

## Benchmarks for Fourth Grade Education in Wisconsin\*

\*Benchmarks for education in Wisconsin were taken directly from the Fourth Grade sections of the website: \_\_\_\_\_

Wisconsin Educational Benchmarks, Essential Concepts and Skills G4	Earthschooling
Math	
<p><b>G4 Math Critical Area:</b> Students generalize their understanding of place value to 1,000,000, understanding the relative sizes of numbers in each place. They apply their understanding of models for multiplication (equal-sized groups, arrays, area models), place value, and properties of operations, in particular the distributive property, as they develop, discuss, and use efficient, accurate, and generalizable methods to compute products of multi-digit whole numbers. They develop fluency with efficient procedures for multiplying whole numbers. Students apply their understanding of models for division, place value, properties of operations, and the relationship of division to multiplication as they develop, discuss, and use efficient, accurate, and generalizable procedures to find quotients involving multi-digit dividends. They select and accurately apply appropriate methods to estimate and mentally calculate quotients, and interpret remainders based upon the context.</p>	<p>G4 Block: Fourth Grade Math G4: Problems for Math</p>
<p><b>G4 Math Critical Area:</b> Students develop understanding of fraction equivalence and operations with fractions. They recognize that two different fractions can be equal (e.g., <math>15/9 = 5/3</math>), and they develop methods for generating and recognizing equivalent fractions. Students extend previous understandings about how fractions are built from unit fractions, composing fractions from unit fractions, decomposing fractions into unit fractions, and using the meaning of fractions and the meaning</p>	<p>G4 Block: Cooking with Fractions G4: Adding and Subtracting Fractions Supplement</p>

of multiplication to multiply a fraction by a whole number.	
<b>G4 Math Critical Area:</b> Students describe, analyze, compare, and classify two-dimensional shapes. Through building, drawing, and analyzing two-dimensional shapes, students deepen their understanding of properties of two-dimensional objects and the use of them to solve problems involving symmetry.	G4 Block: Form Drawing Form Drawing Basics
<b>G4 Math Benchmark: Operations and Algebraic Thinking</b> <ul style="list-style-type: none"> <li>• Use the four operations with whole numbers to solve problems.</li> <li>• Gain familiarity with factors and multiples.</li> <li>• Generate and analyze patterns.</li> </ul>	G4 Block: Fourth Grade Math
<b>G4 Math Benchmark: Number and Operations in Base Ten</b> <ul style="list-style-type: none"> <li>• Generalize place value understanding for multidigit whole numbers.</li> <li>• Use place value understanding and properties of operations to perform multi-digit arithmetic.</li> </ul>	G4 Block: Fourth Grade Math
<b>G4 Math Benchmark: Number and Operations—Fractions</b> <ul style="list-style-type: none"> <li>• Extend understanding of fraction equivalence and ordering.</li> <li>• Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.</li> <li>• Understand decimal notation for fractions, and compare decimal fractions.</li> </ul>	G4 Block: Cooking with Fractions G4: Adding and Subtracting Fractions Supplement
<b>G4 Math Benchmark: Measurement and Data</b> <ul style="list-style-type: none"> <li>• Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.</li> <li>• Represent and interpret data.</li> <li>• Geometric measurement: understand concepts of angle and measure angles.</li> </ul>	G4 Block: Fourth Grade Math G4 Block: Cross Stitch (Math) G4 Block: Orienteering and Four Directions

<p><b>G4 Math Benchmark: Geometry</b></p> <ul style="list-style-type: none"> <li>• Draw and identify lines and angles, and classify shapes by properties of their lines and angles.</li> </ul>	<p>G4 Block: Fourth Grade Math  G4 Block: Cross Stitch (Math)  G4 Block: Orienteering and Four Directions  G4 Block: Form Drawing</p>
<p>English</p>	
<p><b>K-G5 Reading Benchmark: Key Ideas and Details</b></p> <ul style="list-style-type: none"> <li>• Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.</li> <li>• Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.</li> <li>• Analyze how and why individuals, events, and ideas develop and interact over the course of a text.</li> </ul>	<p>G4 Block: Norse Mythology  G4: The Heroes of Asgard</p>
<p><b>K-G5 Reading Benchmark: Craft and Structure</b></p> <ul style="list-style-type: none"> <li>• Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.</li> <li>• Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole.</li> <li>• Assess how point of view or purpose shapes the content and style of a text.</li> </ul>	<p>G4 Block: Norse Mythology  G4 Block: Language Supplement March  G4 Block: Reading and Grammar  G4 Block: Native American Myths  G4 Block: Native American Poems</p>
<p><b>K-G5 Reading Benchmark: Integration of Knowledge and Ideas</b></p> <ul style="list-style-type: none"> <li>• Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.</li> <li>• Delineate and evaluate the argument and specific claims</li> </ul>	<p>G4 Block: Norse Mythology  G4 Block: Language Supplement March  G4 Block: Reading and Grammar  G4 Block: Storytelling and Theater  G4 Block: Native American Myths</p>

<p>in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence.</p> <ul style="list-style-type: none"> <li>Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take.</li> </ul>	<p>G4 Block: Native American Poems</p>
<p><b>K-G5 Reading Benchmark: Range of Reading and Level of Text Complexity</b></p> <ul style="list-style-type: none"> <li>Read and comprehend complex literary and informational texts independently and proficiently.</li> </ul>	<p>G4: Books for Silent Reading  G4 Block: Norse Mythology  G4: The Heroes of Asgard  G4 Block: Native American Myths  G4 Block: Native American Poems</p>
<p><b>K-G5 Writing Benchmark: Text Types and Purposes</b></p> <ul style="list-style-type: none"> <li>Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.</li> <li>Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.</li> <li>Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences.</li> </ul>	<p>G4: Reading and Grammar</p>
<p><b>K-G5 Writing Benchmark: Production and Distribution of Writing</b></p> <ul style="list-style-type: none"> <li>Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.</li> <li>Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.</li> <li>Use technology, including the Internet, to produce and publish writing and to interact and collaborate with</li> </ul>	<p>G4: Reading and Grammar</p>

others.	
<p><b>K-G5 Writing Benchmark: Research to Build and Present Knowledge</b></p> <ul style="list-style-type: none"> <li>• Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.</li> <li>• Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.</li> <li>• Draw evidence from literary or informational texts to support analysis, reflection, and research.</li> </ul>	<p>G4: Reading and Grammar  G4 Block: Native American Myths  G4 Block: Native American Poems</p>
<p><b>K-G5 Writing Benchmark: Range of Writing</b></p> <ul style="list-style-type: none"> <li>• Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.</li> </ul>	<p>G4: Reading and Grammar  Main Lesson Book Work</p>
<p><b>K-G5 Speaking and Listening Benchmark: Comprehension and Collaboration</b></p> <ul style="list-style-type: none"> <li>• Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.</li> <li>• Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.</li> <li>• Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric.</li> </ul>	<p>G4: Plays for Fourth Graders</p>
<p><b>K-G5 Speaking and Listening Benchmark: Presentation of Knowledge and Ideas</b></p> <ul style="list-style-type: none"> <li>• Present information, findings, and supporting evidence</li> </ul>	<p>G4: Plays for Fourth Graders  G4: Reading and Grammar</p>

<p>such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.</p> <ul style="list-style-type: none"> <li>• Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.</li> <li>• Adapt speech to a variety of contexts and communicative tasks, demonstrating command of formal English when indicated or appropriate.</li> </ul>	
<p><b>K-G5 Language Benchmark: Conventions of Standard English</b></p> <ul style="list-style-type: none"> <li>• Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</li> <li>• Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</li> </ul>	G4 Block: Reading and Grammar
<p><b>K-G5 Language Benchmark: Knowledge of Language</b></p> <ul style="list-style-type: none"> <li>• Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.</li> </ul>	G4 Block: Reading and Grammar Main Lesson Books
<p><b>K-G5 Language Benchmark: Vocabulary Acquisition and Use</b></p> <ul style="list-style-type: none"> <li>• Determine or clarify the meaning of unknown and multiple-meaning words and phrases by using context clues, analyzing meaningful word parts, and consulting general and specialized reference materials, as appropriate.</li> <li>• Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.</li> </ul>	G4 Block: Reading and Grammar Main Lesson Books
<b>Science</b>	
<p><b>4G Science Critical Area:</b> Students in Wisconsin will understand that there are unifying themes: systems, order, organization,</p>	G4 Block: Introduction to Animal Science G4: Anatomy

<p>and interactions; evidence, models, and explanations; constancy, change, and measurement; evolution, equilibrium, and energy; form and function among scientific disciplines.</p>	<p>G4: Man and Animal Teacher Guide</p>
<p><b>G4 Science Benchmark: Science Connections</b></p> <ul style="list-style-type: none"> <li>• When conducting science investigations, ask and answer questions that will help decide the general areas of science being addressed</li> <li>• 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</li> <li>• When investigating a science-related problem, decide what data can be collected to determine the most useful explanations</li> <li>• When studying science-related problems, decide which of the science themes are important</li> <li>• When studying a science-related problem, decide what changes over time are occurring or have occurred</li> </ul>	<p>G4 Block: Man &amp; Animal  G4 Block: Introduction to Animal Science  G4 Block: Anatomy  G4 Book: Animal Homes  G4 Book: Animal Tracks &amp; Scat</p>
<p><b>4G Science Critical Area:</b> Students in Wisconsin will understand that science is ongoing and inventive, and that scientific understandings have changed over time as new evidence is found.</p>	<p>G4 Book: How Birds Fly  G4 Book: Animal Tracking  G4 Book: The Burgess Book of Animals</p>
<p><b>G4 Science Benchmark: Nature of Science</b></p> <ul style="list-style-type: none"> <li>• 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</li> <li>• 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</li> </ul>	<p>G4 Book: How Birds Fly  G4 Book: Animal Tracking  G4 Book: The Burgess Book of Animals  G4 Block: Introduction to Animal Science</p>

<ul style="list-style-type: none"> <li>• Show how the major developments of scientific knowledge in the earth and space, life and environmental, and physical sciences have changed over time</li> </ul>	
<p><b>4G Science Critical Area:</b> 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>	<p>G4 Block: Man and Animal G4: Geography</p>
<p><b>G4 Science Benchmark: Science Inquiry</b></p> <ul style="list-style-type: none"> <li>• Use the vocabulary of the unifying themes to ask questions about objects, organisms, and events being studied</li> <li>• Use the science content being learned to ask questions, plan investigations, make observations, make predictions, and offer explanations</li> <li>• Select multiple sources of information to help answer questions selected for classroom investigations</li> <li>• 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</li> <li>• Use data they have collected to develop explanations and answer questions generated by investigations</li> <li>• 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</li> <li>• Support their conclusions with logical arguments</li> <li>• Ask additional questions that might help focus or further an investigation</li> </ul>	<p>G4: Geography G4: Orienteering and the Four Directions G4: Beginning Clay modeling in science</p>
<p><b>4G Science Critical Area:</b> Students in Wisconsin will</p>	<p>G4: Geography</p>



<p>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>	
<p><b>G4 Science Benchmark: Physical Science</b>  <b>PROPERTIES OF EARTH MATERIALS</b></p> <ul style="list-style-type: none"> <li>• 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</li> <li>• Group and/or classify objects and substances based on the properties of earth materials</li> <li>• Understand that substances can exist in different states- solid, liquid, gas</li> <li>• Observe and describe changes in form, temperature, color, speed, and direction of objects and construct explanations for the changes</li> <li>• Construct simple models of what is happening to materials and substances undergoing change, using simple instruments or tools to aid observations and collect data</li> </ul> <p><b>POSITION AND MOTION OF OBJECTS</b></p> <ul style="list-style-type: none"> <li>• Observe and describe physical events in objects at rest or in motion</li> <li>• 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: <ul style="list-style-type: none"> <li>○ position relative to another object</li> <li>○ motion over time</li> <li>○ and position due to forces</li> </ul> </li> </ul>	<p>G4: Geography  G6 Block: Science (Can be supplemented to G4)</p>

<p>LIGHT, HEAT, ELECTRICITY, AND MAGNETISM</p> <ul style="list-style-type: none"> <li>• 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)</li> </ul>	
<p><b>4G Science Critical Area:</b> Students in Wisconsin will demonstrate an understanding of the structure and systems of earth and other bodies in the universe and of their interactions.</p>	<p>G6 Block: Science: Can be Supplemented to G4 Materials</p>
<p><b>G4 Science Benchmark: Earth and Space Science</b></p> <p>PROPERTIES OF EARTH MATERIALS</p> <ul style="list-style-type: none"> <li>• Investigate that earth materials are composed of rocks and soils and correctly use the vocabulary for rocks, minerals, and soils during these investigations</li> <li>• Show that earth materials have different physical and chemical properties, including the properties of soils found in Wisconsin</li> <li>• 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</li> </ul> <p>OBJECTS IN THE SKY</p> <ul style="list-style-type: none"> <li>• Identify celestial objects (stars, sun, moon, planets) in the sky, noting changes in patterns of those objects over time</li> </ul> <p>CHANGES IN THE EARTH AND SKY</p> <ul style="list-style-type: none"> <li>• 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</li> <li>• Using the science themes, find patterns and cycles in the earth’s daily, yearly, and long-term changes</li> <li>• Using the science themes, describe resources used in</li> </ul>	<p>G6 Block: Science: Can be Supplemented to G4 Materials</p>

<p>the home, community, and nation as a whole</p> <ul style="list-style-type: none"> <li>• Illustrate human resources use in mining, forestry, farming, and manufacturing in Wisconsin and elsewhere in the world</li> </ul>	
<p><b>4G Science Critical Area:</b> 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.</p>	<p>G4 Block: Animal Science</p>
<p><b>4G Science Benchmark: Life and Environmental</b>  <b>THE CHARACTERISTICS OF ORGANISMS</b></p> <ul style="list-style-type: none"> <li>• Discover how each organism meets its basic needs for water, nutrients, protection, and energy in order to survive</li> <li>• Investigate how organisms, especially plants, respond to both internal cues (the need for water) and external cues (changes in the environment)</li> </ul> <p><b>LIFE CYCLES OF ORGANISMS</b></p> <ul style="list-style-type: none"> <li>• Illustrate the different ways that organisms grow through life stages and survive to produce new members of their type</li> </ul> <p><b>ORGANISMS AND THEIR ENVIRONMENT</b></p> <ul style="list-style-type: none"> <li>• Using the science themes, develop explanations for the connections among living and non-living things in various environments</li> </ul>	<p>G4 Block: Animal Science  G4 Block: Man &amp; Animal  G4 Book: Animal Tracking</p>
<p><b>4G Science Critical Area:</b> Students in Wisconsin will demonstrate an understanding of the relationship between science and technology and the ways in which that relationship influences human activities.</p>	<p>G4: Man &amp; Animal Block</p>
<p><b>4G Science Benchmark: Science Applications</b></p> <ul style="list-style-type: none"> <li>• Identify the technology used by someone employed in a job or position in Wisconsin and explain* how the</li> </ul>	<p>G4: Independent Field Trip</p>

<p>technology helps</p> <ul style="list-style-type: none"> <li>• 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</li> <li>• Determine what science discoveries have led to changes in technologies that are being used in the workplace by someone employed locally</li> <li>• 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</li> <li>• Ask questions to find answers about how devices and machines were invented and produced</li> </ul>	
<p><b>4G Science Critical Area:</b> Students in Wisconsin will use scientific information and skills to make decisions about themselves, Wisconsin, and the world in which they live.</p>	<p>G4: Geography</p>
<p><b>4G Science Benchmark: Science in Personal and Social Perspectives</b></p> <ul style="list-style-type: none"> <li>• 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</li> <li>• 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</li> <li>• Show how science has contributed to meeting personal needs, including hygiene, nutrition, exercise, safety, and health care</li> <li>• Develop a list of issues that citizens must make decisions about and describe a strategy for becoming informed about the science behind these issues</li> </ul>	<p>G4: Geography Discussions Main Lesson Book</p>

**Not Listed in Wisconsin Benchmarks**

G4: Beginning Clay Modeling

G4: Native American Crafts

G4: Early Settlers and Human Deeds

G4: Foreign Language Samples