

TITLE	MI STANDARDS ADDRESSED	GR LEVEL	LEXILE LEVEL	BOOK SUMMARY	VOCABULARY
<b>A Favorite Season</b> ISBN 0022789731 6 PK ISBN 22793062	S.IP.00.12, S.IA.00.12, S.IA.00.14, S.RS.00.11	D	90	<i>A Favorite Season</i> describes characteristics of each of the four seasons, and uses pictures to illustrate weather and activities associated with each season	spring summer winter
<b>All About Animals</b> ISBN 0022845917 6 PK ISBN 22863826	S.IA.00.14, S.RS.00.11, L.OL.00.11	C	380	<i>All About Animals</i> describes characteristics that help animals survive in their specific habitats. Photos are used to illustrate each of the animals and their habitats.	blubber hoof hooves
<b>All Kinds of Plants</b> ISBN 0022789669 6 PK ISBN 22792996	S.IP.00.11, S.IA.00.12, S.IA.00.14	B	BR	<i>All Kinds of Plants</i> uses simple words and pictures to describe and compare plants. This book also identifies some plants that are commonly used by people as food.	food plant
<b>America, The Beautiful</b> ISBN 0022845925 6 PK ISBN 22863834	S.IP.00.11, S.IA.00.14, S.RS.00.11, P.FM.00.11, P.FM.00.12	A	230	<i>America the Beautiful</i> introduces the terms mountain and canyon in a simple rhyming text. These landforms are shown in photos from the point of view of a soaring eagle.	canyon mountain
<b>Animals Grow</b> ISBN 002281079X 6 PK ISBN 22827137	S.IP.00.11, S.IA.00.12, S.IA.00.14, S.RS.00.11	D	210	<i>Animals Grow</i> shows the growth and development of animals such as giraffes and bears. The life cycle of a monarch butterfly is described with the words "grow" and "change," and a three-photo sequence shows the steps of butterfly's life cycle.	change grow
<b>Animals on the Move</b> ISBN 0022845895 6 PK ISBN 22863818	S.IA.00.12, S.IA.00.14, S.RS.00.11, P.FM.00.12	B	180	<i>Animals on the Move</i> uses photos to show how different kinds of animals move. Crawling, running, leaping, flying, and swimming are each shown.	crawl fly leap

\* - Also available in an English Language Learner version

TITLE	MI STANDARDS ADDRESSED	GR LEVEL	LEXILE LEVEL	BOOK SUMMARY	VOCABULARY
<b>At the Petting Zoo</b> ISBN 0022789650 6 PK ISBN 22792988	S.IP.00.11, S.IA.00.14, S.RS.00.11	C	NP	<i>At the Petting Zoo</i> uses illustrations and single-word descriptions to identify differences among animals.	smooth rough
<b>Clouds</b> ISBN 002281082X 6 PK ISBN 22827161	S.IP.00.11, S.IA.00.12, S.IA.00.13, S.IA.00.14, S.RS.00.11	C	150	<i>Clouds</i> describes differences among clouds and uses photos to illustrate different types of clouds. This books also identifies clouds as the source of rain and snow, and asks students to consider whether fog is a cloud.	cloud rain snow
<b>From Seed to Sunflower</b> ISBN 0022845879 6 PK ISBN 22863788	S.IP.00.11, S.IA.00.14, S.RS.00.11, E.SE.00.11	C	320	<i>From Seed to Sunflower</i> shows and describes the life cycle of a sunflower plant.	flower seed sunflower
<b>Good Morning</b> ISBN 0022784594 6 PK ISBN 22792880	S.IA.00.12, S.RS.00.11	B	BR	<i>Good Morning</i> shows a variety of animals in the morning and in the evening. Students are asked to think about things that typically occur in the morning.	morning
<b>I Like Ice</b> ISBN 0022846034 6 PK ISBN 002286394X	S.IP.00.11, S.IA.00.12, S.IA.00.14, S.RS.00.11	B	210	<i>I Like Ice</i> explains that water is a solid when it is cold and a liquid when it gets warmer. The terms frozen and melts are used to describe changes in state.	frozen icicle melt
<b>Land High and Low</b> ISBN 0022810811 6 PK ISBN 22827153	S.RS.00.11, E.SE.00.11	C	150	<i>Land High and Low</i> describes mountains, valleys, canyons, and shows the ocean shore. Activities associated with each landform, such as hiking and sledding, are also mentioned.	canyon mountain valley

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TITLE	MI STANDARDS ADDRESSED	GR LEVEL	LEXILE LEVEL	BOOK SUMMARY	VOCABULARY
<b>Made from Clay</b> ISBN 0022845992 6 PK ISBN 22863915	S.IA.00.14	B	260	<b>Made From Clay</b> identifies clay as an earth material and shows the many ways that people use clay.	clay mask pot
<b>Making Sounds</b> ISBN 0022820272 6 PK ISBN 22869174	S.IA.00.12, S.RS.00.11	C	70	<b>Let's Make Sounds</b> shows several different ways that students can generate sounds. Photographs show students using recycled materials as musical instruments.	sound
<b>Matter Changes</b> ISBN 0022846042 6 PK ISBN 22863958	S.IP.00.11, S.IP.00.12, S.IA.00.12, S.IA.00.13, S.IA.00.14	C	220	<b>Matter Changes</b> describes matter, explains that matter is made up of tiny parts, and shows the three common states of matter. The role of heat in changes of state is also identified.	gas liquid solid
<b>Melting Snow</b> ISBN 0022846026 6 PK ISBN 22863931	S.IP.00.11, S.IP.00.12, S.IP.00.13, S.IA.00.14	A	40	<b>Melting Snow</b> describes the change of state from solid to liquid that occurs when sunlight warms snow.	melting puddle Sun
<b>Our Desert Home</b> ISBN 0022789723 6 PK ISBN 22793054	S.IP.00.11, S.IA.00.12, S.IA.00.13, S.RS.00.11	C	BR	<b>Our Desert Home</b> uses illustrations to identify the plants, insects, reptiles, birds, and mammals that live in a desert habitat.	bird reptile mammal
<b>Our Land</b> ISBN 0022845933 6 PK ISBN 22863842	S.RS.00.11	B	330	<b>Our Land</b> uses photographs to illustrate landforms and habitats, such as mountains, forests, valleys, deserts, rivers, and oceans.	land ocean valley

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<b>Plant Parts</b> ISBN 0022789677 6 PK ISBN 22793003	S.IP.00.11, S.IA.00.14, S.RS.00.11, E.SE.00.11	C	270	<i>Plant Parts</i> identifies roots, stems, leaves, flowers, cones, and fruits as plant parts.	fruit root stem
<b>Plants Grow</b> ISBN 0022810781 6 PK ISBN 22827129	S.RS.00.11, E.SE.00.11	B	BR	<i>Plants Grow</i> identifies water, light, and soil as basic needs of plants.	soil
<b>Recycle, Reduce, Reuse</b> ISBN 0022845941 6 PK ISBN 22863850	S.RS.00.11	C	340	<i>Recycle, Reduce, Reuse</i> uses brief explanations and photos to define each of these methods of protecting the environment.	recycle reduce reuse
<b>Rocks</b> ISBN 0022810803 6 PK ISBN 22827145	S.IP.00.11, S.IP.00.13, S.RS.00.11	C	20	<i>Rocks</i> compares the colors, sizes, and textures of a variety of rocks.	rock
<b>Seasons</b> ISBN 002284595X 6 PK ISBN 22863869	S.IA.00.12	A	50	<i>Seasons</i> illustrates the weather, clothing, and activities associated with each of the four seasons.	season weather
<b>Small Plants Tall Plants</b> ISBN 0022845852 6 PK ISBN 22863761	S.IP.00.11, S.IA.00.12	A	310	<i>Small Plants, Tall Plants</i> describes the characteristics of some types of plants and points out differences among plants.	moss redwood sunflower

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TITLE	MI STANDARDS ADDRESSED	GR LEVEL	LEXILE LEVEL	BOOK SUMMARY	VOCABULARY
<b>Soft or Hard?</b> ISBN 0022845984 6 PK ISBN 22863893	S.IP.00.11, S.IA.00.12, S.IA.00.13	A	BR	<i>Soft or Hard?</i> defines matter and describes different textures associated with solid matter. Examples of objects with different textures are identified.	<b>matter solid</b>
<b>That Night Sky</b> ISBN 0022810838 6 PK ISBN 002282717X	S.IP.00.11, S.RS.00.11	C	80	<i>The Night Sky</i> describes objects that are visible in the night sky, including the Moon and stars. Patterns of stars and phases of the Moon are pictures.	<b>moon stars</b>
<b>Toys that Move</b> ISBN 0022789715 6 PK ISBN 22793046	S.IA.00.12, S.RS.00.11, P.FM.00.31, P.FM.00.32, P.FM.00.33,	C	330	<i>Toys That Move</i> uses toys to illustrate the fact that pushes and pulls (forces) change the motion of objects.	<b>push pull</b>
<b>Water Moves</b> ISBN 0022810862 6 PK ISBN 22827218	S.IA.00.12	C	BR	<i>Water Moves</i> uses simple rhyming text to identify some of the properties of solid and liquid water.	<b>water</b>
<b>What Can a Magnet Do?</b> ISBN 0022846018 6 PK ISBN 22863923	S.IP.00.11, S.IA.00.13, S.IA.00.14, S.RS.00.11, P.FM.00.31, P.FM.00.32, P.FM.00.33	C	260	<i>What Can a Magnet Do?</i> explains that magnets can push or pull objects and shows some applications of magnets.	<b>magnet pull push</b>
<b>What is the Weather?</b> ISBN 0022845968 6 PK ISBN 22863877	S.IP.00.11, S.IA.00.12, S.IA.00.13, S.IA.00.14, S.RS.00.11	B	BR	<i>What Is the Weather?</i> uses the terms sunny, rainy, windy, cloudy, and snowy to describe the weather.	<b>cloudy weather windy</b>

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TITLE	MI STANDARDS ADDRESSED	GR LEVEL	LEXILE LEVEL	BOOK SUMMARY	VOCABULARY
<b>What Kind of Animal Are You?</b> ISBN 0022845887 6 PK ISBN 22863796	S.RS.00.11	A	BR	<i>What Kind of Animal Are You?</i> points out characteristics of birds, fish, and mammals, and leads students to the conclusion that humans are mammals.	feather mammal scales
<b>What Will I Wear Today?</b> ISBN 0022845976 6 PK ISBN 22863885	S.IA.00.12, S.RS.00.11	C	170	<i>What Will I Wear Today?</i> shows clothing associated with each season of the year.	fall spring summer winter
<b>What's in the Soil?</b> ISBN 0022789707 6 PK ISBN 22793038	S.IP.00.11, S.IA.00.12, S.IA.00.13, S.IA.00.14, S.RS.00.11, E.SE.00.11	C	BR	<i>What's In the Soil?</i> identifies living and nonliving things found in soil.	soil
<b>Where Do Plants Live?</b> ISBN 0022845860 6 PK ISBN 002286377X	S.IA.00.14, S.RS.00.11, E.SE.00.11	B	350	<i>Where Do Plants Live?</i> shows the types of plants associated with different environments.	dry plant wet
<b>Working with Clay</b> ISBN 0022810854 6 PK ISBN 22827196	S.RS.00.11	G	510	<i>Working with Clay</i> shows that clay is an earth material, and sequences the steps in making a useful product with clay.	clay
<b>Working with Wood</b> ISBN 0022810846 6 PK ISBN 22827188	S.RS.00.11	E	290	<i>Working with Wood</i> explains that wood comes from trees and describes the processes used to make useful products with wood.	wood

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# Michigan Science Grade Level Content Expectations

## SCIENCE PROCESSES

### Inquiry Process

**K-7 Standard S.IP**

**Develop an understanding that scientific inquiry and reasoning involves observing, questioning, investigating, recording, and developing solutions to problems**

**S.IP.E.1**

**Inquiry involves generating questions, conducting investigations, and developing solutions to problems through reasoning and observation.**

S.IP.00.11

Make purposeful observation of the natural world using the appropriate senses.

S.IP.00.12

Generate questions based on observations.

S.IP.00.13

Plan and conduct simple investigations.

S.IP.00.14

Manipulate simple tools (for example: hand lens, pencils, balances, non-standard objects for measurement) that aid observation and data collection.

S.IP.00.15

Make accurate measurements with appropriate (non-standard) units for the measurement tool.

S.IP.00.16

Construct simple charts from data and observations.

### Inquiry Analysis and Communication

**K-7 Standard S.IA**

**Develop an understanding that scientific inquiry and investigations require analysis and communication of findings, using appropriate technology.**

**S.IA.E.1**

**Inquiry includes an analysis and presentation of findings that lead to future questions, research, and investigations.**

S.IA.00.12

Share ideas about science through purposeful conversation.

- S.IA.00.13 Communicate and present findings of observations.
- S.IA.00.14 Develop strategies for information gathering (ask an expert, use a book, make observations, conduct simple investigations, and watch a video)

### Reflection and Social Implications

#### K-7 Standard S.RS

**Develop an understanding that claims and evidence for their scientific merit should be analyzed. Understand how scientists decide what constitutes scientific knowledge. Develop an understanding of the importance of reflection on scientific knowledge and its application to new situations to better understand the role of science in society and technology.**

#### S.RS.E.1

**Reflecting on knowledge is the application of scientific knowledge to new and different situations. Reflecting on knowledge requires careful analysis of evidence that guides decision making and the application of science throughout history and within society.**

#### S.RS.00.11

Demonstrate scientific concepts through various illustrations, performances, models, exhibits, and activities.

## PHYSICAL SCIENCE

### Force and Motion

#### K-7 Standard P.F

**Develop an understanding that the position and/or motion of an object is relative to a point of reference. Understand forces affect the motion and speed of an object and that the net force on an object is the total of all of the forces acting on it. Understand the Earth pulls down on objects with a force called gravity. Develop an understanding that some forces are in direct contact with objects, while other forces are not in direct contact with objects.**

#### P.FM.E.1 Position

**A position of an object can be described by locating the object relative to other objects or a background. The description of the motion of an object from one observer's view may be different from that reported from a different observer's view.**

#### P.FM.00.11

Compare the position of an object (for example: above, below, in front of, behind, on) in relation to other objects around it.

#### P.FM.00.12

Describe the motion of an object (for example: away from or closer to) from different observers' views.

#### P.FM.E.2 Gravity

**Earth pulls down on all objects with a force called gravity. With very few exceptions, objects fall to the ground no matter where the object is on the Earth.**

P.FM.00.21

Observe how objects fall toward the earth.

**P.FM.E.3 Force**

**A force is either a push or a pull. The motion of objects can be changed by forces. The size of the change is related to the size of the force. The change is also related to the weight (mass) of the object on which the force is being exerted. When an object does not move in response to a force, it is because another force is being applied by the environment.**

P.FM.00.31

Demonstrate pushes and pulls.

P.FM.00.32

Observe that objects initially at rest will move in the direction of the push or pull.

P.FM.00.33

Observe how pushes and pulls can change the speed or direction of moving objects.

P.FM.00.34

Observe how shape (for example: cone, cylinder, sphere), size, and weight of an object can affect motion.

**LIFE SCIENCE****Organization of Living Things****K-7 Standard L.OL**

**Develop an understanding that plants and animals (including humans) have basic requirements for maintaining life which include the need for air, water and a source of energy. Understand that all life forms can be classified as producers, consumers, or decomposers as they are all part of a global food chain where food/energy is supplied by plants which need light to produce food/ energy. Develop an understanding that plants and animals can be classified by observable traits and physical characteristics. Understand that all living organisms are composed of cells and they exhibit cell growth and division. Understand that all plants and animals have a definite life cycle, body parts, and systems to perform specific life functions.**

**L.OL.E.1 Life Requirements**

**Organisms have basic needs. Animals and plants need air, water, and food. Plants also require light. Plants and animals use food as a source of energy and as a source of building material for growth and repair.**

L.OL.00.11

Identify that living things have basic needs.

L.OL.00.12

Identify and compare living and nonliving things.

**EARTH SCIENCE****Solid Earth****K-7 Standard E.SE**

**Develop an understanding of the properties of earth materials and how those properties make materials useful. Understand gradual and rapid changes in earth materials and features of the surface of Earth. Understand magnetic properties of Earth.**

**E.SE.E.1**

**Earth Materials- Earth materials that occur in nature include rocks, minerals, soils, water, and the gases of the atmosphere. Some Earth materials have properties which sustain plant and animal life.**

E.SE.00.11

Identify Earth materials (air, water, soil) that are used to grow plants.