

Core Standards & Power Standards

Power standards are standards that have been chosen as a primary focus in a specific class/content area based on 3 criteria:

- Endurance
 - When the standard represents learning that goes beyond one course or grade level and is representative of a concept or skill that is important in life, it has endurance.
- Leverage
 - When the standard represents learning that is applied both within the content area and in other content areas, it has leverage.
- Readiness
 - When the standard represents learning that is essential for success in a new unit, course of study or grade level, it has readiness.

6th Grade ELA

ELA State Standards

Power Standards

- ❑ R.6.1 Cite textual evidence to support an analysis of what the text says explicitly/implicitly and make logical inferences. (RI&RL)
- ❑ R.6.2 Summarize texts, from a variety of genres, to determine a theme or central idea and how it is developed by key supporting details over the course of a text. (RI &RL)
- ❑ R.6.3 In literary texts, describe how events unfold, as well as how characters respond or change as the plot moves toward a resolution. (RL)
- ❑ W.6.2 Write text in a variety of modes: a. Write arguments to support claims with clear reasons, relevant evidence, and literary theory.
- ❑ W.6.3 Create writing that utilizes: a. Organization: introduce a topic; organize ideas, concepts, and information. Provide a concluding statement appropriate to the mode of writing. b. Transitions: use appropriate transitions to clarify the relationships among ideas and concepts. c. Word Choice (including domain specific): use precise language and domain-specific vocabulary to inform about or explain the topic. Use sensory language to describe experiences and events.
- ❑ W.6.5 With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.
- ❑ W.6.9 Draw evidence from literary or informational texts to support analysis, reflection, and inquiry.
- ❑ SL.6.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on topics, texts, and issues, building on others' ideas and expressing one's thinking clearly.

7th Grade ELA

ELA State Standards

Power Standards

- ❑ R.7.1 Cite textual evidence to support an analysis of what the text says explicitly/implicitly and make logical inferences.
- ❑ R.7.2 Summarize texts, from a variety of genres, to determine a theme or central idea and analyze its development over the course of the text. (RI&RL)
- ❑ R.7.3 In literary texts, analyze how elements of plot are related, affect one another, and contribute to meaning. (RL) In informational texts, analyze how individuals, events, and ideas are introduced, related to each other, and developed. (RI)
- ❑ R.7.6 In literary texts, analyze how an author develops and contrasts the point of view, possible biases, and the perspectives of different characters or narrators. (RL) In informational texts, explain how an author's geographic location, identity, and/or culture affect perspective. Analyze how the author distinguishes his or her position from that of others. (RI)
- ❑ SL.7.1 **Engage effectively in a range of collaborative discussions** (one-on-one, in groups, and teacher-led) with diverse partners on topics, texts, and issues, building on others' ideas and expressing one's thinking clearly. a. Come to discussions prepared and explicitly draw on that preparation by referring to evidence on the topic, text, or issue. Support analysis by making connections, paraphrasing, clarifying, or explaining the evidence. b. With guidance and support, set and track specific norms and goals for collegial discussions (e.g., gaining attention in respectful ways, actively listening, speaking one at a time about the topics and texts under discussion). c. Pose questions that invite elaboration and respond to others' questions and comments with relevant observations and ideas that bring the discussion back on topic as needed. Promote multiple perspectives. d. Review the key ideas expressed and demonstrate an understanding of multiple perspectives through analysis, including reflection, clarification, and paraphrasing.
- ❑ W.7.2 Write text in a variety of modes: Write **narratives** that develop real or imagined experiences or events using relevant descriptive details and well-structured event sequences that organize an event sequence logically. Engage and orient the reader by establishing a context and point of view and introduces a narrator or characters; using techniques, such as dialogue, pacing, description, and reflection, to develop experiences, events, and characters.
- ❑ W.7.3 Create writing that utilizes: a. **Organization**: provide an introduction that creates suspense and anticipation for the reader. Structure of the text supports and clarifies the purpose and topic. Provide a concluding statement appropriate to the mode of writing. b. **Transitions**: use a variety of appropriate transitions that connect and develop ideas. c. **Word Choice** (including domain specific): use words, phrases, and clauses to create cohesion and clarify the relationships. Use sensory language to describe experiences and events.

8th Grade ELA

ELA State Standards

Power Standards

- R.8.1 Cite textual evidence that strongly supports an analysis of what the text says explicitly/implicitly and make logical inferences. (RL&RI)
- R.8.2 Summarize texts, from a variety of genres, to determine one or more themes or central ideas and analyze their development over the course of the text. (RL)
- R.8.3 In literary texts, analyze how particular lines of dialogue or events propel the action, reveal aspects of a character, or provoke a decision. (RL)
- W.8.2 Write text in a variety of modes: a. Write arguments to introduce and support claim(s) using logical reasoning, relevant evidence and literary theory. Use accurate, credible sources and demonstrate an understanding of the topic or text, acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically.
- W.8.9 Draw evidence from literary or informational texts to support analysis, reflection, and inquiry.

6th Grade Math

Math State Standards

Power Standards

- 6.G.A solve real-world and mathematical problems involving area, surface area, and volume.
- 6.SP.4 Display numerical data in plots on a number line, including dot plots, histograms, and box plots.
- 6.NS.C Apply and extend previous understandings of numbers to the system of rational numbers.
- 6.EE.A Apply and extend previous understandings of arithmetic to algebraic expressions.
- 6.EE.B Reason about and solve one-variable equations and inequalities.
- 6.NS.A Apply and extend previous understandings of multiplication and division to divide fractions by fractions.
- 6. RP.A Understand ratio concepts and use ratio reasoning to solve problems.

7th Gr. Math

Math State Standards

Power Standards

- 7.NS Apply and extend previous understandings of operations with rational numbers to add, subtract and multiply fractions.
- 7.NS Apply and extend previous understandings of rational numbers to convert between portions (fraction to decimal to percent).
- 7.NS Apply and extend previous understandings of operations with rational numbers to add, subtract, multiply and divide integers.
- 7.NS Apply and extend previous understandings of operations with rational numbers to add, subtract, multiply and divide fractions.
- 7.NS Apply and extend previous understandings of operations with rational numbers to add,

subtract, multiply and divide decimals.

- ❑ 7.RP Analyze proportional relationships and use them to solve real-world and mathematical problems.
- ❑ 7.EE.A Use properties of operations to generate equivalent expressions (algebraic).
- ❑ 7.EE.B Solve real-life and mathematical problems using numerical and algebraic expressions and equations.

8th Grade Math

Math State Standards

Power Standards

- ❑ Solve linear equations in one variable (8.EE.7a, and 8.EE.7b)
- ❑ Understand that a function is a rule that assigns to each input exactly one output. The graph of a function is the set of ordered pairs consisting of an input and the corresponding output. (8.F.1)
- ❑ Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). For example, given a linear function represented by a table of values and a linear function represented by an algebraic expression, determine which function has the greater rate of change. (8.F.2)
- ❑ Construct a function to model a linear relationship between two quantities. Determine the rate of change and initial value of the function from a description of a relationship or from two (x, y) values, including reading these from a table or from a graph. Interpret the rate of change and initial value of a linear function in terms of the situation it models, and in terms of its graph or a table of values. (8.F.4)
- ❑ Analyze and solve pairs of simultaneous linear equations. (8.EE.C.8)
- ❑ Graph proportional relationships, interpreting the unit rate as the slope of the graph. Compare two different proportional relationships represented in different ways. For example, compare a distance-time graph to a distance-time equation to determine which of two moving objects has greater speed. (8.EE.B.5)
- ❑ Use similar triangles to explain why the slope m is the same between any two distinct points on a non-vertical line in the coordinate plane; derive the equation $y = mx$ for a line through the origin and the equation $y = mx + b$ for a line intercepting the vertical axis at b . (8.EE.B.6)
- ❑ Apply the Pythagorean Theorem to determine unknown side lengths in right triangles in real-world and mathematical problems in two and three dimensions. (8.G.B.7)
- ❑ Use the equation of a linear model to solve problems in the context of bivariate measurement data, interpreting the slope and intercept. For example, in a linear model for a biology experiment, interpret a slope of 1.5 cm/hr as meaning that an additional hour of sunlight each day is associated with an additional 1.5 cm in mature plant height. (8.SP.A.3)

8th Gr. Algebra

Math State Standards

Power Standards

- F-IF.A.1: Understand that a function from one set (called the domain) to another set (called the range) assigns to each element of the domain exactly one element of the range. If f is a function and x is an element of its domain, then $f(x)$ denotes the output of f corresponding to the input x . The graph of f is the graph of the equation $y = f(x)$.
- F-BF.A.1: Write a function that describes a relationship between two quantities.
- A-CED.A.2: Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales.
- A-CED.A.3: Represent constraints by equations or inequalities, and by systems of equations and/or inequalities, and interpret solutions as viable or nonviable options in a modeling context. For example, represent inequalities describing nutritional and cost constraints on combinations of different foods.
- S-ID.C.7: Interpret the slope (rate of change) and the intercept (constant term) of a linear model in the context of the data.
- F-LE.A.2: Construct linear and exponential functions, including arithmetic and geometric sequences, given a graph, a description of a relationship, or two input-output pairs (include reading these from a table).
- F-IF.B.4: For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship. Key features include: intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior; and periodicity.
- A-SSE.B.3a: Factor a quadratic expression to reveal the zeros of the function it defines.

6th Grade Science

Science State Standards

Power Standards

- PS3-3 Construct an experiment to show a thermal transfer of energy.
- PS3-4 & 5-6 Explains the transfer of energy and how kinetic energy is measured by temperature.
- PS1-4 Develop a model that predicts and describes changes in particle motion, temperature, and state of a pure substance when thermal energy is added or removed.
- ESS2-1 Explains how water cycles through Earth's reservoirs.
- ESS2-2 Explains how water affects Earth's surface and systems.
- ESS3-3 Construct a plan to monitor or minimize human impact on Earth's resources.
- LS2-1 Understands how resource availability affects organisms and their populations.
- LS2-2 Construct explanations that predict patterns of interactions among organisms across ecosystems.
- LS2-3 Develop models to demonstrate the flow of energy among living and nonliving parts of an ecosystem.
- LS2-4 Construct arguments supported by evidence to show how changes to an ecosystem affect populations.

7th Grade Science

Science State Standards

Power Standards

- ❑ SCI.LS1.A.m All living things are made up of cells. In organisms, cells work together to form tissues and organs that are specialized for particular body functions.
 - ❑ MS-LS1-1. Conduct an investigation to provide evidence that living things are made of cells, either one cell or many different numbers and types of cells
 - ❑ MS-LS1-2. Develop and use a model to describe the function of a cell as a whole and ways parts of cells contribute to the function.
- ❑ SCI.ESS2.A.m Energy flows and matter cycles within and among Earth's systems, including the sun and Earth's interior as primary energy sources.
 - ❑ MS-ESS2-5. Collect data to provide evidence for how the motions and complex interactions of air masses results in changes in weather conditions.
 - ❑ MS-ESS2-6. Develop and use a model to describe how unequal heating and rotation of the Earth cause patterns of atmospheric and oceanic circulation that determine regional climates.
 - ❑ MS-ESS3-5. Ask questions to clarify evidence of the factors that have caused the rise
- ❑ SCI.PS3.A.m Energy changes to and from each type can be tracked through physical or chemical interactions. The relationship between the temperature and the total energy of a system depends on the types, states, and amounts of matter.
 - ❑ MS-PS3-2. Develop a model to describe that when the distance between two objects changes, different amounts of potential energy are stored in the system (e.g. gravitational, magnetic or electrostatic potential energy).
 - ❑ MS-PS3-4. Plan an investigation to determine the relationships among the energy transferred, the type of matter, the mass, and the change in the average kinetic energy of the particles as measured by the temperature of the sample.
 - ❑ MS-PS3-5. Construct, use, and present arguments to support the claim that when the kinetic energy of an object changes, energy is transferred to or from the object.
- ❑ SCI.PS1.A.m The fact that matter is composed of atoms and molecules can be used to explain the properties of substances, diversity of materials, states of matter, phase changes, and conservation of matter.
 - ❑ MS-PS1-2. Analyze and interpret data on the properties of substances before and after the substances interact to determine if a chemical reaction has occurred.
 - ❑ MS-PS1-3. Gather and make sense of information to describe that synthetic materials come from natural resources and impact society.
 - ❑ MS-PS1-5. Develop and use a model to describe how the total number of atoms does not change in a chemical reaction, and thus, mass is conserved

8th Grade Science

Science State Standards

Power Standards

- ❑ Develop and use a model to show and predict how genetic traits are passed on to offspring. (Using pedigrees)
 - ❑ [MS-LS3-2](#). Develop and use a model to describe why asexual reproduction results in offspring with identical genetic information and sexual reproduction results in offspring with genetic variations.
 - ❑ [SCI.LS3.B.m](#) In sexual reproduction, each parent contributes half of the genes acquired by the offspring resulting in variation between parent and offspring. Genetic information can be altered because of mutations, which may result in beneficial, negative, or no change to proteins in or traits of an organism.
- ❑ Analyze and interpret data to explain how populations are changed by inheritance of traits.
 - ❑ [MS-LS4-4](#). Construct an explanation based on evidence that describes how genetic variations of traits in a population increase some individuals' probability of surviving and reproducing in a specific environment.
 - ❑ [MS-LS1-5](#). Construct a scientific explanation based on evidence for how environmental and genetic factors influence the growth of organisms.
 - ❑ [MS-LS4-6](#). Use mathematical representations to support explanations of how natural selection may lead to increases and decreases of specific traits in populations over time.
- ❑ Use and evaluate models to construct an explanation based on evidence for how the movement of Earth's plates has changed and continues to change the Earth's surface.
 - ❑ [MS-ESS2-1](#). Develop a model to describe the cycling of Earth's materials and the flow of energy that drives this process.
 - ❑ [MS-ESS2-2](#). Construct an explanation based on evidence for how geoscience processes have changed Earth's surface at varying time and spatial scales.
 - ❑ [MS-ESS2-3](#). Analyze and interpret data on the distribution of fossils and rocks, continental shapes, and seafloor structures to provide evidence of the past plate motions.
- ❑ Explain how chemical reactions build up and break down food to provide all organisms the energy to live.
 - ❑ [MS-LS1-6](#). Construct a scientific explanation based on evidence for the role of photosynthesis in the cycling of matter and flow of energy into and out of organisms.
 - ❑ [MS-LS1-7](#). Develop a model to describe how food is rearranged through chemical reactions forming new molecules that support growth and/or release energy as this matter moves through an organism.
 - ❑ [MS-PS1-2](#). Analyze and interpret data on the properties of substances before and after the substances interact to determine if a chemical reaction has occurred.
- ❑ Carry out investigations and construct models to determine how forces influence motion, the relationship between forces and energy, and how to describe motion.
 - ❑ [MS-ESS1-1](#). Develop and use a model of the Earth-sun-moon system to describe the cyclic patterns of lunar phases, eclipses of the sun and moon, and seasons.
 - ❑ [MS-ESS1-2](#). Develop and use a model to describe the role of gravity in the motions within galaxies and the solar system.

6th Grade Social Studies

Social Studies State Standards

Power Standards

- ❑ SS.Hist1: Use historical evidence for determining cause and effect.
- ❑ SS.Hist3: Connect past events, people, and ideas to the present; use different perspectives to draw conclusions; and suggest current implications.
- ❑ SS.PS2: Examine and interpret rights, privileges, and responsibilities in society.
- ❑ SS.Econ3: Analyze how an economy functions as a whole (Macroeconomics).
- ❑ SS.Econ4: Evaluate government decisions and their impact on individuals, businesses, markets, and resources (Role of Government).
- ❑ SS.Geog4: Evaluate the relationship between identity and place.
- ❑ SS.Geog5: Evaluate the relationship between humans and the environment.
- ❑ SS.Inq3: Develop claims using evidence to support reasoning.

7th Grade Social Studies

Social Studies State Standards

Power Standards

- ❑ SS.Inq3: Wisconsin students will develop claims using evidence to support reasoning
- ❑ SS.Geog1: Wisconsin students will use geographic tools and ways of thinking to analyze the world
- ❑ SS.Geog1.a.m Use paper and digital maps to ask and answer geographic questions (e.g., Where are there patterns? Why there? So what?). Analyze how various map projections distort shape, area, distance, and direction (e.g., Mercator, Robinson, Peters).
- ❑ SS.Geog1.b.m Interpret patterns in a variety of maps, charts, and graphs to display geographic information (contour, cartogram, population, natural resource, historical maps) and explain relationships among them.
- ❑ SS.Geog1.c.m Construct a mental map of regions and locate the major regions of the world and their physical and cultural features including continents, cities, countries, bodies of water, landforms, mountain ranges, and climate zones. Compare mental maps shaped by individual perceptions of people, places, regions, and environments.
- ❑ SS.Geog2: Wisconsin students will analyze human movement and population patterns.
- ❑ SS Geog3: Evaluate the impacts of global interconnections and relationships.
- ❑ SS.Geog4: Wisconsin students will evaluate the relationship between identity and place.
- ❑ Standard SS.Geog5: Wisconsin students will evaluate the relationship between humans and the environment.
- ❑ SS.Geog5.a.m Analyze how technology interacts with the environment and how increased use of technology affects the burden and use of natural resources.
- ❑ SS.Geog5.b.m Analyze how distribution of natural resources such as fisheries and crops (renewable and nonrenewable) creates systems of commerce between groups. Analyze how unequal distribution of resources creates inequities between regions and can lead to conflict between competing countries

8th Grade Social Studies

Social Studies State Standards

Power Standards

- ❑ **SS.Hist1:** Wisconsin students will use historical evidence for determining cause and effect.
 - ❑ SS.Hist1.a.m Use multiple perspectives to analyze and explain the causes of issues or events within and across time periods, events, or cultures.
 - ❑ SS.Hist1.b.m Use multiple perspectives to analyze and explain effects of issues or events within and across time periods, events, or cultures.
- ❑ **SS.Hist2:** Wisconsin students will analyze, recognize, and evaluate patterns of continuity and change over time and contextualization of historical events.
 - ❑ SS.Hist2.a.m Explain patterns of continuity over time in the community, the state, the United States, and the world.
 - ❑ SS.Hist2.b.m Explain patterns of change over time in the community, the state, the United States, and the world.
 - ❑ SS.Hist2.c.m Analyze how the historical context influenced the process or nature of the continuity or change that took place.
- ❑ **SS.Hist3:** Wisconsin students will connect past events, people, and ideas to the present; use different perspectives to draw conclusions; and suggest current implications.
 - ❑ SS.Hist3.a.m Compare events from United States or world history to a current issue or event.
 - ❑ SS.Hist3.b.m Apply historical perspectives to describe differing viewpoints of current events.
 - ❑ SS.Hist3.c.m Hypothesize the direction of current events and outcomes based on the past.2.2.
- ❑ **SS.Hist4:** Wisconsin students will evaluate a variety of primary and secondary sources to interpret the historical context, intended audience, purpose, and/or author's point of view (Historical Methodology).
 - ❑ SS.Hist4.a.m Explain how the historical context (situation) influences a primary or secondary source
 - ❑ SS.Hist4.b.m Explain the significance of the intended audience of a primary or secondary source.
 - ❑ SS.Hist4.d.m Explain how the POV of the author can influence the meaning of a primary or secondary source.
- ❑ **SS.Inq1:** Wisconsin students will construct meaningful questions that initiate an inquiry. (Inq1.a.m, b.m.)
 - ❑ SS.Inq1.a.m Formulate open-ended questions for further research within one of the social studies disciplines.
 - ❑ SS.Inq1.b.m Identify additional questions that support the research and possible resources to guide the inquiry.
- ❑ **SS.Inq2:** Wisconsin students will gather and evaluate sources.
 - ❑ SS.Inq2.a.m Explore evidence from multiple reliable sources representing a range of perspectives and media that have been selected through research to guide the inquiry.
 - ❑ SS.Inq2.b.m Determine credibility and applicability of a source by considering a variety of factors through the lens of a social studies strand.SS.
- ❑ **SS.Inq3:** Wisconsin students will develop claims using evidence to support reasoning.
 - ❑ SS.Inq3.a.m Develop a debatable and defensible claim based upon the analysis of sources.
 - ❑ SS.Inq3.b.m Support a claim with evidence from multiple reliable sources representing a range of media (electronic, digital, print, and other mass media).

- ❑ SS.Inq3.c.m Analyze the extent to which evidence supports or does not support a claim, and if it does not, adjust the claim appropriately.
- ❑ **SS.Inq5:** Wisconsin students will be civically engaged.
 - ❑ SS.Inq5.a.m Explore opportunities for personal or collaborative civic engagement with community, school, state, tribal, national, and/or global implications.