

TITLE	MO STANDARDS ADDRESSED	GR LEVEL	LEXILE LEVEL	BOOK SUMMARY	VOCABULARY
In the Garden ISBN 0022858334 6 PK ISBN 0022865365	7.1.B.a	B	30	<i>In the Garden</i> contrasts living and nonliving things and identifies some of the characteristics of living things, such as growth and change.	living thing plant rock
A World of Animals * ISBN 0022846093 6 PK ISBN 0022864016	3.1.D.b, 3.1.D.d	E	?	<i>A World of Animals</i> describes adaptations of dolphins, polar bears, elephants, beavers, woodpeckers, and camels.	fin hoof hooves trunk
Amazing Animals ISBN 0022846115 6 PK ISBN 0022864024	3.1.A.a, 3.1.D.b, 3.1.D.d	G	300	<i>Amazing Animals</i> describes adaptations of animals and relates adaptations to specific environments.	gill spines webbed feet
Animal Homes ISBN 0022858466 6 PK ISBN 0022865403	3.1.A.a, 7.1.E.a	G	190	<i>Animal Homes</i> identifies the environments, such as deserts, oceans, and forests, in which various animals make their homes.	cactus desert forest
Boats Float ISBN 0022846220 6 PK ISBN 0022864121	7.1.A.a, 7.1.A.b, 7.1.B.a, 7.1.C.a	B	BR	<i>Boats Float</i> describes solids, liquids, and gases, and defines the term <i>float</i> . It also identifies that solids have a definite shape, but liquids do not.	float gas liquid
Bryce Canyon ISBN 0022858474 6 PK ISBN 0022865438	7.1.B.a, 7.1.E.a	H	240	<i>Bryce Canyon</i> explains how wind and water have shaped Bryce Canyon over time, and that similar processes shape other rocks.	rock water wind

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Dolphin Sounds ISBN 0022858385 6 PK ISBN 0022865551	3.1.D.d	B	120	<i>Dolphin Sounds</i> illustrates how echolocation works, and describes how dolphins use echolocation to find food.	dolphin echo sound
Forces At Play ISBN 0022861653 6 PK ISBN 0022865543	2.2.A.a, 2.2.D.a, 7.1.B.a	H	240	<i>Forces at Play</i> defines force as a push or pull, defines the term <i>work</i> , and identifies how forces are involved in baseball, basketball, and tug-of-war.	force gravity work
Fun With Magnets ISBN 0022858377 6 PK ISBN 0022865527	2.2.A.a, 7.1.A.a, 7.1.A.b, 7.1.B.a	B	270	<i>Fun With Magnets</i> explains how magnets attract metal objects and can attract or repel one another. It also describes some uses of magnets.	magnet metal push
Good to Eat * ISBN 0022858393 6 PK ISBN 0022865373	3.1.D.a, 4.1.A.a	E	230	<i>Good to Eat</i> identifies plant parts (stems, leaves, flowers, roots, fruits, and leaves) that humans use for food. The book uses lettuce, celery, broccoli, carrots, cantaloupe, and strawberries as examples.	fruit root stem
How Does Matter Change? ISBN 0022846271 6 PK ISBN 0022864172	5.3.A.a, 7.1.B.a	G		<i>How Does Matter Change?</i> describes physical changes of matter, such as changes of shape and changes of state. It also defines the term <i>matter</i> and describes solids, liquids, and gases.	gas liquid matter
Ice Hotels ISBN 0022858512 6 PK ISBN 0022865519	5.3.A.a, 7.1.A.a, 7.1.B.a, 7.1.C.a	G	270	<i>Ice Hotels</i> uses pictures and descriptions of an ice hotel to highlight the differences between solids and liquids. It also points out the role of temperature change in melting.	liquid melts solid
Land All Around ISBN 0022858342 6 PK ISBN 0022865411	7.1.B.a	B	BR	<i>Land All Around</i> describes the characteristics of mountains, valleys, and plains.	mountain plain valley

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Let's Bake a Cake! ISBN 0022846255 6 PK ISBN 0022864156	1.2.A.a, 7.1.B.a	B	270	<i>Let's Bake a Cake</i> uses a discussion of baking to introduce the terms <i>melt</i> , <i>solid</i> , <i>liquid</i> , and <i>mixture</i> .	liquid melt mixture
Look for Rocks * ISBN 0022858407 6 PK ISBN 002286542X	7.1.B.a , 7.1.E.a	E	90	<i>Look for Rocks</i> explains that rocks can be found in many places, such as yards, parks, and beaches, and uses photos to illustrate the characteristics of sandstone, slate, and granite.	granite sandstone slate
Make It New * ISBN 0022858415 6 PK ISBN 0022865454	7.1.E.a	F	BR	<i>Make It New</i> shows that paper, glass, and cans can be recycled to make new products.	bottle can recycle
Mars ISBN 0022858490 6 PK ISBN 0022865497	1.2.A.a, 2.1.A.a, 7.1.B.a	H	230	<i>Mars</i> compares and contrasts characteristics, such as size, position, temperature, and presence of water, of Earth and Mars.	planet Mars Sun
Parts of Plants ISBN 0022858458 6 PK ISBN 0022865381	3.1.D.a, 3.1.D.c, 4.1.A.a, 7.1.B.a	H	250	<i>Parts of Plants</i> describes leaves, flowers, stems, roots, fruits, and seeds and identifies the function of each.	root seed soil
Pond Life ISBN 0022861645 6 PK ISBN 0022864032	5.3.A.a, 7.1.E.a	D	390	<i>Pond Life</i> identifies some of the living things found in ponds, including plants, fish, frogs, and insects and points out that a pond is a freshwater environment.	insect living thing pond

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TITLE	MO STANDARDS ADDRESSED	GR LEVEL	LEXILE LEVEL	BOOK SUMMARY	VOCABULARY
Ready, Set, Go! * ISBN 0022858423 6 PK ISBN 0022865489	7.1.B.a	E	330	Ready, Set, Go explores how astronauts prepare for a flight on the space shuttle. It describes a sequence of steps using the words <i>first</i> , <i>next</i> , <i>then</i> , and <i>finally</i> .	astronaut space shuttle spacesuit
Solids, Liquids, and Gases * ISBN 0022846239 6 PK ISBN 002286413X	7.1.B.a, 7.1.C.a	E	370	Solids, Liquids, and Gases discusses the properties of solids, liquids, and gases and gives everyday examples of each.	gas liquid solid
Sun Power ISBN 0022858520 6 PK ISBN 0022865578	1.2.A.a	G	350	Sun Power describes energy and explains that some energy comes from the Sun. It also discusses ways that solar energy can be used, such as heating homes and powering vehicles.	energy solar energy Sun
The Four Seasons ISBN 0022846182 6 PK ISBN 0022864091	5.2.F.c, 5.3.A.a	B	330	The Four Seasons describes spring, summer, fall, and winter by picturing the weather, activities, and clothing associated with each.	fall spring summer
The Story of Water ISBN 0022846247 6 PK ISBN 0022864148	1.2.A.a, 3.1.A.a, 5.3.A.a, 7.1.E.a	G	370	The Story of Water identifies the importance of water, discusses the water cycle, and explains the role of the Sun's energy in the water cycle.	clouds gas water cycle
The Tallest Tree * ISBN 0022846069 6 PK ISBN 0022863974	3.1.D.a, 7.1.B.c, 7.1.B.d	E	470	The Tallest Tree explains that some seeds germinate and develop into trees, such as the General Sherman Sequoia. Illustrations allow students to compare the height of the General Sherman to other objects.	cone seedling sequoia

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TITLE	MO STANDARDS ADDRESSED	GR LEVEL	LEXILE LEVEL	BOOK SUMMARY	VOCABULARY
Things Change * ISBN 0022846263 6 PK ISBN 0022864164	7.1.B.a, 7.1.C.b, 7.1.E.a	E	300	<i>Things Change</i> identifies changes such as boiling, freezing, melting, mixing, and growing and illustrates everyday examples of these changes.	boil freeze melt
Two Trees ISBN 0022846077 6 PK ISBN 0022863982	3.1.A.b, 3.1.D.a, 3.1.D.c, 7.1.B.d	H	430	<i>Two Trees</i> compares and contrasts trees found at the coast with trees found in the desert. Adaptations to each environment are pictured and identified.	desert roots soil
Watch It Grow ISBN 0022846050 6 PK ISBN 0022863966	3.1.A.b, 4.1.A.a, 7.1.E.a	B	70	<i>Watch It Grow</i> identifies what seeds and plants need to grow and develop. The germination and growth of a tomato seed illustrates this process.	plant Sun water
Water Fun ISBN 0022858350 6 PK ISBN 0022865446	5.3.A.a	B	BR	<i>Water Fun</i> identifies recreational uses of water, points out that humans need water to drink, and explains that water should not be wasted.	ocean waste water
What Goes Around? ISBN 0022858369 6 PK ISBN 0022865470	1.2.A.a, 2.1.A.b, 7.1.B.a, 7.1.E.a	B	120	<i>What Goes Around?</i> explains the motion of the Earth and Moon relative to the Sun and to one another. Diagrams shows Earth's orbit around the Sun and the Moon's orbit around Earth.	Earth Moon Sun
What Is Wool? ISBN 0022858482 6 PK ISBN 0022865462	4.1.A.a	H	330	<i>What Is Wool?</i> explains that wool is produced by sheep and used by humans. The process of producing clothing using wool is described.	sheep wool yarn

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What People and Animals Need ISBN 0022846085 6 PK ISBN 0022863990	3.1.A.a, 5.3.A.a	B	310	<i>What People and Animals Need</i> identifies that both people and animals need food, water, air, and shelter to live. The terms <i>breathe</i> , <i>energy</i> , and <i>shelter</i> are defined.	breathe energy shelter
What Sounds Say * ISBN 002285844X 6 PK ISBN 002286556X	7.1.B.a	F	130	<i>What Sounds Say</i> explains that sounds can be used to communicate and that some sounds, such as sirens and train whistles, are used to indicate danger.	bell siren sound
What Would We Do Without Bees? * ISBN 0022846131 6 PK ISBN 0022864040	3.1.A.a, 3.1.A.b, 3.1.D.a, 4.1.A.a	E	430	<i>What Would We Do Without Bees?</i> describes the role of bees in pollination of plants and in honey production. The process of pollination of an apple tree is illustrated.	honey nectar pollen
When the Weather Changes * ISBN 0022846190 6 PK ISBN 0022864105	5.2.F.c, 5.3.A.a	E	230	<i>When the Weather Changes</i> describes the weather, activities, and clothing commonly associated with each season.	fall season weather
Where Are They? * ISBN 0022858431 6 PK ISBN 0022865535	2.1.A.a, 7.1.B.a	F	100	<i>Where Are They?</i> uses position words, such as <i>on</i> , <i>under</i> , <i>behind</i> , <i>in</i> , and <i>inside</i> to describe the position of animals relative to objects.	bush egg log

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Missouri Science Grade-Level Expectations

Strand 1

Properties and Principles of Matter and Energy

1.1

Changes in properties and states of matter provide evidence of the atomic theory of matter

1.1.A

Objects, and the materials they are made of, have properties that can be used to describe and classify them

1.1.A.a

Given an equal-arm balance and various objects, illustrate arrangements in which the beam is balanced

1.1.A.b

Measure and compare the mass of objects (more/less)

1.1.A.c

Order objects according to mass

1.2

Energy has a source, can be transferred, and can be transformed into various forms but is conserved between and within systems

1.2.A

Forms of energy have a source, a means of transfer (work and heat), and a receiver

1.2.A.a

Identify the source of energy that causes an increase in the temperature of an object (e.g., Sun, stove, flame, light bulb)

1.2.A.b

Compare the temperature of hot and cold objects using a simple thermometer

1.2.A.c

Describe the change in temperature of an object as warmer or cooler

Strand 2

Properties and Principles of Force and Motion

2.1

The motion of an object is described by its change in position relative to another object or point

2.1.A

The motion of an object is described as a change in position, direction, and speed relative to another object (frame of reference)

- 2.1.A.a Compare the position of an object relative to another object (e.g., left of or right of)
- 2.1.A.b Describe an object's motion as straight, circular, vibrational (back and forth), zigzag, stopping, starting, or falling
- 2.1.A.c Compare the speeds (faster vs. slower) of two moving objects

2.2 Forces affect motion

2.2.A Forces are classified as either contact (pushes, pulls, friction, buoyancy) or non-contact forces (gravity, magnetism), that can be described in terms of direction and magnitude

- 2.2.A.a Identify the force (i.e., push or pull) required to do work (move an object)

2.2.D Newton's Laws of Motion explain the interaction of mass and forces, and are used to predict changes in motion

- 2.2.D.a Describe ways to change the motion of an object (i.e., how to cause an object to go slower, go faster, go farther, change direction, stop)

Strand 3

Characteristics and Interactions of Living Organisms

3.1 There is a fundamental unity underlying the diversity of all living organisms

3.1.A Organisms have basic needs for survival

- 3.1.A.a Identify the basic needs of most animals (i.e., air, water, food, shelter)
- 3.1.A.b Identify the basic needs of most plants (i.e., air, water, light)
- 3.1.A.c Predict and investigate the growth of plants when growing conditions are altered (e.g., dark vs. light, water vs. no water)

3.1.D Plants and animals have different structures that serve similar functions necessary for the survival of the organism

- 3.1.D.a Identify and compare the physical structures of a variety of plants (e.g., stem, leaves, flowers, seeds, roots)

- 3.1.D.b Identify and compare the physical structures of a variety of animals (e.g., sensory organs, beaks, appendages, body covering) (Do NOT assess terms: sensory organs, appendages)
- 3.1.D.c Identify the relationships between the physical structures of plants and the function of those structures (e.g., absorption of water, absorption of light energy, support, reproduction)
- 3.1.D.d Identify the relationships between the physical structures of animals and the function of those structures (e.g., taking in water, support, movement, obtaining food, reproduction)

3.1.E Biological classifications are based on how organisms are related

- 3.1.E.a Distinguish between plants and animals based on observable structures and behaviors

Strand 4

Changes in Ecosystems and Interactions of Organisms with their Environments

4.1

Organisms are interdependent with one another and with their environment

4.1.A

All populations living together within a community interact with one another and with their environment in order to survive and maintain a balanced ecosystem

4.1.A.a

Identify ways man depends on plants and animals for food, clothing, and shelter

Strand 5

Processes and Interactions of the Earth's Systems (Geosphere, Atmosphere, and Hydrosphere)

5.2

Earth's systems (geosphere, atmosphere, and hydrosphere) interact with one another as they undergo change by common processes

5.2.F

Constantly changing properties of the atmosphere occur in patterns which are described as weather

5.2.F.a

Observe, measure, record weather data throughout the year (i.e., cloud cover, temperature, precipitation, wind speed) by using thermometers, rain gauges, wind socks

5.2.F.b

Compare temperatures in different locations (e.g., inside, outside, in the sun, in the shade)

5.2.F.c

Compare weather data observed at different times throughout the year (e.g., hot vs. cold, cloudy vs. clear, types of precipitation, windy vs. calm)

5.2.F.d Recognize patterns indicating relationships between observed weather data and weather phenomena (e.g., temperature and types of precipitation, clouds and amounts of precipitation)

5.3 Human activity is dependent upon and affects Earth's resources and systems

5.3.A Earth's materials are limited natural resources affected by human activity

5.3.A.a Observe and describe ways water, both as a solid and liquid, is used in every day activities at different times of the year (e.g., bathe, drink, make ice cubes, build snowmen, cook, swim)

Strand 7

Scientific Inquiry

7.1 Science understanding is developed through the use of science process skills, scientific knowledge, scientific investigation, reasoning, and critical thinking

7.1.A Scientific inquiry includes the ability of students to formulate a testable question and explanation, and to select appropriate investigative methods in order to obtain evidence relevant to the explanation

7.1.A.a Pose questions about objects, materials, organisms, and events in the environment

7.1.A.b Plan and conduct a simple investigation (fair test) to answer a question

7.1.B Scientific inquiry relies upon gathering evidence from qualitative and quantitative observations

7.1.B.a Make qualitative observations using the five senses

7.1.B.b a. Make observations using simple tools and equipment (e.g., magnifiers/hand lenses, magnets, equal arm balances, thermometers)

7.1.B.c Measure length, mass, and temperature using standard and non-standard units

7.1.B.d Compare amounts/measurements

7.1.C Evidence is used to formulate explanations

- 7.1.C.a Use observations as support for reasonable explanations
- 7.1.C.b Use observations to describe relationships and patterns and to make predictions to be tested
- 7.1.D Scientific inquiry includes evaluation of explanations (hypotheses, laws, theories) in light of scientific principles (understandings)**
- 7.1.D.a Compare explanations with prior knowledge
- 7.1.E The nature of science relies upon communication of results and justification of explanations**
- 7.1.E.a Communicate simple procedures and results of investigations and explanations through:
- oral presentations
 - drawings and maps
 - data tables
 - graphs (bar, pictograph)
 - writings

Strand 8**Impact of Science, Technology and Human Activity**

- 8.1 The nature of technology can advance, and is advanced by, science as it seeks to apply scientific knowledge in ways that meet human needs**
- 8.1.A Designed objects are used to do things better or more easily and to do some things that could not otherwise be done at all**
- 8.1.A.a Recognize that some objects occur in nature (natural objects); others have been designed and made by people
- 8.1.B Advances in technology often result in improved data collection and an increase in scientific information**
- 8.1.B.a Describe how tools have helped scientists make better observations (e.g., magnifiers, balances, thermometers)
- 8.3 Science and technology affect, and are affected by, society**

8.3.A

People, alone or in groups, are always making discoveries about nature and inventing new ways to solve problems and get work done

8.3.A.a

Identify a question that was asked, or could be asked, or a problem that needed to be solved when given a brief scenario (fiction or nonfiction of individuals solving everyday problems or learning through discovery)

8.3.A.b

Work with a group to solve a problem, giving due credit to the ideas and contributions of each group member (Assess Locally)