosynthesis, and discusses the life cycle of an apple tree.	chlorophyll photosynthesis pollinate
Beyond the Sky * ISBN 0022858644 6 PK ISBN 0022865721	ESS-1, ESS-2, ESS-3	J	460	<i>Beyond the Sky</i> describes stars, including the Sun, and the solar system. Apparent movement of the Sun is related to the motion of Earth. Stars, tools used to observe stars, and phases of the moon are also explained.	solar system star telescope

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Bicycle Metals ISBN 0022858733 6 PK ISBN 0022865799	ST-1, ST-2, ST-4	K	460	<i>Bicycle Metals</i> describes the properties of metals, explains how mixtures of metals are used, and discusses how the qualities of different metals make them well-suited for different purposes.	aluminum metal mixture
Big Orange Pumpkins ISBN 002284628X 6 PK ISBN 0022864180	LS-4, LS-5, LS-6	H	400	<i>Big Orange Pumpkins</i> describes the functions of different plant parts, identifies the steps in a pumpkin plant's life cycle, and explains ways that humans use pumpkins.	fruit root seed
Day and Night ISBN 0022858563 6 PK ISBN 0022865713	ESS-2	E	110	<i>Day and Night</i> explains how a globe is used to model Earth, and how Earth's motion relative to the Sun causes day and night.	Earth Sun tilt
Desert Life ISBN 0022858539 6 PK ISBN 0022865616	LS-2, LS-3	E	390	<i>Desert Life</i> describes the climate in desert areas, identifies forms of life found in deserts, and mentions adaptations of desert plants and desert animals.	desert saguaro cactus scaly
Different Kinds of Land ISBN 0022858547 6 PK ISBN 0022865640	LS-7	G	320	<i>Different Kinds of Land</i> identifies different landforms, such as mountains, valleys, plains, forests and deserts.	landform mountain plain
Electricity ISBN 0022858598 6 PK ISBN 0022865802	ST-1, ST-2	E	270	<i>Electricity</i> classifies electricity as a form of energy, explains how electricity is used in the home, and describes how batteries are used.	battery electricity energy

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Fast Changes on Earth ISBN 0022858695 6 PK ISBN 0022865667	ESS-4	L	480	<i>Fast Changes on Earth</i> describes events that rapidly change Earth, such as floods, tornadoes, earthquakes, land slides, and volcanoes. Photos illustrate each of these events.	earthquake flood landslide
Finding Fossils * ISBN 0022846395 6 PK ISBN 0022864288	SI-6, SWK-4	J	750	<i>Finding Fossils</i> explains what scientists can learn by studying fossils, how fossils are found, and how scientists apply knowledge about fossils to the study of today's world.	fossil microscope paleontologist
From Seed to Tree * ISBN 0022846298 6 PK ISBN 0022864199	LS-5, LS-6, LS-7, LS-9	J	480	<i>From Seed to Tree</i> describes the life cycle of an apple tree, identifies seasonal changes apple trees undergo, and describes ways that people use apples.	life cycle pollen sapling
From Tadpole to Frog ISBN 0022846344 6 PK ISBN 0022864237	LS-2, LS-6	L	560	<i>From Tadpole to Frog</i> describes the life cycle of a frog, including the changes that occur when a tadpole changes to become a frog. Chapter 7 includes some fun facts about frogs.	hatch life cycle tadpole
Gases Matter * ISBN 0022858652 6 PK ISBN 0022865756	LS-1	H	500	<i>Gases Matter</i> begins by describing solids, liquids, and gases. The properties of gases are described in detail. The carbon and nitrogen cycle are also discussed.	gas matter nitrogen

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Get Moving! ISBN 002284645X 6 PK ISBN 0022864334	SI-10	H	460	<i>Get Moving</i> describes forces, such as gravity and friction, that affect the motion of objects. Tools and machines used to change motion and apply forces are also described.	force gravity tool
Hot Air Balloons ISBN 0022858725 6 PK ISBN 0022865764	ST-1, ST-2, ST-3	L	430	<i>Hot Air Balloons</i> describes the history of hot air balloons, how a hot air balloon works, and the role of heat energy in the function of a hot air balloon.	energy gas heat
Journey into Space ISBN 0022858717 6 PK ISBN 002286573X	ST-1, ST-2, ST-3	K	480	<i>Journey into Space</i> explores the history of space flight beginning with the Wright brothers, and describes modern space exploration, including satellites, Moon walks, space shuttles, space probes, and the International Space Station.	astronaut probe space shuttle
Let's Recycle! * ISBN 0022846433 6 PK ISBN 0022864318	SWK-3	K	650	<i>Let's Recycle</i> describes dumps and landfills, defines reducing and reusing, and explains the process of recycling. Actions that individuals can take to promote recycling are also described.	recycle reduce reuse
Make a Pizza * ISBN 0022858660 6 PK ISBN 0022865780	LS-5, SI-10	J	500	<i>Make a Pizza</i> describes the changes that pizza ingredients undergo as they are mixed and cooked. Ingredients are classified as solids or liquids, and the process of boiling is described.	boil liquid solid
Matter and Change ISBN 0022858571 6 PK ISBN 0022865748	SI-10	G	390	<i>Matter and Change</i> defines matter and describes everyday examples of solids, liquids, and gases. Changes in matter caused by heating and cooling are also described.	heat matter solid

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Minerals ISBN 0022846379 6 PK ISBN 0022864261	SI-10	M		<i>Minerals</i> describes the properties of minerals and the rock cycle. Common minerals are pictured and described. Properties of minerals, such as hardness, are described.	crystal gemstone mineral
Mix It Up ISBN 002285858X 6 PK ISBN 0022865772	SI-4, SI-5	F	210	<i>Mix It Up</i> describes mixtures and solutions. Everyday examples of mixtures, such as trail mix, and solutions, such as salt water, are shown.	dissolve mixture solution
Push or Pull? * ISBN 0022846468 6 PK ISBN 0022864342	SI-10	J	350	<i>Push or Pull?</i> defines force as a push or pull, explains the role of forces in changing motion, and depicts everyday examples of forces changing motion.	direction force machine
Saving Animals ISBN 0022859365 6 PK ISBN 0022865594	LS-3	M	660	<i>Saving Animals</i> defines the term endangered and identifies some endangered animals, such as California sea otters, manatees, green sea turtles, bighorn sheep, and California condors. It also identifies steps that are being taken to save each of these animals.	endangered habitat reptile
Soil ISBN 0022846352 6 PK ISBN 0022864245	LS-1, LS-2	I	470	<i>Soil</i> differentiates soil and dirt and describes the layers of soil. It also identifies soil as a resource and describes ways that soil can be conserved.	humus mineral nutrient

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The Big Splash! * ISBN 0022858628 6 PK ISBN 0022865659	LS-2, LS-6	J	500	<i>The Big Splash</i> explains why Earth is called the water planet, describes the zones of the ocean and pictures and describes forms of life found in each part of the ocean.	coral reef ocean volcano
The Camera's Eye ISBN 0022861661 6 PK ISBN 0022865829	LS-6, ST-2	L	620	<i>The Camera's Eye</i> compares the structure of the human eye and a camera, explains how a camera works, describes the history of the camera, and discusses how modern digital cameras work.	lens pupil shutter
Tracking Weather ISBN 0022858709 6 PK ISBN 0022865691	ESS-4, ESS-5, ST-1, ST-2, SI-7	L	540	<i>Tracking Weather</i> explains how weather was forecast long ago, tools that are used to forecast weather, and technology used to learn about weather. Chapter 6 describes how scientific models are used in weather forecasting.	barometer radar satellite
Two Kinds of Forests * ISBN 002285861X 6 PK ISBN 0022865624	ESS-4, LS-2, LS-8, LS-9	J	500	<i>Two Kinds of Forests</i> compares a woodland forest to a rainforest. The climates in which each type of forest is found are described, seasonal changes in forests are pictured, and adaptations such as migration and hibernation are defined.	climate hibernate migrate
Wait and See * ISBN 0022846336 6 PK ISBN 0022864229	SI-10	J	430	<i>Wait and See</i> describes the life cycle of a bird, a butterfly, a frog, and a sea turtle.	hatching pupa tadpole
Water for Life ISBN 0022858555 6 PK ISBN 0022865675	LS-1	G	290	<i>Water for Life</i> identifies the importance of water and describes the water cycle. Different forms of precipitation, such as hail and sleet are described.	hail sleet water cycle

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Water Habitats ISBN 0022858687 6 PK ISBN 0022865632	LS-2, LS-7	L	470	<i>Water Habitats</i> describes the physical characteristics of oceans, lakes, ponds, river, streams, and wetlands and the living things found in each.	habitat
What Do Clouds Tell Us? * ISBN 0022858636 6 PK ISBN 0022865683	ESS-4	J	450	<i>What Do Clouds Tell Us?</i> describes how clouds form, identifies different types of clouds, and identifies the weather associated with each type of cloud.	cirrus cumulus stratus

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Ohio Science Academic Content Standards

Standard 1

Earth and Space Sciences

The Universe

- ESS-1 Recognize that there are more stars in the sky than anyone can easily count.
- ESS-2 Observe and describe how the sun, moon and stars all appear to move slowly across the sky.
- ESS-3 Observe and describe how the moon appears a little different every day but looks nearly the same again about every four weeks.

Earth Systems

- ESS-4 Observe and describe that some weather changes occur throughout the day and some changes occur in a repeating seasonal pattern.
- ESS-5 Describe weather by measurable quantities such as temperature and precipitation.

Standard 2**Life Sciences****Characteristics and structure of Life**

- LS-1 Explain that animals, including people, need air, water, food, living space and shelter; plants need air, water, nutrients (e.g., minerals), living space and light to survive.
- LS-2 Identify that there are many distinct environments that support different kinds of organisms.
- LS-3 Explain why organisms can survive only in environments that meet their needs (e.g., organisms that once lived on Earth have disappeared for different reasons such as natural forces or human-caused effects).

Heredity

- LS-4 Compare similarities and differences among individuals of the same kind of plants and animals, including people.

Diversity and Interdependence of Life

- LS-5 Explain that food is a basic need of plants and animals (e.g., plants need sunlight to make food and to grow, animals eat plants and/or other animals for food, food chain) and is important because it is a source of energy (e.g., energy used to play, ride bicycles, read, etc.).
- LS-6 Investigate the different structures of plants and animals that help them live in different environments (e.g., lungs, gills, leaves and roots).
- LS-7 Compare the habitats of many different kinds of Ohio plants and animals and some of the ways animals depend on plants and each other.

LS-8 Compare the activities of Ohio's common animals (e.g., squirrels, chipmunks, deer, butterflies, bees, ants, bats and frogs) during the different seasons by describing changes in their behaviors and body covering.

LS-9 Compare Ohio plants during the different seasons by describing changes in their appearance.

Standard 3**Physical Sciences****Forces and Motion**

PS-1 Explore how things make sound (e.g., rubber bands, tuning fork and strings).

PS-2 Explore and describe sounds (e.g., high, low, soft and loud) produced by vibrating objects.

PS-3 Explore with flashlights and shadows that light travels in a straight line until it strikes an object.

Standard 4**Science and Technology****Understanding Technology**

ST-1 Explain that developing and using technology involves benefits and risks.

ST-2 Investigate why people make new products or invent new ways to meet their individual wants and needs.

ST-3 Predict how building or trying something new might affect other people and the environment.

Abilities To Do Technological Design

ST-4 Communicate orally, pictorially, or in written form the design process used to make something.

Standard 5**Scientific Inquiry****Doing Scientific Inquiry**

SI-1 Ask "how can I/we" questions.

- SI-2 Ask "how do you know" questions (not "why" questions) in appropriate situations and attempt to give reasonable answers when others ask questions.
- SI-3 Explore and pursue student-generated "how" questions.
- SI-4 Use appropriate safety procedures when completing scientific investigations.
- SI-5 Use evidence to develop explanations of scientific investigations. (What do you think? How do you know?)
- SI-6 Recognize that explanations are generated in response to observations, events and phenomena.
- SI-7 Use appropriate tools and simple equipment/instruments to safely gather scientific data (e.g., magnifiers, non-breakable thermometers, timers, rulers, balances and calculators and other appropriate tools).
- SI-8 Measure properties of objects using tools such as rulers, balances and thermometers.
- SI-9 Use whole numbers to order, count, identify, measure and describe things and experiences.
- SI-10 Share explanations with others to provide opportunities to ask questions, examine evidence and suggest alternative explanations.

Standard 6**Scientific Ways of Knowing****Nature of Science**

- SWK-1 Describe that scientific investigations generally work the same way under the same conditions.
- SWK-2 Explain why scientists review and ask questions about the results of other scientists' work.

Ethical Practices

- SWK-3 Describe ways in which using the solution to a problem might affect other people and the environment.

Science and Society

- SWK-4 Demonstrate that in science it is helpful to work with a team and share findings with others.