

Carolina™ Curriculum Correlation to



Wisconsin Model Academic Standards Science Grades K–4 and 5–8

Wisconsin Model Academic Standards for Science Grades K–4 and 5–8

This document is an alignment of The STC PROGRAM™, GEMS Kits®, GEMS® Space Science for Grades 3-5 and Building Blocks of Science® units with the Wisconsin Model Academic Standards for Science grades K–4 and 5–8. Although each unit was developed for use at a specific grade level, there is some flexibility in grade placement. Below is a chart of the STC PROGRAM™.



The STC PROGRAM™ is made up of 2 research-based, inquiry-centered core curriculums:

- Science and Technology for Children® (STC®) for grades K–6; and
- Science and Technology Concepts for Middle Schools™ (STC/MS™) for grades 6–8

| | Life Science | Earth Science | Physical Science and Technology | |
|-----|-------------------------------|---------------------|---------------------------------|--------------------------------------|
| K–2 | Organisms | Weather | Solids and Liquids | Comparing and Measuring |
| 1–3 | The Life Cycle of Butterflies | Soils | Changes | Balancing and Weighing |
| 2–4 | Plant Growth and Development | Rocks and Minerals | Chemical Tests | Sound |
| 3–5 | Animal Studies | Land and Water | Electric Circuits | Motion and Design |
| 4–6 | Microworlds | Ecosystems | Food Chemistry | Floating and Sinking |
| 5–6 | Experiments with Plants | Measuring Time | Magnets and Motors | The Technology of Paper |
| 6–8 | Human Body Systems | Catastrophic Events | Properties of Matter | Energy, Machines, and Motion |
| | Organisms–From Macro to Micro | Earth in Space | Light | Electrical Energy and Circuit Design |



Great Explorations in Math and Science® (GEMS Kits®) are standards-based PreK-8 math and science supplemental kits. The kits have been tested for specific grade levels but can also be used at lower or higher levels.



GEMS® Space Science for Grades 3-5 is a research-based science curriculum that teaches fundamental concepts in space science.



Building Blocks of Science® is a K-5 supplementary science curriculum that can be used as stand-alone instruction.

LEGEND - To save paper, the location information in this document has been abbreviated as follows:

- TG = Teacher’s Guide, SG=Student Guide
- L01, L02, etc. = Lesson 1, Lesson 2, etc. or Act01, Act02, etc. = Activity 1, Activity 2, etc.
- RB = STC BOOK™ (a science reading book included in some of the grades 3–5 STC® unit kits)
- Exts = Extensions (found at the end of most lessons in the Teacher’s Guide)

Wisconsin Model Academic Standards for Science Grades K–4 and 5–8

Grades K-4 Science

Wisconsin Model Academic Standards

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| CONTENT STANDARD | WI.A. | Science Connections: Students in Wisconsin will understand that there are unifying themes: systems, order, organization, and interactions; evidence, models, and explanations; constancy, change, and measurement; evolution, equilibrium, and energy; form and function among scientific disciplines. |
| PERFORMANCE STANDARD | A.4.1. | When conducting science investigations, ask and answer questions that will help decide the general areas of science being addressed. <ul style="list-style-type: none"> • All Units |
| PERFORMANCE STANDARD | A.4.2. | When faced with a science-related problem, decide what evidence, models, or explanations previously studied can be used to better understand what is happening now. <ul style="list-style-type: none"> • All Units |
| PERFORMANCE STANDARD | A.4.3. | When investigating a science-related problem, decide what data can be collected to determine the most useful explanations. <ul style="list-style-type: none"> • All Units |
| PERFORMANCE STANDARD | A.4.4. | When studying science-related problems, decide which of the science themes are important. <ul style="list-style-type: none"> • All Units |
| PERFORMANCE STANDARD | A.4.5. | When studying a science-related problem, decide what changes over time are occurring or have occurred. <ul style="list-style-type: none"> • All Units |
| CONTENT STANDARD | WI.B. | Nature of Science: Students in Wisconsin will understand that science is ongoing and inventive, and that scientific understandings have changed over time as new evidence is found. |
| PERFORMANCE STANDARD | B.4.1. | Use encyclopedias, source books, texts, computers, teachers, parents, other adults, journals, popular press, and various other sources, to help answer science-related questions and plan investigations. <ul style="list-style-type: none"> • All Units |
| PERFORMANCE STANDARD | B.4.2. | Acquire information about people who have contributed to the development of major ideas in the sciences and learn about the cultures in which these people lived and worked. <ul style="list-style-type: none"> • Animal Studies • RB: (pp50-52) • TG: L12 (pp123-134) • TG: L14.Exts (p145) • Balancing and Weighing • TG: L02.Exts (p12) • Building Blocks of Science: Human Bodyworks • TG: Ext 02 (p 26) |

Wisconsin Model Academic Standards for Science Grades K–4 and 5–8

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| | <ul style="list-style-type: none">• TG: Ext 03 (p 33)• TG: Ext 04 (p 41)• TG: Ext 07 (p 57)• TG: Ext 08 (p 64)• TG: Ext 09 (p 68)• TG: Ext 10 (p 73)• TG: Ext 11 (p 79)• Building Blocks of Science: Understanding Cells and DNA• TG: Ext 01 (p 23)• TG: Ext 04 (p 58)• TG: Ext 05 (p 71)• Changes• TG: L11.Exts (pp106-107)• Chemical Tests• TG: L10.Exts (p97)• Ecosystems• RB: (pp07-10)• RB: (pp54-61)• TG: L03.Exts (p29)• TG: L05.Exts (p57)• TG: L09 (pp95-98)• TG: L16 (pp165-168)• Electric Circuits• RB: (pp07-12)• RB: (pp17-21)• Floating and Sinking• RB: (pp07-10)• RB: (pp18-26)• GEMS: Electric Circuits• TG: Ses01 (pp13-33)• Land and Water• RB: (pp07-09)• RB: (pp36-38)• RB: (pp41-44)• RB: (pp57-58)• Microworlds• RB: (pp52-55)• Motion and Design• RB: (pp23-28)• RB: (pp41-43)• Plant Growth and Development• TG: L08.Exts (p44)• TG: L16.Exts (pp96-97)• Rocks and Minerals• TG: L08.Exts (p59)• Soils• TG: L04.Exts (p41)• TG: L09.Exts (p92)• TG: L14 (pp91-102)• Solids and Liquids• TG: L04.Exts (p34)• TG: L14.Exts (p114)• TG: L15.Exts (p124) |
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Wisconsin Model Academic Standards for Science Grades K–4 and 5–8

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| | | <ul style="list-style-type: none"> • Sound • TG: L04.Exts (pp26-27) • TG: L08 (pp57-62) • TG: L14 (pp91-102) • Weather • TG: L10.Exts (p95) • TG: L11 (pp101-112) • TG: L12 (pp113-122) • TG: L15 (pp135-140) |
| PERFORMANCE STANDARD | B.4.3. | <p>Show how the major developments of scientific knowledge in the earth and space, life and environmental, and physical sciences have changed over time.</p> <ul style="list-style-type: none"> • Building Blocks of Science: Understanding Cells and DNA • TG: Act 02 (pp 27-33) • Electric Circuits • TG: L01 (pp3-6) • Floating and Sinking • RB: (pp07-26) • RB: (pp29-30) • RB: (pp34-35) • RB: (pp41-42) • TG: L10 (pp79-86) • TG: L15 (pp119-128) • Microworlds • RB: (pp10-12) • Motion and Design • TG: L15.Exts (p143) • Moons of Jupiter • TG: Act01 (pp7-17) • Space Science for Grades 3-5 • TG: Ses 1.1 (pp 28-45) • TG: Ses 3.1 (pp 286-299) |
| CONTENT STANDARD | WI.C. | Science Inquiry: Students in Wisconsin will investigate questions using scientific methods and tools, revise their personal understanding to accommodate knowledge, and communicate these understandings to others. |
| PERFORMANCE STANDARD | C.4.1. | <p>Use the vocabulary of the unifying themes to ask questions about objects, organisms, and events being studied.</p> <ul style="list-style-type: none"> • All Units |
| PERFORMANCE STANDARD | C.4.2. | <p>Use the science content being learned to ask questions, plan investigations, make observations, make predictions, and offer explanations.</p> <ul style="list-style-type: none"> • All Units |
| PERFORMANCE STANDARD | C.4.3. | <p>Select multiple sources of information to help answer questions selected for classroom investigations.</p> <ul style="list-style-type: none"> • All Units |

Wisconsin Model Academic Standards for Science Grades K–4 and 5–8

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| PERFORMANCE STANDARD | C.4.4. | Use simple science equipment safely and effectively, including rulers, balances, graduated cylinders, hand lenses, thermometers, and computers, to collect data relevant to questions and investigations. <ul style="list-style-type: none"> • All Units |
| PERFORMANCE STANDARD | C.4.5. | Use data they have collected to develop explanations and answer questions generated by investigations. <ul style="list-style-type: none"> • All Units |
| PERFORMANCE STANDARD | C.4.6. | Communicate the results of their investigations in ways their audiences will understand by using charts, graphs, drawings, written descriptions, and various other means, to display their answers. <ul style="list-style-type: none"> • All Units |
| PERFORMANCE STANDARD | C.4.7. | Support their conclusions with logical arguments. <ul style="list-style-type: none"> • All Units |
| PERFORMANCE STANDARD | C.4.8. | Ask additional questions that might help focus or further an investigation. <ul style="list-style-type: none"> • All Units |
| CONTENT STANDARD | WI.D. | Physical Science: Students in Wisconsin will demonstrate an understanding of the physical and chemical properties of matter, the forms and properties of energy, and the ways in which matter and energy interact. |
| PERFORMANCE STANDARD | D.4.1. | Properties of Earth Materials: Understand that objects are made of more than one substance, by observing, describing and measuring the properties of earth materials, including properties of size, weight, shape, color, temperature, and the ability to react with other substances. <ul style="list-style-type: none"> • Balancing and Weighing • TG: L07.Exts (p58) • TG: L10.Exts (pp84-85) • TG: L12.Exts (p104) • TG: L16.Exts (pp132-133) • Changes • TG: L01 (pp3-20) • TG: L11-17 (pp103-158) • Chemical Tests • TG: L07 (pp69-78) • TG: L11.Exts (pp103-104) • TG: L15 (pp135-148) • TG: L16.Exts (pp152-153) • TG: L17 (pp155-158)\ • Comparing and Measuring • TG: L05-17 (pp31-120) • Ecosystems • TG: L11 (pp111-116) • Electric Circuits • RB: (pp13-16) |

Wisconsin Model Academic Standards for Science Grades K–4 and 5–8

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| | | <ul style="list-style-type: none"> • RB: (pp34-38) • Floating and Sinking • TG: L04 (pp31-38) • TG: L09.Exts (p72) • TG: L10 (pp79-86) • TG: L11 (pp87-94) • TG: L12.Exts (p100) • TG: L15.Exts (p124) • Microworlds • TG: L01.Exts (p6) • Motion and Design • TG: L04 (pp35-46) • Rocks and Minerals • TG: L01 (pp3-12) • TG: L02 (pp13-18) • TG: L16 (pp113-126) • Soils • TG: L01-17 (pp3-172) • Solids and Liquids • TG: L01-2 (pp3-18) • TG: L07 (pp55-62) • TG: L09.Exts (p73) • TG: L10 (pp81-86) |
| <p>PERFORMANCE STANDARD</p> | <p>D.4.2.</p> | <p>Properties of Earth Materials: Group and/or classify objects and substances based on the properties of earth materials.</p> <ul style="list-style-type: none"> • Balancing and Weighing • TG: L12.Exts (p104) • Changes • TG: L01 (pp3-20) • TG: L11 (pp103-110) • Chemical Tests • TG: L11.Exts (pp103-104) • TG: L16.Exts (pp152-153) • TG: L17 (pp155-158) • Rocks and Minerals • TG: L01 (pp3-12) • TG: L02 (pp13-18) • TG: L16 (pp113-126) • Soils • TG: L01-17 (pp3-172) • Solids and Liquids • TG: L01 (pp3-10) • TG: L02 (pp11-18) • TG: L07 (pp55-62) • TG: L10 (pp81-86) |
| <p>PERFORMANCE STANDARD</p> | <p>D.4.3.</p> | <p>Properties of Earth Materials: Understand that substances can exist in different states-solid, liquid, gas.</p> <ul style="list-style-type: none"> • Bubble Festival • TG: Act01-12 (pp54-124) |

Wisconsin Model Academic Standards for Science Grades K–4 and 5–8

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| | | <ul style="list-style-type: none"> • Crime Lab Chemistry • TG: Act01-3 (pp7-62) • Chemical Tests • TG: L08 (pp79-84) • TG: L09 (pp85-92) • TG: L14 (pp125-134) • TG: L17 (pp155-158) • Floating and Sinking • RB: (pp36-40) • TG: L14 (pp113-118) • TG: L15 (pp119-128) • Liquid Explorations • TG: Act01-5 (pp5-49) • Solids and Liquids • TG: L09.Exts (p73) |
| <p>PERFORMANCE STANDARD</p> | <p>D.4.4.</p> | <p>Properties of Earth Materials: Observe and describe changes in form, temperature, color, speed, and direction of objects and construct explanations for the changes.</p> <ul style="list-style-type: none"> • Changes • TG: L01 (pp3-20) • TG: L03 (pp31-42) • TG: L04 (pp43-52) • TG: L12-14 (pp111-136) • TG: L16 (pp147-154) • TG: L17 (pp155-158) • Chemical Tests • TG: L10.Exts (p97) • TG: L11.Exts (pp103-104) • TG: L15.Exts (pp140-141) • TG: L16.Exts (pp152-153) • TG: L17 (pp155-158) • Ecosystems • TG: L13.Exts (p127) • Floating and Sinking • TG: L06 (pp49-54) • Liquid Explorations • TG: Act03 (pp25-31) • Microworlds • TG: L09.Exts (p53) • Of Cabbages and Chemistry • TG: Ses01 (pp9-19) • TG: Ses02 (pp21-28) • TG: Ses04 (pp41-46) |
| <p>PERFORMANCE STANDARD</p> | <p>D.4.5.</p> | <p>Properties of Earth Materials: Construct simple models of what is happening to materials and substances undergoing change, using simple instruments or tools to aid observations and collect data.</p> <ul style="list-style-type: none"> • Balancing and Weighing • TG: L12.Exts (p104) • Changes • TG: L01 (pp3-20) |

Wisconsin Model Academic Standards for Science Grades K–4 and 5–8

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| | | <ul style="list-style-type: none"> • TG: L03 (pp31-42) • TG: L04 (pp43-52) • TG: L11-12 (pp103-118) • TG: L15.Exts (p143) • TG: L17 (pp155-158) • Chemical Tests • TG: L11.Exts (pp103-104) • TG: L16.Exts (pp152-153) • TG: L17 (pp155-158) • Ecosystems • TG: L13.Exts (p127) • Floating and Sinking • RB: (pp41-42) • TG: L06 (pp49-54) • Land and Water • RB: (pp32-35) • Liquid Explorations • TG: Act03 (pp25-31) • Rocks and Minerals • TG: L01-4(pp3-34) • TG: L06-12 (pp43-90) • TG: L17 (pp127-128) • Secret Formulas • TG: Ses01-9 (pp15-97) • Soils • TG: L03-8 (pp27-86) • Solids and Liquids • TG: L01 (pp3-10) • TG: L02 (pp11-18) • TG: L07 (pp55-62) • TG: L10 (pp81-86) • Stories in Stone • TG: Ses01 (pp15-21) |
| <p>PERFORMANCE STANDARD</p> | <p>D.4.6.</p> | <p>Position and Motion of Objects: Observe and describe physical events in objects at rest or in motion.</p> <ul style="list-style-type: none"> • Building Blocks of Science: Measure It! • TG: L03 (pp 23-38) • Floating and Sinking • TG: L09 (pp69-78) • Motion and Design • TG: L03-5 (pp25-56) • TG: L07.Exts (pp68-69) • TG: L08-13 (pp73-124) • TG: L15 (pp139-144) • TG: L17 (pp153-156) • Solids and Liquids • TG: L04 (pp29-40) • Space Science for Grades 3-5 • TG: Ses 1.1 (pp 28-45) • TG: Ses 2.1-2.6 (pp 172-281) |

Wisconsin Model Academic Standards for Science Grades K–4 and 5–8

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| PERFORMANCE STANDARD | D.4.7. | <p>Position and Motion of Objects: Observe and describe physical events involving objects and develop record-keeping systems to follow these events by measuring and describing changes in their properties, including: position relative to another object, motion over time, and position due to forces.</p> <ul style="list-style-type: none"> • Balancing and Weighing • TG: L07.Exts (p58) • TG: L10.Exts (pp84-85) • TG: L16.Exts (pp132-133) • Building Blocks of Science: Measure It! • TG: L03 (pp 23-38) • Ecosystems • TG: L11 (pp111-116) • Electric Circuits • RB: (pp34-38) • Floating and Sinking • TG: L04 (pp31-38) • TG: L09-11 (pp69-94) • TG: L12.Exts (p100) • TG: L15.Exts (p124) • Motion and Design • TG: L03-5 (pp25-56) • TG: L07.Exts (pp68-6) • TG: L08-13 (pp73-124) • TG: L15 (pp139-144) • TG: L17 (pp153-156) • Solids and Liquids • TG: L04 (pp29-40) • Space Science for Grades 3-5 • TG: Ses 1.1 (pp 28-45) • TG: Ses 2.1-2.6 (pp 172-281) |
| PERFORMANCE STANDARD | D.4.8. | <p>Light, Heat, Electricity, and Magnetism: Ask questions and make observations to discover the differences between substances that can be touched (matter) and substances that cannot be touched (forms of energy, light, heat, electricity, sound, and magnetism).</p> <ul style="list-style-type: none"> • Building Blocks of Science: Light • TG: Act 01 (pp 1-4) • TG: Act 02 (pp 1-4) • TG: Act 03 (pp 1-5) • TG: Act 04 (pp 1-4) • TG: Act 05 (pp 1-3) • Bubble Festival • TG: Act05 (pp80-85) • Chemical Tests • TG: L10 (pp93-100) • Electric Circuits • RB: (pp07-21) • RB: (pp24-44) • RB: (pp47-61) • Electric Circuits • TG: L01-17 (pp3-86) • GEMS: Electric Circuits |

Wisconsin Model Academic Standards for Science Grades K–4 and 5–8

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| | | <ul style="list-style-type: none"> • TG: Ses01-11 (pp13-175) • Rocks and Minerals • TG: L11 (pp79-84) • Solids and Liquids • TG: L07 (pp55-62) • TG: L09 (pp69-80) • Sifting Through Science • TG: Act02 (pp25-35) • Tree Homes • TG: Act03 (pp33-39) • Weather • TG: L09 (pp83-90) |
| CONTENT STANDARD | WI.E. | Earth and Space Science: Students in Wisconsin will demonstrate an understanding of the structure and systems of earth and other bodies in the universe and of their interactions. |
| PERFORMANCE STANDARD | E.4.1. | <p>Properties of Earth Materials: Investigate that earth materials are composed of rocks and soils and correctly use the vocabulary for rocks, minerals, and soils during these investigations.</p> <ul style="list-style-type: none"> • Ecosystems • TG: L02 (pp13-24) • Hot Water and Warm Homes from Sunlight • TG: Ses01-5 (pp7-41) • Land and Water • RB: (pp15-18) • RB: (pp36-38) • TG: L05.Exts (p56) • TG: L06 (pp63-74) • TG: L08 (pp85-98) • Microscopic Explorations • TG: Act05 (pp61-67) • TG: Act07 (pp75-79) • Moons of Jupiter • TG: Act01-5 (pp7-64) • Rocks and Minerals • TG: G-App-A (pp129-131) • TG: L01-17 (pp3-128) • Soils • TG: L01-17 (pp3-172) • Solids and Liquids • TG: L04.Exts (p34) • Stories in Stone • TG: Ses01-8 (pp15-113) • Space Science for Grades 3-5 • TG: Ses 1.1-1.3 (pp 28-69) • Terrarium Habitats • TG: Act01 (pp5-13) • Weather • TG: Glossary- App-C (pp169-170) |
| PERFORMANCE STANDARD | E.4.2. | Properties of Earth Materials: Show that earth materials have different physical and |

Wisconsin Model Academic Standards for Science Grades K–4 and 5–8

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| | | <p>chemical properties, including the properties of soils found in Wisconsin.</p> <ul style="list-style-type: none"> • Balancing and Weighing • TG: L12.Exts (p104) • Changes • TG: L11 (pp103-110) • TG: L15 (pp137-146) • Chemical Tests • TG: L10.Exts (p97) • TG: L11.Exts (pp103-104) • TG: L15.Exts (pp140-141) • TG: L16.Exts (pp152-153) • TG: L17 (pp155-158) • Ecosystems • TG: L02 (pp13-24) • Food Chemistry • TG: L03.Exts (p32) • TG: L09.Exts (p89) • TG: L10.Exts (p97) • TG: L11.Exts (pp102-103) • TG: L12.Exts (pp112-113) • Land and Water • RB: (pp36-38) • TG: L05.Exts (p56) • Secret Formulas • TG: Ses01-9 (pp15-97) • Soils • TG: L01-17 (pp3-172) • Terrarium Habitats • TG: Act01 (pp5-13) |
| <p>PERFORMANCE STANDARD</p> | <p>E.4.3.</p> | <p>Properties of Earth Materials: Develop descriptions of the land and water masses of the earth and of Wisconsin's rocks and minerals, using the common vocabulary of earth and space science.</p> <ul style="list-style-type: none"> • Land and Water • RB: (pp15-18) • RB: (pp21-25) • RB: (pp45-49) • TG: L01 (pp3-10) • TG: L02 (pp11-28) • TG: L06.Exts (pp67-68) • TG: L09.Exts (p103) • TG: L10-12 (pp109-142) • Rocks and Minerals • TG: L01-17 (pp3-128) • Solids and Liquids • TG: L04.Exts (p34) • Stories in Stone • TG: Ses01-3 (pp15-45) • TG: Ses07 (pp83-101) • TG: Ses08 (pp103-113) |

Wisconsin Model Academic Standards for Science Grades K–4 and 5–8

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| PERFORMANCE STANDARD | E.4.4. | <p>Objects in the Sky: Identify celestial objects (stars, sun, moon, planets) in the sky, noting changes in patterns of those objects over time.</p> <ul style="list-style-type: none"> • Building Blocks of Science: Sky Watchers • TG: Act 01 (pp 1-3) • TG: Act 02 (pp 1-6) • TG: Act 05 (pp 1-5) • Moons of Jupiter • TG: Act01 (pp7-17) • Space Science for Grades 3-5 • TG: Ses 1 Post Assessment (pp 1-2) • TG: Ses 1 Pre Assessment (p 1) • TG: Ses 1.2-1.9 (pp 46-167) • TG: Ses 3 Post Assessment (pp 1-2) • TG: Ses 3 Pre Assessment (pp 1-2) • TG: Ses 3.2 (pp 300-311) • TG: Ses 3.3 (pp 312-323) |
| PERFORMANCE STANDARD | E.4.5. | <p>Changes in The Earth and Sky: Describe the weather commonly found in Wisconsin in terms of clouds, temperature, humidity, and forms of precipitation, and the changes that occur over time, including seasonal changes.</p> <ul style="list-style-type: none"> • Building Blocks of Science: Sky Watchers • TG: Act 02 (pp 1-6) • Electric Circuits • RB: (pp56-59) • Land and Water • RB: (pp57-61) • Weather • TG: L02-5 (pp11-54) • TG: L15-17 (pp135-150) |
| PERFORMANCE STANDARD | E.4.6. | <p>Changes in The Earth and Sky: Using the science themes, find patterns and cycles in Changes in The Earth and Sky: the earth's daily, yearly, and long-term changes.</p> <ul style="list-style-type: none"> • Building Blocks of Science: Sky Watchers • TG: Act 02 (pp 1-6) • TG: Act 03 (pp 1-6) • TG: Act 04 (pp 1-7) • Space Science for Grades 3-5 • TG: Ses 4.1-4.5 (pp 340-423) |
| PERFORMANCE STANDARD | E.4.7. | <p>Changes in The Earth and Sky: Using the science themes, describe resources used in the home, community, and nation as a whole.</p> <ul style="list-style-type: none"> • Land and Water • RB: (pp47-49) |
| PERFORMANCE STANDARD | E.4.8. | <p>Changes in The Earth and Sky: Illustrate human resources use in mining, forestry, farming, and manufacturing in Wisconsin and elsewhere in the world.</p> <ul style="list-style-type: none"> • Animal Studies • TG: L03.Exts (p32) |

Wisconsin Model Academic Standards for Science Grades K–4 and 5–8

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| | | <ul style="list-style-type: none"> • Ecosystems • RB: (pp35-37) • RB: (pp45-48) • Food Chemistry • TG: L02.Exts (p19) • TG: L10.Exts (p97) • Floating and Sinking • RB: (pp24-26) • Land and Water • RB: (pp36-38) • Plant Growth and Development • TG: L16 (pp95-98) |
| CONTENT STANDARD | WI.F. | Life and Environmental Science: Students in Wisconsin will demonstrate an understanding of the characteristics and structures of living things, the processes of life, and how living things interact with one another and their environment. |
| PERFORMANCE STANDARD | F.4.1. | <p>The Characteristics of Organisms: Discover how each organism meets its basic needs for water, nutrients, protection, and energy in order to survive.</p> <ul style="list-style-type: none"> • Aquatic Habitats • TG: Act01 (pp13-23) • Animal Studies • TG: L01-17 (pp3-172) • Building Blocks of Science: Understanding Cells and DNA • TG: Act 01 (pp 21-26) • Ecosystems • RB: (pp11-13) • RB: (pp49-51) • TG: L01 (pp3-12) • TG: L02 (pp13-24) • Microworlds • RB: (pp37-43) • RB: (pp46-47) • TG: L13.Exts (p74) • The Life Cycle of Butterflies • TG: L02-03 (pp11-22) • TG: L05-8 (pp29-52) • TG: L10-12 (pp63-80) • TG: L15 (pp89-94) • Organisms • TG: L01 (pp3-10) • TG: L07-10 (pp75-118) • TG: L16-17 (pp169-182) • Soils • TG: L09-10 (pp87-108) • Terrarium Habitats • TG: Act02 (pp15-21) |
| PERFORMANCE STANDARD | F.4.2. | <p>The Characteristics of Organisms: Investigate how organisms, especially plants, respond to both internal cues (the need for water) and external cues (changes in the environment).</p> |

Wisconsin Model Academic Standards for Science Grades K–4 and 5–8

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| | <ul style="list-style-type: none">• Aquatic Habitats• TG: Act01-3 (pp13-43)• TG: Act05 (pp61-70)• TG: Exts (pp70-78)• Animal Studies• RB: (pp06-11)• RB: (pp16-19)• RB: (pp22-32)• RB: (pp45-52)• TG: L01-17 (pp3-172)• Building Blocks of Science: Human Bodyworks• TG: Ext 01 (p 21)• Building Blocks of Science: Understanding Cells and DNA• TG: Act 01 (pp 21-26)• Building Blocks of Science: Understanding My Body• TG: Act 04 (pp 1-4)• Buzzing a Hive• TG: Les01-6 (pp5-66)• TG: Exts (p67)• Hide a Butterfly• TG: Ses02-3 (pp11-26)• Ecosystems• RB: (pp11-13)• RB: (pp20-23)• RB: (pp26-27)• RB: (pp49-51)• TG: L01-7 (pp3-82)• TG: L12 (pp117-124)• TG: L17 (pp169-171)• Floating and Sinking• RB: (pp57-61)• Microworlds• TG: L1-16 (pp75-86)• On Sandy Shores• TG: Act04 (pp59-89)• Organisms• TG: L01 (pp3-10)• TG: L07-10 (pp75-118)• TG: L14 (pp149-154)• TG: L16 (pp169-178)• TG: L17 (pp179-182)• Plant Growth and Development• TG: L08.Exts (p44)• TG: L11 (pp61-66)• TG: L14.Exts (pp86-87)• Schoolyard Ecology• TG: Act02-4 (pp21-49)• Soils• TG: L09-10 (pp87-108)• The Life Cycle of Butterflies• TG: L01-16 (pp3-96)• Terrarium Habitats• TG: Act02-5 (pp15-48) |
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Wisconsin Model Academic Standards for Science Grades K–4 and 5–8

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| | | <ul style="list-style-type: none"> • Weather • TG: L10.Exts (p95) |
| <p>PERFORMANCE STANDARD</p> | <p>F.4.3.</p> | <p>Life Cycles of Organisms: Illustrate the different ways that organisms grow through life stages and survive to produce new members of their type.</p> <ul style="list-style-type: none"> • Animal Studies • TG: L09.Exts (pp101-102) • Building Blocks of Science: Understanding Cells and DNA • TG: Act 05 (pp 65-73) • TG: Act 06 (pp 75-79) • TG: Post Assessment (pp 85-91) • TG: Pre Assessment (pp 17-19) • Food Chemistry • RB: (pp21-23) • Microworlds • RB: (pp28-30) • TG: L13 (pp71-74) • The Life Cycle of Butterflies • TG: L01-16 (pp3-96) |
| <p>PERFORMANCE STANDARD</p> | <p>F.4.4.</p> | <p>Organisms and Their Environment: Using the science themes, develop explanations for the connections among living and non-living things in various environments.</p> <ul style="list-style-type: none"> • Animal Studies • RB: (pp06-8) • TG: L01-17 (pp3-172) • Buzzing a Hive • TG: Exts (p67) • TG: Les04 (pp39-53) • TG: Les05 (pp55-59) • Ecosystems • RB: (pp07-23) • RB: (pp26-37) • RB: (pp40-51) • RB: (pp54-61) • TG: L01-15 (pp3-164) • TG: L17 (pp169-171) • Hide a Butterfly • TG: Ses01 (pp3-8) • Microworlds • TG: L12.Exts (pp69-70) • Organisms • TG: L01 (pp3-10) • TG: L04.Exts (pp43-45) • TG: L11-12 (pp119-134) • TG: L14.Exts (pp152-153) • TG: L17 (pp179-182) • Plant Growth and Development • TG: L11 (pp61-66) • TG: L14.Exts (pp86-87) • Schoolyard Ecology • TG: Act03-5 (pp33-59) |

Wisconsin Model Academic Standards for Science Grades K–4 and 5–8

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| | | <ul style="list-style-type: none"> • The Life Cycle of Butterflies • TG: L02.Exts (pp14-15) • TG: L10 (pp63-68) • Terrarium Habitats • TG: Act03-5 (pp23-48) |
| CONTENT STANDARD | WI.G. | Science Applications: Students in Wisconsin will demonstrate an understanding of the relationship between science and technology and the ways in which that relationship influences human activities. |
| PERFORMANCE STANDARD | G.4.1. | <p>Identify the technology used by someone employed in a job or position in Wisconsin and explain how the technology helps.</p> <ul style="list-style-type: none"> • Animal Studies • TG: L08.Exts (p94) • Bubble Festival • TG: Act04 (pp74-79) • Building Blocks of Science: Human Bodyworks • TG: Ext 08 (p 64) • Electric Circuits • RB: (pp17-21) • RB: (pp42-44) • RB: (pp53-55) • Electric Circuits • TG: L16 (pp81-84) • Food Chemistry • RB: (pp31-33) • RB: (pp49-50) • TG: L10.Exts (p97) • TG: L12.Exts (pp112-113) • Floating and Sinking • RB: (pp31-35) • RB: (pp41-45) • Land and Water • RB: (pp21-29) • Microworlds • RB: (pp20-22) • RB: (pp58-61) • Motion and Design • RB: (pp32-36) |
| PERFORMANCE STANDARD | G.4.2. | <p>Discover what changes in technology have occurred in a career chosen by a parent, grandparent, or an adult friend over a long period of time.</p> <ul style="list-style-type: none"> • Animal Studies • TG: L08.Exts (p94) • Building Blocks of Science: Human Bodyworks • TG: Ext 08 (p 64) • Electric Circuits • RB: (pp17-21) • RB: (pp42-44) • RB: (pp53-55) • TG: L16 (pp81-84) • Food Chemistry |

Wisconsin Model Academic Standards for Science Grades K–4 and 5–8

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| | | <ul style="list-style-type: none"> • RB: (pp31-33) • RB: (pp49-50) • TG: L10.Exts (p97) • TG: L12.Exts (pp112-113) • Floating and Sinking • RB: (pp41-45) • Land and Water • RB: (pp21-29) • Microworlds • RB: (pp20-22) • RB: (pp58-61) • Motion and Design • RB: (pp29-36) |
| <p>PERFORMANCE STANDARD</p> | <p>G.4.3.</p> | <p>Determine what science discoveries have led to changes in technologies that are being used in the workplace by someone employed locally.</p> <ul style="list-style-type: none"> • Animal Studies • TG: L08.Exts (p94) • Building Blocks of Science: Human Bodyworks • TG: Ext 08 (p 64) • Ecosystems • RB: (pp07-10) • RB: (pp54-61) • Electric Circuits • RB: (pp07-12) • RB: (pp17-21) • RB: (pp42-44) • TG: L08.Exts (p47) • Food Chemistry • RB: (pp31-33) • RB: (pp49-50) • TG: L10.Exts (p97) • TG: L12.Exts (pp112-113) • Floating and Sinking • RB: (pp07-14) • RB: (pp18-26) • RB: (pp31-33) • RB: (pp41-45) • TG: L15 (pp119-128) • GEMS: Electric Circuits • TG: Ses01 (pp13-33) • Land and Water • RB: (pp07-09) • RB: (pp36-38) • RB: (pp41-44) • RB: (pp57-58) • Microworlds • RB: (pp07-09) • RB: (pp52-55) • Motion and Design • RB: (pp29-36) • RB: (pp52-57) |

Wisconsin Model Academic Standards for Science Grades K–4 and 5–8

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| | | <ul style="list-style-type: none"> • TG: L02 (pp15-24) • Weather • TG: L11 (pp101-112) • TG: L12 (pp113-122) |
| <p>PERFORMANCE STANDARD</p> | <p>G.4.4.</p> | <p>Identify the combinations of simple machines in a device used in the home, the workplace, or elsewhere in the community, to make or repair things, or to move goods or people.</p> <ul style="list-style-type: none"> • Comparing and Measuring • TG: L13 (pp87-92) • Electric Circuits • RB: (pp07-12) • RB: (pp17-21) • TG: L08.Exts (p47) • Floating and Sinking • RB: (pp11-14) • RB: (pp31-33) • RB: (pp41-42) • TG: L15 (pp119-128) • Land and Water • RB: (pp32-35) • Microworlds • RB: (pp07-09) • Motion and Design • RB: (pp29-31) • RB: (pp32-36) • RB: (pp52-57) • TG: L02 (pp15-24) |
| <p>PERFORMANCE STANDARD</p> | <p>G.4.5.</p> | <p>Ask questions to find answers about how devices and machines were invented and produced.</p> <ul style="list-style-type: none"> • Electric Circuits • RB: (pp07-10) • RB: (pp17-21) • RB: (pp36-38) • RB: (pp56-59) • TG: L04.Exts (p24) • TG: L08.Exts (p47) • Floating and Sinking • RB: (pp18-21) • RB: (pp22-23) • TG: L15 (pp119-128) • GEMS: Electric Circuits • TG: Ses01 (pp13-33) • Land and Water • TG: L07 (pp75-84) • Microworlds • RB: (pp07-09) • Motion and Design • RB: (pp20-22) • RB: (pp29-40) |

Wisconsin Model Academic Standards for Science Grades K–4 and 5–8

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| | | <ul style="list-style-type: none"> • RB: (pp54-57) • Weather • TG: L11 (pp101-112) • TG: L12 (pp113-122) |
| CONTENT STANDARD | WI.H. | Science Applications: Students in Wisconsin will use scientific information and skills to make decisions about themselves, Wisconsin, and the world in which they live. |
| PERFORMANCE STANDARD | H.4.1. | <p>Describe how science and technology have helped, and in some cases hindered, progress in providing better food, more rapid information, quicker and safer transportation, and more effective health care.</p> <ul style="list-style-type: none"> • Building Blocks of Science: Understanding Cells and DNA • TG: Act 02 (pp 27-33) • Ecosystems • RB: (pp07-10) • RB: (pp54-61) • Electric Circuits • RB: (pp07-12) • RB: (pp17-21) • TG: L01 (pp3-6) • Floating and Sinking • RB: (pp07-14) • RB: (pp18-26) • RB: (pp29-30) • RB: (pp34-35) • RB: (pp41-42) • GEMS: Electric Circuits • TG: Ses01 (pp13-33) • Land and Water • RB: (pp07-09) • RB: (pp36-38) • RB: (pp41-44) • RB: (pp57-58) • Microworlds • RB: (pp10-12) • RB: (pp52-55) • Motion and Design • TG: L15.Exts (p143) • Moons of Jupiter • TG: Act01 (pp7-17) • Space Science for Grades 3-5 • TG: Ses 3.1 (pp 286-299) • Weather • TG: L11 (pp101-112) • TG: L12 (pp113-122) |
| PERFORMANCE STANDARD | H.4.2. | <p>Using the science themes, identify local and state issues that are helped by science and technology and explain how science and technology can also cause a problem.</p> <ul style="list-style-type: none"> • Building Blocks of Science: Understanding Cells and DNA • TG: Act 02 (pp 27-33) • Electric Circuits |

Wisconsin Model Academic Standards for Science Grades K–4 and 5–8

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| | | <ul style="list-style-type: none"> • RB: (pp07-10) • RB: (pp17-21) • TG: L01 (pp3-6) • Floating and Sinking • RB: (pp07-14) • RB: (pp18-26) • RB: (pp29-30) • RB: (pp34-35) • RB: (pp41-42) • Microworlds • RB: (pp10-12) • Motion and Design • TG: L15.Exts (p143) • Moons of Jupiter • TG: Act01 (pp7-17) • Space Science for Grades 3-5 • TG: Ses 3.1 (pp 286-299) |
| <p>PERFORMANCE STANDARD</p> | <p>H.4.3.</p> | <p>Show how science has contributed to meeting personal needs, including hygiene, nutrition, exercise, safety, and health care.</p> <ul style="list-style-type: none"> • Balancing and Weighing • TG: Safety-Sec3 (pp17-22) • Comparing and Measuring • TG: Safety-Sec3 (pp8-11) • Balancing and Weighing • TG: Safety-Sec3 (pp17-22) • Building Blocks of Science: Human Bodyworks • TG: Ext 08 (p 64) • TG: Ext 10 (p 73) • TG: Ext 11 (p 79) • Chemical Tests • TG: Safety-Sec3 (pp18-46) • TG: L02 (pp13-22) • TG: L04.Exts (p39) • TG: L12.Exts (pp109-110) • Ecosystems • RB: (pp07-10) • RB: (pp54-61) • Electric Circuits • RB: (pp07-12) • RB: (pp17-21) • Food Chemistry • RB: (pp11-12) • RB: (pp41-43) • TG: L02.Exts (p19) • TG: L06.Exts (p61) • TG: L12.Exts (pp112-113) • TG: L14.Exts (p127) • TG: L15.Exts (pp135-136) • Floating and Sinking • RB: (pp07-10) • RB: (pp18-26) |

Wisconsin Model Academic Standards for Science Grades K–4 and 5–8

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| | | <ul style="list-style-type: none"> • GEMS: Electric Circuits • TG: Ses01 (pp13-33) • Land and Water • RB: (pp07-09) • RB: (pp36-38) • RB: (pp41-44) • RB: (pp47-49) • RB: (pp57-58) • Microworlds • RB: (pp20-22) • RB: (pp46-47) • RB: (pp52-55) • Organisms • TG: Safety-Sec3 (pp19-24) • Plant Growth and Development • TG: Safety-Sec3 (pp10-14) • Solids and Liquids • TG: Safety-Sec3 (pp9-18) • Sound • TG: Safety-Sec3 (pp9-12) • Weather • TG: Safety-Sec3 (pp9-12) • TG: L02.Exts (pp15-16) • TG: L11 (pp101-112) • TG: L12 (pp113-122) |
| <p>PERFORMANCE STANDARD</p> | <p>H.4.4.</p> | <p>Develop a list of issues that citizens must make decisions about and describe a strategy for becoming informed about the science behind these issues.</p> <ul style="list-style-type: none"> • Building Blocks of Science: Understanding Cells and DNA • TG: Act 02 (pp 27-33) |

Wisconsin Model Academic Standards for Science Grades K–4 and 5–8

Grades 5-8 Science

Wisconsin Model Academic Standards

| CONTENT STANDARD | WI.A. | Science Connections: Students in Wisconsin will understand that there are unifying themes: systems, order, organization, and interactions; evidence, models, and explanations; constancy, change, and measurement; evolution, equilibrium, and energy; form and function among scientific disciplines. |
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| PERFORMANCE STANDARD | A.8.1. | <p>Develop their understanding of the science themes by using the themes to frame questions about science-related issues and problems.</p> <ul style="list-style-type: none"> • Building Blocks of Science: Understanding Cells and DNA • TG: Act 02 (pp 27-33) • Ecosystems • TG: L02-07 (pp13-82) • Electrical Energy and Circuit Design • SG: L21-23 (pp216-243) • TG: L21-23 (pp291-312) • Experiments with Plants • TG: L04 (pp39-50) • Human Body Systems • TG: L16.Exts (p188) • Land and Water • TG: L02-03 (pp11-36) • TG: L08-12 (pp85-142) • TG: L14-15 (pp153-172) |
| PERFORMANCE STANDARD | A.8.2. | <p>Describe limitations of science systems and give reasons why specific science themes are included in or excluded from those systems.</p> <ul style="list-style-type: none"> • Building Blocks of Science: Understanding Cells and DNA • TG: Act 01 (pp 21-26) • Ecosystems • TG: L02-07 (pp13-82) • Electrical Energy and Circuit Design • SG: L21-23 (pp216-243) • TG: L21-23 (pp291-312) • Experiments with Plants • TG: L04 (pp39-50) • Human Body Systems • TG: L16.Exts (p188) |
| PERFORMANCE STANDARD | A.8.3. | <p>Defend explanations and models by collecting and organizing evidence that supports them and critique explanations and models by collecting and organizing evidence that conflicts with them.</p> <ul style="list-style-type: none"> • All Units |
| PERFORMANCE STANDARD | A.8.4. | <p>Collect evidence to show that models developed as explanations for events were (and are) based on the evidence available to scientists at the time.</p> <ul style="list-style-type: none"> • All Units |
| PERFORMANCE STANDARD | A.8.5. | <p>Show how models and explanations, based on systems, were changed as new evidence accumulated (the effects of constancy, evolution, change, and measurement should all be part of these explanations).</p> <ul style="list-style-type: none"> • All Units |

Wisconsin Model Academic Standards for Science Grades K–4 and 5–8

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| PERFORMANCE STANDARD | A.8.6. | Use models and explanations to predict actions and events in the natural world. <ul style="list-style-type: none"> • All Units |
| PERFORMANCE STANDARD | A.8.7. | Design real or thought investigations to test the usefulness and limitations of a model. <ul style="list-style-type: none"> • All Units |
| PERFORMANCE STANDARD | A.8.8. | Use the themes of evolution, equilibrium, and energy to predict future events or changes in the natural world. <ul style="list-style-type: none"> • All Units |
| CONTENT STANDARD | WI.B. | Nature of Science: Students in Wisconsin will understand that science is ongoing and inventive, and that scientific understandings have changed over time as new evidence is found. |
| PERFORMANCE STANDARD | B.8.1. | Describe how scientific knowledge and concepts have changed over time in the earth and space, life and environmental, and physical sciences. <ul style="list-style-type: none"> • All Units |
| PERFORMANCE STANDARD | B.8.2. | Identify and describe major changes that have occurred over in conceptual models and explanations in the earth and space, life and environmental, and physical sciences and identify the people, cultures, and conditions that led to these developments. <ul style="list-style-type: none"> • All Units |
| PERFORMANCE STANDARD | B.8.3. | Explain how the general rules of science apply to the development and use of evidence in science investigations, model-making, and applications. <ul style="list-style-type: none"> • All Units |
| PERFORMANCE STANDARD | B.8.4. | Describe types of reasoning and evidence used outside of science to draw conclusions about the natural world. <ul style="list-style-type: none"> • Animal Studies <ul style="list-style-type: none"> • TG: L02.Exts (pp15-16) • TG: L03.Exts (p32) • TG: L04.Exts (pp41-42) • TG: L05.Exts (p58) • TG: L08.Exts (p94) • TG: L09.Exts (pp101-102) • TG: L10.Exts (p110) • TG: L11.Exts (p119) • TG: L14.Exts (p145) • TG: L15.Exts (pp159-160) • TG: L16.Exts (p167) • Earth in Space <ul style="list-style-type: none"> • TG: L02.Exts (pp18-19) • TG: L04.Exts (pp45-46) • TG: L06.Exts (p81) • TG: L20.Exts (p297) • Light <ul style="list-style-type: none"> • TG: L08.Exts (p105) |

Wisconsin Model Academic Standards for Science Grades K–4 and 5–8

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| PERFORMANCE STANDARD | B.8.5. | <p>Explain ways in which science knowledge is shared, checked, and extended, and show how these processes change over time.</p> <ul style="list-style-type: none"> • Animal Studies • TG: L16 (pp165-168) • Catastrophic Events • SG: L18 (pp200-209) • TG: L18 (pp257-264) • Dry Ice Investigations • TG: Act01 (pp19-47) • Electrical Energy and Circuit Design • SG: L02 (pp12-25) • TG: L02 (pp23-36) • Experiments with Plants • TG: L11.Exts (p89) • Human Body Systems • TG: L01.Exts (p7) |
| PERFORMANCE STANDARD | B.8.6. | <p>Explain the ways in which scientific knowledge is useful and also limited when applied to social issues.</p> <ul style="list-style-type: none"> • Building Blocks of Science: Understanding Cells and DNA • TG: Act 02 (pp 27-33) • Catastrophic Events • SG: L09 (pp102-112) • TG: L09 (pp127-142) • Earth in Space • SG: L10 (pp130-145) • SG: L20 (pp324-333) • TG: L10 (pp147-158) • TG: L20 (pp293-308) • Electric Circuits • RB: (pp07-10) |
| CONTENT STANDARD | WI.C. | <p>Science Inquiry: Students in Wisconsin will investigate questions using scientific methods and tools, revise their personal understanding to accommodate knowledge, and communicate these understandings to others.</p> |
| PERFORMANCE STANDARD | C.8.1. | <p>Identify questions they can investigate using resources and equipment they have available.</p> <ul style="list-style-type: none"> • All Units |
| PERFORMANCE STANDARD | C.8.2. | <p>Identify data and locate sources of information including their own records to answer the questions being investigated.</p> <ul style="list-style-type: none"> • All Units |
| PERFORMANCE STANDARD | C.8.3. | <p>Design and safely conduct investigations that provide reliable quantitative or qualitative data, as appropriate, to answer their questions.</p> <ul style="list-style-type: none"> • All Units |
| PERFORMANCE STANDARD | C.8.4. | <p>Use inferences to help decide possible results of their investigations, use observations to check their inferences.</p> <ul style="list-style-type: none"> • All Units |
| PERFORMANCE STANDARD | C.8.5. | <p>Use accepted scientific knowledge, models, and theories to explain their</p> |

Wisconsin Model Academic Standards for Science Grades K–4 and 5–8

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| STANDARD | | <p>results and to raise further questions about their investigations.</p> <ul style="list-style-type: none"> • All Units |
| PERFORMANCE STANDARD | C.8.6. | <p>State what they have learned from investigations, relating their inferences to scientific knowledge and to data they have collected.</p> <ul style="list-style-type: none"> • All Units |
| PERFORMANCE STANDARD | C.8.7. | <p>Explain their data and conclusions in ways that allow an audience to understand the questions they selected for investigation and the answers they have developed.</p> <ul style="list-style-type: none"> • All Units |
| PERFORMANCE STANDARD | C.8.8. | <p>Use computer software and other technologies to organize, process, and present their data.</p> <ul style="list-style-type: none"> • All Units |
| PERFORMANCE STANDARD | C.8.9. | <p>Evaluate, explain, and defend the validity of questions, hypotheses, and conclusions to their investigations.</p> <ul style="list-style-type: none"> • All Units |
| PERFORMANCE STANDARD | C.8.10. | <p>Discuss the importance of their results and implications of their work with peers, teachers, and other adults.</p> <ul style="list-style-type: none"> • All Units |
| PERFORMANCE STANDARD | C.8.11. | <p>Raise further questions which still need to be answered.</p> <ul style="list-style-type: none"> • All Units |
| CONTENT STANDARD | WI.D. | <p>Physical Science: Students in Wisconsin will demonstrate an understanding of the physical and chemical properties of matter, the forms and properties of energy, and the ways in which matter and energy interact.</p> |
| PERFORMANCE STANDARD | D.8.1. | <p>Properties and Changes of Properties in Matter: Observe, describe, and measure physical and chemical properties of elements and other substances to identify and group them according to properties such as density, melting points, boiling points, conductivity, magnetic attraction, solubility, and reactions to common physical and chemical tests.</p> <ul style="list-style-type: none"> • Catastrophic Events • SG: L04 (pp42-53) • TG: L04 (pp45-56) • Discovering Density • TG: Ses01-05 (pp5-46) • TG: Exts (p48) • Energy, Machines, and Motion • SG: L02-03 (pp12-25) • TG: L02-03 (pp23-36) • Floating and Sinking • TG: L02 (pp13-20) • TG: L10 (pp79-86) • TG: L13-15 (pp103-128) • RB: (pp07-10) • RB: (pp15-17) |

Wisconsin Model Academic Standards for Science Grades K–4 and 5–8

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| | | <ul style="list-style-type: none"> • RB: (pp36-42) • RB: (pp48-50) • RB: (pp60-61) • Human Body Systems • TG: L03.Exts (p24) • TG: L07.Exts (pp74-75) • Ocean Currents • TG: Act03-05 (pp47-93) • Properties of Matter • SG: L01-03 (pp2-29) • SG: L05 (pp38-55) • SG: L09 (pp78-83) • SG: L19-20 (pp162-185) • SG: L26 (pp230-235) • TG: L01-03 (pp3-38) • TG: L04.Exts (p45) • TG: L05 (pp49-64) • TG: L09 (pp101-112) • TG: L19-20 (pp209-240) • TG: L26 (pp313-332) |
| <p>PERFORMANCE STANDARD</p> | <p>D.8.2.</p> | <p>Properties and Changes of Properties in Matter: Use the major ideas of atomic theory and molecular theory to describe physical and chemical interactions among substances, including solids, liquids, and gases.</p> <ul style="list-style-type: none"> • Catastrophic Events • TG: L20.Exts (p287) • Crime Lab Chemistry • TG: Act01-03 (pp7-62) • Floating and Sinking • RB: (pp36-40) • Properties of Matter • TG: L05.Exts (p56) • TG: L21.Exts (p251) |
| <p>PERFORMANCE STANDARD</p> | <p>D.8.3.</p> | <p>Properties and Changes of Properties in Matter: Understand how chemical interactions and behaviors lead to new substances with different properties.</p> <ul style="list-style-type: none"> • Acid Rain • TG: Exts (pp120-122) • Bubble Festival • TG: Act01-02 (pp54-65) • TG: Act04 (pp74-79) • TG: Act06-12 (pp86-124) • Bubble-ology • TG: Act03 (pp19-27) • Catastrophic Events • TG: L19.Exts (pp274-275) • Chemical Reactions • TG: Part1 (pp9-14) • TG: Part2 (pp15-21) • TG: Exts (pp22-23) • Color Analyzers • TG: Act01-04 (pp5-37) • TG: Exts (pp38-40) |

Wisconsin Model Academic Standards for Science Grades K–4 and 5–8

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| | | <ul style="list-style-type: none"> • Electric Circuits • RB: (pp13-16) • Food Chemistry • TG: L03.Exts (p32) • TG: L09.Exts (p89) • TG: L10.Exts (p97) • TG: L11.Exts (pp102-103) • TG: L12.Exts (pp112-113) • GEMS Electric Circuits • TG: Ses01-10 (pp13-168) • Investigating Artifacts • TG: Ses01-06 (pp7-63) • TG: Exts (pp68-69) • Light • SG: L02 (pp20-31) • Microscopic Explorations • TG: Act03-04 (pp49-59) • TG: Exts (p102) • Microworlds • TG: L01.Exts (p6) • Of Cabbages and Chemistry • TG: Ses01-04 (pp9-46) • TG: Exts (pp49-51) • Properties of Matter • SG: L06 (pp56-63) • SG: L12 (pp106-111) • SG: L18 (pp150-161) • SG: L20-26 (pp170-235) • TG: L06 (pp65-78) • TG: L12 (pp135-142) • TG: L16.Exts (p178) • TG: L18 (pp193-208) • TG: L20-26 (pp227-332) • Space Science for Grades 3-5 • TG: Ses 2.4-2.5 (pp 226-259) |
| <p>PERFORMANCE STANDARD</p> | <p>D.8.4.</p> | <p>Properties and Changes of Properties in Matter: While conducting investigations, use the science themes to develop explanations of physical and chemical interactions and energy exchanges.</p> <ul style="list-style-type: none"> • Bubble Festival • TG: Act01-12 (pp54-124) • Chemical Reactions • TG: Part1 (pp9-14) • TG: Part2 (pp15-21) • TG: Exts (pp22-23) • Color Analyzers • TG: Act01-04 (pp5-37) • TG: Exts (pp38-40) • Convection: A Current Event • TG: Ses01-03 (pp5-26) • TG: Exts (pp27-29) • Discovering Density |

Wisconsin Model Academic Standards for Science Grades K–4 and 5–8

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| | <ul style="list-style-type: none">• TG: Ses01-05 (pp5-46)• TG: Exts (p48)• Dry Ice Investigations• TG: Act01-04 (pp19-129)• TG: Exts (pp131-132)• Electric Circuits• TG: L01-17 (pp3-86)• RB: (pp13-21)• RB: (pp24-28)• RB: (pp32-33)• RB: (pp36-38)• RB: (pp60-61)• Electrical Energy and Circuit Design• SG: L01-24 (pp2-251)• TG: L01-24 (pp3-326)• Energy, Machines, and Motion• SG: L01-22 (pp2-236)• TG: L01-22 (pp3-254)• Floating and Sinking• TG: L01-17 (pp3-136)• RB: (pp60-61)• Food Chemistry• TG: L04.Exts (p43)• GEMS Electric Circuits• TG: Ses01-10 (pp13-168)• Human Body Systems• TG: L03.Exts (p24)• TG: L05.Exts (p52)• TG: L06.Exts (p63)• TG: L07.Exts (pp74-75)• TG: L09.Exts (p107)• Investigating Artifacts• TG: Ses01-06 (pp7-63)• TG: Exts (pp68-69)• Invisible Universe• TG: Act01-05 (pp15-91)• Light• SG: L01-08 (pp2-91)• SG: L10-26 (pp108-297)• TG: L01-26 (pp3-367)• Magnets and Motors• TG: L02-17 (pp11-108)• Measuring Time• TG: L02 (pp21-30)• TG: L07-16 (pp67-148)• Microscopic Explorations• TG: Act03-04 (pp49-59)• TG: Exts (p102)• More Than Magnifiers• TG: Act01-04 (pp9-36)• Motion and Design• TG: L01 (pp3-14)• TG: L03 (pp25-34) |
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Wisconsin Model Academic Standards for Science Grades K–4 and 5–8

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| | | <ul style="list-style-type: none"> • TG: L04 (pp35-46) • TG: L06-09 (pp57-90) • TG: L12 (pp109-116) • Of Cabbages and Chemistry • TG: Ses01-04 (pp9-46) • TG: Exts (pp49-51) • Properties of Matter • SG: L01-26 (pp2-235) • TG: L01-26 (pp3-332) |
| <p>PERFORMANCE STANDARD</p> | <p>D.8.5.</p> | <p>Motions and Forces: While conducting investigations, explain the motion of objects by describing the forces acting on them.</p> <ul style="list-style-type: none"> • Bubble Festival • TG: Act01-02 (pp54- -65) • TG: Act04 (pp74-79) • TG: Act06-12 (pp86-124) • Building Blocks of Science: Measure It! • TG: L03 (pp 23-38) • Catastrophic Events • SG: L11-12 (pp120-153) • SG: L15 (pp170-189) • TG: L11-12 (pp149-176) • TG: L15 (pp197-218) • Chemical Reactions • TG: Part1 (pp9-14) • TG: Part2 (pp15-21) • TG: Exts (pp22-23) • Color Analyzers • TG: Act01-04 (pp5-37) • TG: Exts (pp38-40) • Convection: A Current Event • TG: Ses01-03 (pp5-26) • TG: Exts (pp27-29) • Discovering Density • TG: Ses01-05 (pp5-46) • TG: Exts (p48) • Dry Ice Investigations • TG: Act01-04 (pp19-129) • TG: Exts (pp131-132) • Earth in Space • SG: L15 (pp216-243) • TG: L15 (pp221-244) • Earth, Moon, and Stars • TG: Act01 (pp3-8) • Electric Circuits • TG: L01-17 (pp3-86) • RB: (pp13-16) • RB: (pp60-61) • Electrical Energy and Circuit Design • SG: L01-24 (pp2-251) • TG: L01-24 (pp3-326) • Energy, Machines, and Motion • SG: L01-22 (pp2-236) |

Wisconsin Model Academic Standards for Science Grades K–4 and 5–8

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| | | <ul style="list-style-type: none"> • TG: L01-22 (pp3-254) • Floating and Sinking • TG: L01-17 (pp3-136) • RB: (pp60-61) • Food Chemistry • TG: L04.Exts (p43) • GEMS Electric Circuits • TG: Ses01-10 (pp13-168) • Human Body Systems • TG: L03.Exts (p24) • TG: L05.Exts (p52) • TG: L06.Exts (p63) • TG: L09.Exts (p107) • Investigating Artifacts • TG: Ses01-06 (pp7-63) • TG: Exts (pp68-69) • Invisible Universe • TG: Act01-05 (pp15-91) • Light • SG: L01 (pp2-19) • SG: L03-08 (pp32-91) • SG: L10-26 (pp108-297) • TG: L01-26 (pp3-367) • Magnets and Motors • TG: L02-17 (pp11-108) • Measuring Time • TG: L02 (pp21-30) • TG: L07-16 (pp67-148) • Microscopic Explorations • TG: Act03-04 (pp49-59) • TG: Exts (p102) • More Than Magnifiers • TG: Act01-04 (pp9-36) • Motion and Design • TG: L01 (pp3-14) • TG: L03-05 (pp25-56) • TG: L07-13 (pp65-124) • TG: L15 (pp139-144) • TG: L17 (pp153-156) • Of Cabbages and Chemistry • TG: Ses01-04 (pp9-46) • TG: Exts (pp49-51) • Properties of Matter • SG: L01-26 (pp2-235) • TG: L01-26 (pp3-332) • Space Science for Grades 3-5 • TG: Ses 1.1 (pp 28-45) • TG: Ses 2.1-2.6 (pp 172-281) |
| <p>PERFORMANCE STANDARD</p> | <p>D.8.6.</p> | <p>Motions and Forces: While conducting investigations, explain the motion of objects using concepts of speed, velocity, acceleration, friction, momentum, and changes over time, among others, and apply these concepts and explanations to real-life situations outside the classroom.</p> |

Wisconsin Model Academic Standards for Science Grades K–4 and 5–8

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| | <ul style="list-style-type: none">• Bubble Festival• TG: Act01-02 (pp54-65)• TG: Act04 (pp74-79)• TG: Act06-12 (pp86-124)• Building Blocks of Science: Measure It!• TG: L03 (pp 23-38)• Catastrophic Events• SG: L11-12 (pp120-153)• SG: L15 (pp170-189)• TG: L11-12 (pp149-176)• TG: L15 (pp197-218)• Chemical Reactions• TG: Part1 (pp9-14)• TG: Part2 (pp15-21)• TG: Exts (pp22-23)• Color Analyzers• TG: Act01-04 (pp5-37)• TG: Exts (pp38-40)• Convection: A Current Event• TG: Ses01-03 (pp5-26)• TG: Exts (pp27-29)• Discovering Density• TG: Ses01-05 (pp5-46)• TG: Exts (p48)• Dry Ice Investigations• TG: Act01-04 (pp19-129)• TG: Exts (pp131-132)• Earth in Space• SG: L15 (pp216-243)• TG: L15-16 (pp221-268)• Earth, Moon, and Stars• TG: Act01 (pp3-8)• Electric Circuits• TG: L01-17 (pp3-86)• RB: (pp13-16)• RB: (pp60-61)• Electrical Energy and Circuit Design• SG: L01-24 (pp2-251)• TG: L01-24 (pp3-326)• Energy, Machines, and Motion• SG: L01-22 (pp2-236)• TG: L01-22 (pp3-254)• Floating and Sinking• TG: L01-17 (pp3-136)• RB: (pp60-61)• Food Chemistry• TG: L04.Exts (p43)• GEMS Electric Circuits• TG: Ses01-10 (pp13-168)• Human Body Systems• TG: L03.Exts (p24)• TG: L05.Exts (p52)• TG: L06.Exts (p63) |
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Wisconsin Model Academic Standards for Science Grades K–4 and 5–8

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| | | <ul style="list-style-type: none"> • TG: L09.Exts (p107) • Investigating Artifacts • TG: Ses01-06 (pp7-63) • TG: Exts (pp68-69) • Invisible Universe • TG: Act01-05 (pp15-91) • Light • SG: L01 (pp2-19) • SG: L03-08 (pp32-91) • SG: L10-26 (pp108-297) • TG: L01-26 (pp3-367) • Magnets and Motors • TG: L02-17 (pp11-108) • Measuring Time • TG: L02 (pp21-30) • TG: L07-16 (pp67-148) • Microscopic Explorations • TG: Act03-04 (pp49-59) • TG: Exts (p102) • More Than Magnifiers • TG: Act01-04 (pp9-36) • Motion and Design • TG: L01 (pp3-14) • TG: L03-05 (pp25-56) • TG: L07-13 (pp65-124) • TG: L15 (pp139-144) • TG: L17 (pp153-156) • Of Cabbages and Chemistry • TG: Ses01-04 (pp9-46) • TG: Exts (pp49-51) • Properties of Matter • SG: L01-26 (pp2-235) • TG: L01-26 (pp3-332) • Space Science for Grades 3-5 • TG: Ses 1.1 (pp 28-45) • TG: Ses 2.1-2.6 (pp 172-281) |
| <p>PERFORMANCE STANDARD</p> | <p>D.8.7.</p> | <p>Motions and Forces: While conducting investigations of common physical and chemical interactions occurring in the laboratory and the outside world, use commonly accepted definitions of energy and the idea of energy conservation.</p> <ul style="list-style-type: none"> • Bubble Festival • TG: Act01-02 (pp54-65) • TG: Act04 (pp74-79) • TG: Act06-12 (pp86-124) • Chemical Reactions • TG: Part1 (pp9-14) • TG: Part2 (pp15-21) • TG: Exts (pp22-23) • Color Analyzers • TG: Act01-04 (pp5-37) • TG: Exts (pp38-40) |

Wisconsin Model Academic Standards for Science Grades K–4 and 5–8

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| | | <ul style="list-style-type: none">• Convection: A Current Event• TG: Ses01-03 (pp5-26)• TG: Exts (pp27-29)• Discovering Density• TG: Ses01-05 (pp5-46)• TG: Exts (p48)• Dry Ice Investigations• TG: Act01-04 (pp19-129)• TG: Exts (pp131-132)• Electric Circuits• RB: (pp13-16)• RB: (pp60-61)• TG: L01-17 (pp3-86)• Electrical Energy and Circuit Design• SG: L01-24 (pp2-251)• TG: L01-24 (pp3-326)• Energy, Machines, and Motion• SG: L01-22 (pp2-236)• TG: L01-22 (pp3-254)• Floating and Sinking• TG: L01-17 (pp3-136)• RB: (pp60-61)• Food Chemistry• TG: L04.Exts (p43)• GEMS Electric Circuits• TG: Ses01-10 (pp13-168)• Human Body Systems• TG: L03.Exts (p24)• TG: L05.Exts (p52)• TG: L06.Exts (p63)• TG: L09.Exts (p107)• Investigating Artifacts• TG: Ses01-06 (pp7-63)• TG: Exts (pp68-69)• Invisible Universe• TG: Act01-05 (pp15-91)• Light• SG: L01 (pp2-19)• SG: L03-08 (pp32-91)• SG: L10-26 (pp108-297)• TG: L01-26 (pp3-367)• Microscopic Explorations• TG: Act03-04 (pp49-59)• TG: Exts (p102)• More Than Magnifiers• TG: Act01-04 (pp9-36)• Motion and Design• TG: L01 (pp3-14)• TG: L03-04 (pp25-46)• TG: L07-09 (pp65-90)• TG: L12 (pp109-116)• Of Cabbages and Chemistry• TG: Ses01-04 (pp9-46) |
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Wisconsin Model Academic Standards for Science Grades K–4 and 5–8

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| | | <ul style="list-style-type: none"> • TG: Exts (pp49-51) • Properties of Matter • SG: L01-26 (pp2-235) • TG: L01-26 (pp3-332) • Space Science for Grades 3-5 • TG: Ses 2.4-2.5 (pp 226-259) |
| <p>PERFORMANCE STANDARD</p> | <p>D.8.8.</p> | <p>Transfer of Energy: Describe and investigate the properties of light, heat, gravity, radio waves, magnetic fields, electrical fields, and sound waves as they interact with material objects in common situations.</p> <ul style="list-style-type: none"> • Bubble Festival • TG: Act05 (pp80-85) • Catastrophic Events • TG: L03.Exts (pp35-36) • Electric Circuits • TG: L01-17 (pp3-86) • RB: (pp07-21) • RB: (pp24-44) • RB: (pp47-61) • Electrical Energy and Circuit Design • SG: L01-24 (pp2-251) • TG: L01-24 (pp3-326) • Energy, Machines, and Motion • SG: L01-04 (pp2-35) • SG: L10 (pp92-97) • SG: L20 (pp200-213) • SG: L22 (pp226-236) • TG: L01-04 (pp3-46) • TG: L10 (pp107-130) • TG: L20 (pp235-238) • TG: L22 (pp247-254) • GEMS Electric Circuits • TG: Ses01-11 (pp13-175) • Human Body Systems • TG: L07.Exts (pp74-75) • Invisible Universe • TG: Act02 (pp26-38) • Light • SG: L01-26 (pp2-297) • TG: L01-26 (pp3-367) • Magnets and Motors • TG: L14 (pp89-94) • TG: L16 (pp99-102) • TG: L17 (pp103-108) • RB: (pp41-44) • Properties of Matter • SG: L20 (pp170-185) • TG: L20 (pp227-240) |
| <p>PERFORMANCE STANDARD</p> | <p>D.8.9.</p> | <p>Transfer of Energy: Explain the behaviors of various forms of energy by using the models of energy transmission, both in the laboratory and in real-life situations in the outside world.</p> |

Wisconsin Model Academic Standards for Science Grades K–4 and 5–8

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| | | <ul style="list-style-type: none"> • Electric Circuits • TG: L01-17 (pp3-86) • RB: (pp13-21) • RB: (pp24-28) • RB: (pp32-33) • RB: (pp36-38) • Electrical Energy and Circuit Design • SG: L01-02 (pp2-25) • SG: L04-10 (pp36-117) • SG: L12 (pp122-133) • SG: L15-18 (pp156-195) • SG: L24 (pp244-251) • TG: L01-02 (pp3-36) • TG: L04-10 (pp49-156) • TG: L12 (pp169-180) • TG: L15-18 (pp213-262) • TG: L24 (pp313-326) • Energy, Machines, and Motion • SG: L03 (pp20-25) • TG: L03-04 (pp31-46) • TG: L09 (pp99-106) • Light • SG: L02 (pp20-31) • SG: L07 (pp68-81) • SG: L17 (pp186-199) • SG: L19 (pp214-223) • TG: L02 (pp21-36) • TG: L07 (pp83-98) • TG: L16.Exts (p203) • TG: L17 (pp205-224) • TG: L19 (pp247-274) • Magnets and Motors • TG: L16.Exts (p102) • Measuring Time • TG: L13 (pp123-134) • Motion and Design • TG: L06 (pp57-64) • Properties of Matter • TG: L07.Exts (p86) • TG: L08.Exts (p96) • TG: L12.Exts (p140) • TG: L14.Exts (p157) • TG: L15.Exts (p166) |
| <p>PERFORMANCE STANDARD</p> | <p>D.8.10.</p> | <p>Transfer of Energy: Explain how models of the atomic structure of matter have changed over time, including historical models and modern atomic theory.</p> <ul style="list-style-type: none"> • GEMS Electric Circuits • TG: Ses04 (pp89-108) • Properties of Matter • TG: L21.Exts (p251) |

Wisconsin Model Academic Standards for Science Grades K–4 and 5–8

| CONTENT STANDARD | WI.E. | Earth and Space Science: Students in Wisconsin will demonstrate an understanding of the structure and systems of earth and other bodies in the universe and of their interactions. |
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| PERFORMANCE STANDARD | E.8.1. | <p>Structure of Earth System: Using the science themes, explain and predict changes in major features of land, water, and atmospheric systems.</p> <ul style="list-style-type: none"> • Bubble-ology • TG: Act03-04 (pp19-32) • Catastrophic Events • SG: L01-05 (pp2-67) • SG: L09 (pp102-112) • SG: L24 (pp264-273) • TG: L01-05 (pp3-68) • TG: L06.Exts (pp77-78) • TG: L09 (pp127-142) • TG: L24 (pp329-346) • Crime Lab Chemistry • TG: Act01 (pp7-27) • Dry Ice Investigations • TG: Act01 (pp19-47) • Earth in Space • SG: L13 (pp174-199) • SG: L17 (pp268-289) • SG: L19 (pp312-323) • TG: L12-13 (pp181-208) • TG: L17 (pp269-276) • TG: L19 (pp287-292) • Floating and Sinking • RB: (pp24-26) • RB: (pp36-40) • RB: (pp48-50) • Food Chemistry • TG: L12.Exts (pp112-113) • Global Warming and the Greenhouse Effect • TG: Ses02 (pp17-27) • Land and Water • TG: L01-07 (pp3-84) • TG: L09-11 (pp99-128) • TG: L14-15 (pp153-172) • RB: (pp21-25) • RB: (pp41-49) • Plate Tectonics • TG: Ses02 (pp31-41) • Properties of Matter • TG: L05.Exts (p56) • River Cutters • TG: Ses02 (pp27-34) • TG: Ses06 (pp59-65) • Space Science for Grades 3-5 • TG: Ses 1.1-1.9 (pp 28-167) • TG: Ses 2.1-2.6 (pp 172-281) • Stories in Stone • TG: Ses07 (pp83-101) |

Wisconsin Model Academic Standards for Science Grades K–4 and 5–8

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| <p>PERFORMANCE STANDARD</p> | <p>E.8.2.</p> | <p>Structure of Earth System: Describe underlying structures of the earth that cause changes in the earth's surface.</p> <ul style="list-style-type: none"> • Catastrophic Events • SG: L10 (pp114-119) • SG: L13-17 (pp154-197) • TG: L10 (pp143-148) • TG: L13-17 (pp177-256) • Convection: A Current Event • TG: Exts (pp27-29) • Earth in Space • SG: L13 (pp174-199) • TG: L13 (pp197-208) • Land and Water • RB: (pp07-11) • Plate Tectonics • TG: Ses01-03 (pp21-55) • TG: Ses08 (pp113-129) • Properties of Matter • SG: L05 (pp38-55) |
| <p>PERFORMANCE STANDARD</p> | <p>E.8.3.</p> | <p>Structure of Earth System: Using the science themes during the process of investigation, describe climate, weather, ocean currents, soil movements and changes in the forces acting on the earth.</p> <ul style="list-style-type: none"> • Catastrophic Events • SG: L02-04 (pp12-53) • SG: L07 (pp80-95) • TG: L01.Exts (pp10-11) • TG: L02-03 (pp17-44) • TG: L04.Exts (p54) • TG: L06.Exts (pp77-78) • TG: L07 (pp83-102) • Earth in Space • SG: L01-09 (pp2-127) • SG: L19 (pp312-323) • TG: L01-09 (pp3-146) • TG: L19 (pp287-292) • Earth, Moon, and Stars • TG: Act04 (pp25-32) • Ecosystems • TG: L02 (pp13-24) • Floating and Sinking • RB: (pp48-50) • Global Warming and the Greenhouse Effect • TG: Ses01 (pp5-15) • Human Body Systems • TG: L22.Exts (p258) • Land and Water • TG: L05.Exts (p56) • RB: (pp36-38) • Light • TG: L03.Exts (p43) • Magnets and Motors |

Wisconsin Model Academic Standards for Science Grades K–4 and 5–8

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| | | <ul style="list-style-type: none"> • RB: (pp23-25) • Measuring Time • TG: L06.Exts (p63) • RB: (pp10-14) • Ocean Currents • TG: Act02-07 (pp29-140) • Only One Ocean • TG: Act01 (pp15-40) • Organisms-From Macro to Micro • TG: L14.Exts (p247) • Properties of Matter • TG: L05.Exts (p56) • Space Science for Grades 3-5 • TG: Ses 1.1-1.3 (pp 28--69) • TG: Ses 3 Pre Assessment (pp 1-2) • TG: Ses 3 Post Assessment (pp 1-2) • TG: Ses 3 Reading (pp 1-2) • TG: Ses 4.1 (pp 340-364) • Terrarium Habitats • TG: Act01 (pp5-13) • The Real Reasons for the Seasons • TG: Act03 (pp29-48) • TG: Act06-08 (pp65-88) |
| <p>PERFORMANCE STANDARD</p> | <p>E.8.4.</p> | <p>Structure of Earth System: Using the science themes, analyze the influence living organisms have had on the earth's systems, including their impact on the composition of the atmosphere and the weathering of rocks.</p> <ul style="list-style-type: none"> • Animal Studies • TG: L01-17 (pp3-172) • Building Blocks of Science: Human Bodyworks • TG: Ext 08 (p 64) • Catastrophic Events • SG: L03 (pp26-41) • SG: L23-24 (pp252-273) • TG: L03 (pp27-44) • TG: L23-24 (pp217-346) • Earth in Space • SG: L13 (pp174-199) • SG: L19 (pp312-323) • TG: L13 (pp197-208) • TG: L19 (pp287-292) • Ecosystems • TG: L08-11 (pp83-116) • RB (pp17-19) • RB: (pp31-37) • RB: (pp40-42) • RB: (pp60-61) • Environmental Detectives • TG: Act01 (pp15-31) • Experiments with Plants • TG: L02.Exts (p24) • TG: L07 (pp65-70) • RB: (pp20-21) |

Wisconsin Model Academic Standards for Science Grades K–4 and 5–8

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| | | <ul style="list-style-type: none"> • RB: (pp24-25) • RB: (pp30-33) • Floating and Sinking • RB: (pp48-50) • Global Warming and the Greenhouse Effect • TG: Ses02-08 (pp17-124) • Land and Water • TG: L14 (pp153-162) • Ocean Currents • TG: Act01 (pp9-28) • Organisms-From Macro to Micro • SG: L06 (pp64-81) • SG: L13 (pp158-171) • TG: L04.Exts (pp53-54) • Properties of Matter • SG: L04 (pp30-37) • SG: L12 (pp106-111) • River Cutters • TG: Ses02 (pp27-34) • TG: Ses04-05 (pp49-57) • TG: Ses07 (pp67-72) • TG: Exts (p73) • Schoolyard Ecology • TG: Act03-04 (pp33-49) • Stories in Stone • TG: Ses05 (pp65-73) • Terrarium Habitats • TG: Act03-05 (pp23-48) • The Technology of Paper • RB: (pp41-46) |
| <p>PERFORMANCE STANDARD</p> | <p>E.8.5.</p> | <p>Earth's History: Analyze the geologic and life history of the earth, including change over time, using various forms of scientific evidence.</p> <ul style="list-style-type: none"> • Earth in Space • SG: L18 (pp290-311) • TG: L18 (pp277-286) • Human Body Systems • TG: L18.Exts (pp215-216) • Life Through Time • TG: Ses01-07 (pp13-269) • Measuring Time • RB: (pp18-21) • Plate Tectonics • TG: Ses01 (pp21-29) • TG: Ses06 (pp79-91) • River Cutters • TG: Ses03 (pp35-47) |
| <p>PERFORMANCE STANDARD</p> | <p>E.8.6.</p> | <p>Earth's History: Describe through investigations the use of the earth's resources by humans in both past and current cultures, particularly how changes in the resources used for the past 100 years are the basis for efforts to conserve and recycle renewable and non-renewable resources.</p> <ul style="list-style-type: none"> • Animal Studies |

Wisconsin Model Academic Standards for Science Grades K–4 and 5–8

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| | | <ul style="list-style-type: none"> • RB: (pp09-11) • Building Blocks of Science: Human Bodyworks • TG: Ext 08 (p 64) • Ecosystems • TG: L08-11 (pp83-116) • RB: (pp20-21) • RB: (pp24-25) • RB: (pp31-37) • RB: (pp40-42) • RB: (pp60-61) • Energy, Machines, and Motion • SG: L04 (pp26-35) • Environmental Detectives • TG: Act01 (pp15-31) • Experiments with Plants • TG: L02.Exts (p24) • Floating and Sinking • RB: (pp48-50) • Global Warming and the Greenhouse Effect • TG: Ses06-08 (pp93-124) • Land and Water • TG: L12 (pp129-142) • TG: L14-16 (pp153-182) • RB: (pp47-49) • Ocean Currents • TG: Act01 (pp9-28) • Organisms-From Macro to Micro • SG: L06 (pp64-81) • SG: L13 (pp158-171) • Properties of Matter • SG: L12 (pp106-111) • River Cutters • TG: Exts (p73) • The Technology of Paper • TG: L08.Exts (pp122-123) • TG: L13.Exts (pp167-168) • RB: (pp27-29) • RB: (pp41-46) |
| <p>PERFORMANCE STANDARD</p> | <p>E.8.7.</p> | <p>Earth in the Solar System: Describe the general structure of the solar system, galaxies, and the universe, explaining the nature of the evidence used to develop current models of the universe.</p> <ul style="list-style-type: none"> • Catastrophic Events • SG: L02 (pp12-25) • SG: L06 (pp68-79) • SG: L11 (pp120-133) • SG: L17 (pp194-197) • TG: L02 (pp17-26) • TG: L06 (pp69-82) • TG: L11 (pp149-162) • TG: L14.Exts (pp193-194) • TG: L17 (pp233-256) • TG: L23.Exts (pp325-326) |

Wisconsin Model Academic Standards for Science Grades K–4 and 5–8

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| | | <ul style="list-style-type: none"> • Earth in Space • SG: L01-15 (pp2-243) • SG: L17-22 (pp268-343) • TG: L01-22 (pp3-326) • Earth, Moon, and Stars • TG: Act01 (pp3-8) • Global Warming and the Greenhouse Effect • TG: Ses02 (pp17-27) • Hot Water and Warm Homes from Sunlight • TG: Ses01-02 (pp7-16) • TG: Ses04 (pp33-37) • Land and Water • TG: L02-04 (pp11-50) • TG: L09-11 (pp99-128) • TG: L12.Exts (pp132-133) • TG: L15.Exts (p167) • TG: L16 (pp173-182) • Living with a Star • TG: Act02 (pp41-58) • Measuring Time • TG: L06 (pp59-66) • Messages From Space • TG: Act02-03 (pp27-87) • TG: Act05 (pp96-123) • Moons of Jupiter • TG: Act03 (pp31-39) • Plate Tectonics • TG: Ses01-08 (pp21-129) • Properties of Matter • SG: L01 (pp2-13) • TG: L01.Exts (p9) • River Cutters • TG: Ses01-07 (pp21-72) • Space Science for Grades 3-5 • TG: Ses 1 Pre Assessment (p 1) • TG: Ses 1 Post Assessment (pp 1-2) • TG: Ses 1.1-1.9 (pp 28-167) • TG: Ses 2.1-2.6 (pp 172-281) • TG: Ses 3 Reading (pp 1-2) • TG: Ses 3.1-3.4 (pp 286-335) • TG: Ses 4.1-4.5 (pp 340-423) • Stories in Stone • TG: Ses03 (pp33-45) • The Real Reasons for the Seasons • TG: Act02-03 (pp22-48) • TG: Act07 (pp73-79) |
| <p>PERFORMANCE STANDARD</p> | <p>E.8.8.</p> | <p>Earth in the Solar System: Using past and current models of the structure of the solar system, explain the daily, monthly, yearly, and long-term cycles of the earth, citing evidence gained from personal observation as well as evidence used by scientists</p> <ul style="list-style-type: none"> • Catastrophic Events • SG: L03 (pp26-41) |

Wisconsin Model Academic Standards for Science Grades K–4 and 5–8

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| | | <ul style="list-style-type: none"> • SG: L07 (pp80-95) • TG: L01.Exts (pp10-11) • TG: L03 (pp27-44) • TG: L07 (pp83-102) • Earth in Space • SG: L01-13 (pp2-199) • SG: L15 (pp216-243) • SG: L17-22 (pp268-343) • TG: L01-22 (pp3-326) • Earth, Moon, and Stars • TG: Act04-06 (pp25-52) • Measuring Time • TG: L02 (pp21-30) • TG: L06.Exts (p63) • RB: (pp10-14) • RB: (pp24-27) • RB: (pp30-34) • Messages From Space • TG: Act02-03 (pp27-87) • Space Science for Grades 3-5 • TG: Ses 1 Pre Assessment (p 1) • TG: Ses 1 Post Assessment (pp 1-2) • TG: Ses 1.1-1.9 (pp 28-167) • TG: Ses 3 Pre Assessment (pp 1-2) • TG: Ses 3 Post Assessment (pp 1-2) • TG: Ses 3 Reading (pp 1-2) • TG: Ses 3.1-3.4 (pp 286-335) • TG: Ses 4.1-4.5 (pp 340-423) • The Real Reasons for the Seasons • TG: Act02-03 (pp22-48) • TG: Act06-08 (pp65-88) |
| CONTENT STANDARD | WI.F. | Life and Environmental Science: Students in Wisconsin will demonstrate an understanding of the characteristics and structures of living things, the processes of life, and how living things interact with one another and their environment. |
| PERFORMANCE STANDARD | F.8.1. | <p>Structure and Function in Living Things: Understand the structure and function of cells, organs, tissues, organ systems, and whole organisms.</p> <ul style="list-style-type: none"> • Building Blocks of Science: Understanding Cells and DNA • TG: Pre Assessment (pp 17-19) • TG: Act 01-05 (pp 21-73) • TG: Post Assessment (pp 85-91) • Human Body Systems • TG: L01 (pp3-10) • Microworlds • TG: L11-16 (pp61-8.66) • Organisms-From Macro to Micro • SG: L01-20 (pp2-243) • TG: L01-20 (pp3-350) |
| PERFORMANCE STANDARD | F.8.2. | <p>Structure and Function in Living Things: Show how organisms have adapted structures to match their functions, providing means of encouraging individual and group survival within specific environments.</p> |

Wisconsin Model Academic Standards for Science Grades K–4 and 5–8

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| | | <ul style="list-style-type: none"> • Animal Studies • TG: L01-17 (pp3-172) • RB: (pp06-11) • RB: (pp16-19) • RB: (pp30-32) • RB: (pp45-49) • Aquatic Habitats • TG: Act01 (pp13-23) • Building Blocks of Science: Human Bodyworks • TG: Ext 01 (p 21) • Ecosystems • TG: L01 (pp3-12) • TG: L02 (pp13-24) • RB: (pp11-13) • RB: (pp49-51) • Experiments with Plants • RB: (pp11-13) • RB: (pp30-33) • Floating and Sinking • RB: (pp57-61) • Human Body Systems • TG: L07.Exts (pp74-75) • TG: L22.Exts (p258) • Microworlds • TG: L13.Exts (p74) • RB: (pp37-43) • RB: (pp46-47) • Organisms-From Macro to Micro • SG: L01 (pp2-11) • SG: L03 (pp28-37) • SG: L06 (pp64-81) • SG: L11 (pp132-145) • SG: L13-14 (pp158-179) • TG: L01 (pp3-14) • TG: L02.Exts (p25) • TG: L03 (pp33-48) • TG: L04.Exts (pp53-54) • TG: L05.Exts (pp69-70) • TG: L06 (pp73-104) • TG: L10.Exts (pp175-176) • TG: L11 (pp185-200) • TG: L13-14 (pp219-252) • TG: L18.Exts (pp299-300) • Properties of Matter • SG: L04 (pp30-37) • Terrarium Habitats • TG: Act02-05 (pp15-48) |
| <p>PERFORMANCE STANDARD</p> | <p>F.8.3.</p> | <p>Structure and Function in Living Things: Differentiate between single-celled and multiple-celled organisms (humans) through investigation, comparing the cell functions of specialized cells for each type of organism.</p> <ul style="list-style-type: none"> • Acid Rain • TG: Ses01-08 (pp7-119) |

Wisconsin Model Academic Standards for Science Grades K–4 and 5–8

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| | | <ul style="list-style-type: none">• Animal Studies• TG: L01-04 (pp3-48)• TG: L06 (pp65-74)• TG: L07.Exts (pp79-80)• TG: L08 (pp87-96)• TG: L10.Exts (p110)• TG: L13 (pp135-142)• TG: L15.Exts (pp159-160)• TG: L17 (pp169-172)• RB: (pp06-08)• RB: (pp12-15)• RB: (pp22-25)• Aquatic Habitats• TG: Act01-05 (pp13-70)• TG: Exts (pp70-78)• Building Blocks of Science: Human Bodyworks• TG: Pre Assessment (pp 13-17)• TG: Act 01-12 (pp 19-84)• Building Blocks of Science: Understanding Cells and DNA• TG: Pre Assessment (pp 17-19)• TG: Act 01-06 (pp 21-79)• TG: Post Assessment (pp 85-91)• Ecosystems• TG: L02.Exts (p18)• TG: L03-04 (pp25-52)• TG: L07-08 (pp75-94)• TG: L10.Exts (p103)• TG: L13 (pp125-132)• TG: L16-17 (pp165-171)• RB: (pp43-44)• Electric Circuits• RB: (pp53-55)• Environmental Detectives• TG: Act01-07 (pp15-202)• Experiments with Plants• TG: L01-16 (pp9-128)• RB: (pp14-17)• Food Chemistry• TG: L02-16 (pp11-154)• Human Body Systems• SG: L02-08 (pp8-65)• SG: L10-23 (pp76-195)• TG: L02-23 (pp11-276)• Life Through Time• TG: Ses01-07 (pp13-269)• Microscopic Explorations• TG: Act02 (pp43-47)• TG: Act08-10 (pp81-97)• TG: Exts (p102)• Microworlds• TG: L01-17 (pp3-88)• RB: (pp23-25)• RB: (pp28-30) |
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Wisconsin Model Academic Standards for Science Grades K–4 and 5–8

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| | | <ul style="list-style-type: none"> • Organisms-From Macro to Micro • SG: L01-20 (pp2-243) • TG: L01-20 (pp3-350) • Schoolyard Ecology • TG: Act01-05 (pp7-59) • Terrarium Habitats • TG: Act01-05 (pp5-48) |
| <p>PERFORMANCE STANDARD</p> | <p>F.8.4.</p> | <p>Reproduction and Heredity: Investigate and explain that heredity is comprised of the characteristic traits found in genes within the cell of an organism.</p> <ul style="list-style-type: none"> • Animal Studies • TG: L11.Exts (p119) • TG: L13.Exts (p138) • Building Blocks of Science: Understanding Cells and DNA • TG: Pre Assessment (pp 17-19) • TG: Ext 05 (p 71) • TG: Act 06 (pp 75-79) • TG: Post Assessment (pp 85-91) • Experiments with Plants • RB: (pp11-13) • RB: (pp36-40) • RB: (pp44-46) • RB: (pp50-56) • Human Body Systems • TG: L04.Exts (p35) • Organisms-From Macro to Micro • SG: L01 (pp2-11) • SG: L18-19 (pp204-235) • TG: L01 (pp3-14) • TG: L02.Exts (p25) • TG: L18-19 (pp293-330) |
| <p>PERFORMANCE STANDARD</p> | <p>F.8.5.</p> | <p>Reproduction and Heredity: Show how different structures both reproduce and pass on characteristics of their group.</p> <ul style="list-style-type: none"> • Building Blocks of Science: Understanding Cells and DNA • TG: Pre Assessment (pp 17-19) • TG: Act 05-06 (pp 65-79) • TG: Post Assessment (pp 85-91) • Experiments with Plants • RB: (pp36-40) • RB: (pp44-46) • RB: (pp54-56) • RB: (pp60-61) • Human Body Systems • TG: L04.Exts (p35) • Measuring Time • RB: (pp50-52) • Organisms-From Macro to Micro • SG: L18-19 (pp204-235) • TG: L02.Exts (p25) • TG: L18-19 (pp293-330) |

Wisconsin Model Academic Standards for Science Grades K–4 and 5–8

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| PERFORMANCE STANDARD | F.8.6. | <p>Regulation and Behavior: Understand that an organism is regulated both internally and externally.</p> <ul style="list-style-type: none"> • Animal Studies • TG: L13.Exts (p138) • Human Body Systems • TG: L07.Exts (pp74-75) • Microworlds • TG: L13.Exts (p74) • RB: (pp37-43) • RB: (pp46-47) • Organisms-From Macro to Micro • SG: L01 (pp2-11) • SG: L03 (pp28-37) • SG: L11 (pp132-145) • SG: L14 (pp172-179) • TG: L01 (pp3-14) • TG: L02.Exts (p25) • TG: L03 (pp33-48) • TG: L11 (pp185-200) • TG: L14 (pp237-252) |
| PERFORMANCE STANDARD | F.8.7. | <p>Regulation and Behavior: Understand that an organism's behavior evolves through adaptation to its environment.</p> <ul style="list-style-type: none"> • Animal Studies • TG: L01-16 (pp3-168) • RB: (pp06-11) • RB: (pp16-19) • RB: (pp30-32) • RB: (pp40-42) • RB: (pp45-49) • Building Blocks of Science: Human Bodyworks • TG: Ext 01 (p 21) • Ecosystems • RB: (pp11-13) • Experiments with Plants • RB: (pp11-13) • RB: (pp30-33) • Floating and Sinking • RB: (pp57-61) • Human Body Systems • TG: L22.Exts (p258) • Organisms-From Macro to Micro • SG: L06 (pp64-81) • SG: L13 (pp158-171) • TG: L06 (pp73-104) • TG: L10.Exts (pp175-176) • TG: L13 (pp219-236) • TG: L18.Exts (pp299-300) • Terrarium Habitats • TG: Act03-05 (pp23-48) |
| PERFORMANCE STANDARD | F.8.8. | <p>Populations and Ecosystems: Show through investigations how organisms both depend on and contribute to the balance or imbalance of populations</p> |

Wisconsin Model Academic Standards for Science Grades K–4 and 5–8

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| | | <p>and/or ecosystems, which in turn contribute to the total system of life on the planet.</p> <ul style="list-style-type: none"> • Acid Rain • TG: Ses06-07 (pp87-113) • Animal Studies • TG: L01-17 (pp3-172) • RB: (pp06-08) • Ecosystems • TG: L01-17 (pp3-171) • RB: (pp07-23) • RB: (pp26-37) • RB: (pp40-51) • RB: (pp54-61) • Experiments with Plants • TG: L06-07 (pp57-70) • RB: (pp24-25) • RB: (pp30-33) • Microworlds • TG: L12.Exts (pp69-70) • Organisms-From Macro to Micro • SG: L04 (pp38-45) • SG: L09 (pp106-119) • SG: L12 (pp146-155) • TG: L04 (pp49-56) • TG: L09 (pp151-166) • TG: L12 (pp201-218) • TG: L18.Exts (pp299-300) • Schoolyard Ecology • TG: Act03-05 (pp33-59) • Terrarium Habitats • TG: Act03-05 (pp23-48) |
| <p>PERFORMANCE STANDARD</p> | <p>F.8.9.</p> | <p>Diversity and Adaptations of Organisms: Explain how some of the changes on the earth are contributing to changes in the balance of life and affecting the survival or population growth of certain species.</p> <ul style="list-style-type: none"> • Animal Studies • TG: L11.Exts (p119) • TG: L13.Exts (p138) • TG: L14.Exts (p145) • TG: L16.Exts (p167) • RB: (pp06-19) • RB: (pp30-32) • RB: (pp40-42) • RB: (pp45-49) • Catastrophic Events • SG: L23-24 (pp252-273) • TG: L23-24 (pp217-346) • Earth in Space • TG: L10.Exts (p152) • Ecosystems • TG: L01-7 (pp3-82) • TG: L12 (pp117-124) |

Wisconsin Model Academic Standards for Science Grades K–4 and 5–8

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| | | <ul style="list-style-type: none"> • TG: L17 (pp169-171) • RB: (pp11-13) • RB: (pp20-23) • RB (pp26-27) • Environmental Detectives • TG: Act01-07 (pp15-202) • Experiments with Plants • TG: L02.Exts (p24) • RB: (pp11-13) • RB: (pp24-25) • Floating and Sinking • RB: (pp60-61) • Microworlds • TG: L1416 (pp75-86) • Only One Ocean • TG: Act03 (pp89-144) • Organisms-From Macro to Micro • SG: L08 (pp96-105) • SG: L12-13 (pp146-171) • TG: L04.Exts (pp53-54) • TG: L12-13 (pp201-236) • The Technology of Paper • RB: (pp44-46) |
| <p>PERFORMANCE STANDARD</p> | <p>F.8.10.</p> | <p>Diversity and Adaptations of Organisms: Project how current trends in human resource use and population growth will influence the natural environment, and show how current policies affect those trends.</p> <ul style="list-style-type: none"> • Animal Studies • RB: (pp09-11) • Building Blocks of Science: Human Bodyworks • TG: Ext 08 (p 64) • Ecosystems • TG: L08-11 (pp83-116) • RB: (pp31-37) • RB: (pp40-42) • RB: (pp60-61) • Environmental Detectives • TG: Act01 (pp15-31) • Experiments with Plants • TG: L02.Exts (p24) • RB: (pp20-21) • RB: (pp24-25) • Floating and Sinking • RB: (pp48-50) • Global Warming and the Greenhouse Effect • TG: Ses06-08 (pp93-124) • Land and Water • TG: L14 (pp153-162) • Ocean Currents • TG: Act01 (pp9-28) • Organisms-From Macro to Micro • SG: L06 (pp64-81) • SG: L13 (pp158-171) |

Wisconsin Model Academic Standards for Science Grades K–4 and 5–8

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| | | <ul style="list-style-type: none"> • Properties of Matter • SG: L12 (pp106-111) • River Cutters • TG: Exts (p73) • The Technology of Paper • RB: (pp41-43) • RB: (pp44-46) |
| CONTENT STANDARD | WI.G. | Science Applications: Students in Wisconsin will demonstrate an understanding of the relationship between science and technology and the ways in which that relationship influences human activities. |
| PERFORMANCE STANDARD | G.8.1. | <p>Identify and investigate the skills people need for a career in science or technology and identify the academic courses that a person pursuing such a career would need.</p> <ul style="list-style-type: none"> • Building Blocks of Science: Human Bodyworks • TG: Ext 08 (p 64) • Catastrophic Events • SG: L01 (pp2-11) • SG: L04 (pp42-53) • SG: L12 (pp134-153) • SG: L19 (pp210-223) • TG: L01 (pp3-16) • TG: L04 (pp45-56) • TG: L12 (pp163-176) • TG: L14.Exts (pp193-194) • TG: L19 (pp265-278) • Earth in Space • TG: L20.Exts (p297) • TG: L21.Exts (p310) • Electric Circuits • RB: (pp42-44) • RB: (pp50-52) • Electrical Energy and Circuit Design • SG: L02 (pp12-25) • TG: L02 (pp23-36) • Energy, Machines, and Motion • SG: L16 (pp148-161) • TG: L16 (pp185-202) • Floating and Sinking • RB: (pp41-42) • Human Body Systems • SG: L09 (pp68-75) • TG: L09 (pp103-112) • TG: L18.Exts (pp215-216) • TG: L19.Exts (p225) • Land and Water • RB: (pp26-29) • RB: (pp32-35) • RB: (pp59-61) • Microworlds • TG: L09.Exts (p53) • Organisms-From Macro to Micro • SG: L02 (pp12-27) |

Wisconsin Model Academic Standards for Science Grades K–4 and 5–8

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| | | <ul style="list-style-type: none"> • SG: L11 (pp132-145) • TG: L09.Exts (p160) • TG: L19.Exts (pp317-318) • The Technology of Paper • TG: L16.Exts (pp201-202) |
| <p>PERFORMANCE STANDARD</p> | <p>G.8.2.</p> | <p>Explain how current scientific and technological discoveries have an influence on the work people do and how some of these discoveries also lead to new careers.</p> <ul style="list-style-type: none"> • Building Blocks of Science: Understanding Cells and DNA • TG: Act 02 (pp 27-33) • Catastrophic Events • SG: L14 (pp164-169) • SG: L21 (pp232-239) • TG: L14 (pp187-196) • TG: L21 (pp293-302) • Earth in Space • SG: L10 (pp130-145) • SG: L20-21 (pp324-339) • TG: L04 (pp37-52) • TG: L10 (pp147-158) • TG: L20-21 (pp293-310) • Earth, Moon, and Stars • TG: Act01 (pp3-8) • Electric Circuits • TG: L01 (pp3-6) • RB: (pp17-21) • Energy, Machines, and Motion • SG: L02 (pp12-19) • SG: L07 (pp62-71) • SG: L15-16 (pp140-161) • Experiments with Plants • RB: (pp36-46) • RB: (pp54-56) • RB: (pp60-61) • Floating and Sinking • RB: (pp07-14) • RB: (pp18-26) • RB: (pp29-30) • RB: (pp34-35) • RB: (pp41-42) • Human Body Systems • TG: L01.Exts (p7) • TG: L10.Exts (p122) • TG: L18.Exts (pp215-216) • TG: L19.Exts (p225) • Living with a Star • TG: Act03 (pp61-84) • Magnets and Motors • RB: (pp47-50) • Measuring Time • RB: (pp35-38) • Microworlds |

Wisconsin Model Academic Standards for Science Grades K–4 and 5–8

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| | | <ul style="list-style-type: none"> • RB: (pp10-12) • Moons of Jupiter • TG: Act01 (pp7-17) • Motion and Design • TG: L15.Exts (p143) • RB: (pp29-31) • RB: (pp32-36) • Organisms-From Macro to Micro • SG: L19 (pp216-235) • Properties of Matter • SG: L09 (pp78-83) • SG: L11 (pp98-105) • SG: L15 (pp122-129) • SG: L19 (pp162-167) • SG: L21-23 (pp186-217) • SG: L25 (pp224-229) • Space Science for Grades 3-5 • TG: Ses 3.1 (pp 286-299) • The Technology of Paper • TG: L05 (pp75-90) • RB: (pp07-09) • RB: (pp12-24) • RB: (pp41-43) |
| <p>PERFORMANCE STANDARD</p> | <p>G.8.3.</p> | <p>Illustrate the impact that science and technology have had, both good and bad, on careers, systems, society, environment, and quality of life.</p> <ul style="list-style-type: none"> • All Units |
| <p>PERFORMANCE STANDARD</p> | <p>G.8.4.</p> | <p>Propose a design (or re-design) of an applied science model or a machine that will have an impact in the community or elsewhere in the world and show how the design (or re-design) might work, including potential side-effects.</p> <ul style="list-style-type: none"> • Animal Studies • TG: L01.Exts (p6) • TG: L05 (pp49-64) • TG: L08 (pp87-96) • Ecosystems • TG: L07.Exts (p79) • TG: L14.Exts (p136) • Bubble Festival • TG: Act04 (pp74-79) • Earth in Space • SG: L20-21 (pp324-339) • TG: L20-21 (pp293-310) • Electric Circuits • RB: (pp39-41) • RB: (pp56-59) • TG: L09.Exts (pp51-52) • TG: L12 (pp65-68) • TG: L13.Exts (p71) • TG: L15.Exts (p79) • TG: L16.Exts (p83) • Electrical Energy and Circuit Design |

Wisconsin Model Academic Standards for Science Grades K–4 and 5–8

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| | | <ul style="list-style-type: none"> • TG: L12.Exts (pp177-178) • TG: L21.Exts (p295) • TG: L23.Exts (p312) • Energy, Machines, and Motion • TG: L17.Exts (p208) • TG: L18.Exts (p224) • TG: L19.Exts (p234) • TG: L21.Exts (p245) • Floating and Sinking • RB: (pp29-30) • RB: (pp34-35) • RB: (pp43-50) • Magnets and Motors • RB: (pp58-59) • Measuring Time • TG: L13-15 (pp123-144) • Motion and Design • TG: L01 (pp3-14) • TG: L02 (pp15-24) • TG: L05 (pp47-56) • TG: L06 (pp57-64) • TG: L09 (pp81-90) • TG: L11 (pp101-108) • TG: L13-17 (pp117-156) • RB: (pp29-31) • RB: (pp49-51) • RB: (pp54-57) • RB: (pp63) • Organisms-From Macro to Micro • TG: L05.Exts (pp69-70) • Plate Tectonics • TG: Ses01 (pp21-29) • Properties of Matter • SG: L18 (pp150-161) • TG: L21.Exts (p251) • Space Science for Grades 3-5 • TG: Ses 4.5 (pp 414-423) • The Technology of Paper • TG: L03.Exts (pp54-55) • TG: L07.Exts (p111) • TG: L08.Exts (pp122-123) • TG: L15.Exts (pp191-192) |
| <p>PERFORMANCE STANDARD</p> | <p>G.8.5.</p> | <p>Investigate a specific local problem to which there has been a scientific or technological solution, including proposals for alternative courses of action, the choices that were made, reasons for the choices, any new problems created, and subsequent community satisfaction.</p> <ul style="list-style-type: none"> • Earth in Space • SG: L21 (pp334-339) • TG: L20.Exts (p297) • TG: L21 (pp309-310) • Electric Circuits • RB: (pp39-41) |

Wisconsin Model Academic Standards for Science Grades K–4 and 5–8

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| | | <ul style="list-style-type: none"> • RB: (pp56-59) • Electrical Energy and Circuit Design • TG: L12.Exts (pp177-178) • TG: L21.Exts (p295) • TG: L23.Exts (p312) • Energy, Machines, and Motion • TG: L17.Exts (p208) • TG: L18.Exts (p224) • TG: L19.Exts (p234) • TG: L21.Exts (p245) • Floating and Sinking • RB: (pp29-30) • RB: (pp34-35) • RB: (pp43-45) • Magnets and Motors • RB: (pp45-50) • Measuring Time • TG: L13-15 (pp123-144) • Motion and Design • TG: L13-15 (pp117-144) • TG: L16.Exts (p148) • RB: (pp49-51) • RB: (pp63) • Organisms-From Macro to Micro • TG: L05.Exts (pp69-70) • The Technology of Paper • TG: L03.Exts (pp54-55) • TG: L07.Exts (p111) • TG: L08.Exts (pp122-123) • TG: L15.Exts (pp191-192) |
| <p>PERFORMANCE STANDARD</p> | <p>G.8.6.</p> | <p>Use current texts, encyclopedias, source books, computers, experts, the popular press, or other relevant sources to identify examples of how scientific discoveries have resulted in new technology.</p> <ul style="list-style-type: none"> • Animal Studies • TG: L14 (pp143-156) • Building Blocks of Science: Human Bodyworks • TG: Ext 02 (p 26) • TG: Ext 03 (p 33) • TG: Ext 04 (p 41) • TG: Ext 07 (p 57) • TG: Ext 08 (p 64) • TG: Ext 09 (p 68) • TG: Ext 10 (p 73) • TG: Ext 11 (p 79) • Building Blocks of Science: Understanding Cells and DNA • TG: Act 02 (pp 27-33) • TG: Ext 01 (p 23) • TG: Ext 04 (p 58) • TG: Ext 05 (p 71) • Catastrophic Events • SG: L14 (pp164-169) • SG: L21 (pp232-239) |

Wisconsin Model Academic Standards for Science Grades K–4 and 5–8

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| | <ul style="list-style-type: none">• TG: L09.Exts (p132)• TG: L13.Exts (p182)• TG: L14 (pp187-196)• TG: L21 (pp293-302)• Earth in Space• SG: L10 (pp130-145)• SG: L20-21 (pp324-339)• TG: L04 (pp37-52)• TG: L10 (pp147-158)• TG: L20-21 (pp293-310)• Earth, Moon, and Stars• TG: Act01 (pp3-8)• Electric Circuits• TG: L01 (pp3-6)• Energy, Machines, and Motion• SG: L02 (pp12-19)• SG: L07 (pp62-71)• SG: L15 (pp140-147)• Experiments with Plants• RB: (pp36-40)• RB: (pp41-46)• RB: (pp54-56)• RB: (pp60-61)• Floating and Sinking• RB: (pp07-14)• RB: (pp18-26)• RB: (pp29-30)• RB: (pp34-35)• RB: (pp41-42)• Food Chemistry• TG: L06 (pp57-68)• TG: L08-10 (pp79-100)• TG: L12-13 (pp107-124)• TG: L15 (pp131-148)• Human Body Systems• SG: L09 (pp68-75)• TG: L01.Exts (p7)• TG: L09 (pp103-112)• TG: L10.Exts (p122)• TG: L12.Exts (pp147-148)• TG: L18.Exts (pp215-216)• TG: L19.Exts (p225)• Land and Water• TG: L02 (pp11-28)• TG: L06 (pp63-74)• TG: L07 (pp75-84)• TG: L12 (pp129-142)• TG: L16 (pp173-182)• Living with a Star• TG: Act03 (pp61-84)• Measuring Time• RB: (pp35-38)• Microworlds |
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Wisconsin Model Academic Standards for Science Grades K–4 and 5–8

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| | | <ul style="list-style-type: none"> • RB: (pp10-12) • Moons of Jupiter • TG: Act01 (pp7-17) • Motion and Design • TG: L15.Exts (p143) • Organisms-From Macro to Micro • SG: L19 (pp216-235) • Properties of Matter • SG: L09 (pp78-83) • SG: L11 (pp98-105) • SG: L15 (pp122-129) • SG: L19 (pp162-167) • SG: L21-23 (pp186-217) • SG: L25 (pp224-229) • TG: L16.Exts (p178) • TG: L23.Exts (p284) • Space Science for Grades 3-5 • TG: Ses 3.1 (pp 286-299) • The Technology of Paper • TG: L15.Exts (pp191-192) • RB: (pp07-09) • RB: (pp12-24) |
| <p>PERFORMANCE STANDARD</p> | <p>G.8.7.</p> | <p>Show evidence of how science and technology are interdependent, using some examples drawn from personally conducted investigations.</p> <ul style="list-style-type: none"> • Earth in Space • TG: L20.Exts (p297) • TG: L21.Exts (p310) • Electrical Energy and Circuit Design • SG: L02 (pp12-25) • TG: L02 (pp23-36) • Energy, Machines, and Motion • SG: L16 (pp148-161) • TG: L16 (pp185-202) • Human Body Systems • TG: L18.Exts (pp215-216) • TG: L19.Exts (p225) • The Technology of Paper • TG: L16.Exts (pp201-202) |
| <p>CONTENT STANDARD</p> | <p>WI.H.</p> | <p>Science Applications: Students in Wisconsin will use scientific information and skills to make decisions about themselves, Wisconsin, and the world in which they live.</p> |
| <p>PERFORMANCE STANDARD</p> | <p>H.8.1.</p> | <p>Evaluate the scientific evidence used in various media (for example, television, radio, Internet, popular press, and scientific journals) to address a social issue, using criteria of accuracy, logic, bias, relevance of data, and credibility of sources.</p> <ul style="list-style-type: none"> • Animal Studies • TG: L06.Exts (p69) • Building Blocks of Science: Understanding Cells and DNA • TG: Act 02 (pp 27-33) • Earth in Space • TG: L20.Exts (p297) |

Wisconsin Model Academic Standards for Science Grades K–4 and 5–8

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| | | <ul style="list-style-type: none"> • TG: L21.Exts (p310) • Light • SG: L25-26 (pp284-297) • TG: L25-26 (pp335-367) • Magnets and Motors • RB: (pp33-38) • RB: (pp53-54) • The Technology of Paper • TG: L01 (pp19-28) |
| <p>PERFORMANCE STANDARD</p> | <p>H.8.2.</p> | <p>Present a scientific solution to a problem involving the earth and space, life and environmental, or physical sciences and participate in a consensus-building discussion to arrive at a group decision.</p> <ul style="list-style-type: none"> • All Units |
| <p>PERFORMANCE STANDARD</p> | <p>H.8.3.</p> | <p>Understand the consequences of decisions affecting personal health and safety.</p> <ul style="list-style-type: none"> • Building Blocks of Science: Human Bodyworks • TG: Ext 08 (p 64) • TG: Ext 10 (p 73) • TG: Ext 11 (p 79) • Catastrophic Events • SG: L09-12 (pp102-153) • TG: L09-12 (pp127-176) • Earth in Space • SG: L06 (pp74-87) • TG: L03 (pp21-36) • TG: L06 (pp73-82) • Electric Circuits • RB: (pp07-10) • Electrical Energy and Circuit Design • SG: L01 (pp2-11) • SG: L05 (pp46-57) • TG: L01 (pp3-22) • TG: L05 (pp61-76) • Food Chemistry • TG: L02.Exts (p19) • TG: L06.Exts (p61) • TG: L12.Exts (pp112-113) • TG: L14.Exts (p127) • TG: L15.Exts (pp135-136) • RB: (pp11-12) • RB: (pp41-43) • Human Body Systems • TG: L09.Exts (p107) • TG: L10.Exts (p122) • TG: L11.Exts (p135) • TG: L12.Exts (pp147-148) • TG: L14.Exts (p165) • TG: L15.Exts (p178) • Land and Water • RB: (pp47-49) • Magnets and Motors |

Wisconsin Model Academic Standards for Science Grades K–4 and 5–8

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| | | <ul style="list-style-type: none">• RB: (pp55-57)• Measuring Time• RB: (pp53-56)• Microworlds• RB: (pp20-22)• RB: (pp46-47) |
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Carolina Biological Supply Company

2700 York Road • Burlington NC 27215-3398

800.227.1150 • www.carolinacurriculum.com