

Mathematics Learning Continuum

Operations and Algebraic Thinking (K-5), Expressions and Equations (6-8)								
[K] Understand addition as putting together and adding to, and subtraction as taking apart and taking from. Use objects, drawings, and equations to fluently add and subtract within 10.	[1] Represent and solve problems to understand the relationship between addition and subtraction.	[2] Add and subtract within 20. Work with equal groups of objects to gain foundations for multiplication.	[3] Represent and solve problems using the four operations. Understand the relationship between multiplication and division. Fluently multiply and divide within 100.	[4] Use the four operations with whole numbers to solve problems. Gain familiarity with factors and multiples. Generate and analyze patterns.	[5] Write and interpret numerical expressions. Analyze patterns and relationships.	[6] Apply previous understandings to algebraic expressions. Reason and solve one-variable equations and inequalities. Represent and analyze dependent and independent variables.	[7] Use properties of operations to generate equivalent expressions. Solve real-life and mathematical problems using numerical and algebraic expressions and equations.	[8] Work with radicals and integer exponents. Connect proportional relationships, lines, and linear equations. Analyze and solve pairs of simultaneous linear equations.
Numbers and Operations in Base Ten (K-5), Ratios and Proportional Relationships (6-7), Functions (8)								
[K] Work with numbers 11-19 to gain foundations for place value. Compose and decompose into tens and ones using objects, drawings, and equations.	[1] Extend the counting sequence. Use place value understanding and properties of operations to add and subtract.	[2] Use place value understanding and properties of operations to add, subtract, and compare numbers.	[3] Use place value understanding and properties of operations to round and fluently add and subtract.	[4] Generalize place value understanding for multi-digit whole numbers. Use place value understanding and properties of operations to perform multi-digit arithmetic.	[5] Understand the place value system. Fluently multiply and divide multi-digit whole numbers and with decimals to hundredths.	[6] Understand ratio concepts and use ratio reasoning to solve problems.	[7] Analyze proportional relationships and use them to solve real-world and mathematical problems.	[8] Define, evaluate, and compare functions. Use functions to model relationships between quantities.
Counting and Cardinality (K), Numbers and Operations with Fractions (3-5), The Number System (6-8)								
[K] Count to 100 by 1s and 10s. Count from any given number. Count to tell the number of objects. Compare numbers within 10. Write numbers to 20.			[3] Develop understanding of fractions as numbers.	[4] Compare two fractions with different numerators and denominators. Add and subtract fractions. Understand decimal notation and compare decimal fractions.	[5] Use equivalent fractions as a strategy to add and subtract fractions. Apply previous understandings of multiplication and division.	[6] Divide fractions by fractions. Fluently compute multi-digit numbers and find common factors and multiples. Apply previous understandings to the system of rational numbers.	[7] Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.	[8] Know that there are numbers that are not rational, and approximate them by rational numbers.
Measurement and Data (K-5), Statistics and Probability (6-8)								
[K] Describe and compare measurable attributes of objects including length, height, and weight. Classify objects and count the number of objects in categories.	[1] Order and compare objects by length. Measure and express length. Tell and write time to the hour and half hour. Organize, represent and interpret data.	[2] Measure and estimate lengths in standard units. Tell time in five minute increments. Understand money in terms of dollars and cents. Draw graphs to represent data.	[3] Measure and estimate time, liquid volumes and object mass. Draw scaled graphs of data. Relate area to multiplication and addition. Solve real-world perimeter problems.	[4] Solve problems involving measurement and conversion of measurements. Make a line plot of data in fractions of a unit. Understand concepts of angle and measure angles.	[5] Convert like measurement units within a given system. Use operations on fractions to interpret line plots. Relate volume to multiplication and addition.	[6] Develop understanding of statistical variability. Summarize and describe distributions.	[7] Draw inferences about a population using random sampling. Draw informal comparative inferences about two populations. Investigate chance and evaluate probability models.	[8] Investigate patterns of association in bivariate data.
Geometry (K-8)								
[K] Identify and describe two and three dimensional shapes. Analyze, compare, create, and compose shapes and identify their positions.	[1] Define and distinguish shape attributes. Use 2D and 3D shapes to make new composite shapes. Partition circles and rectangles into halves and fourths.	[2] Draw shapes with specified attributes. Partition rectangles into rows and columns of equal squares. Partition circles and rectangles into equal shares.	[3] Understand that shapes in different categories may share attributes. Partition shapes into equal parts. Express each part as a fraction of the whole.	[4] Draw and identify lines and angles, and classify shapes by properties of their lines and angles.	[5] Graph points on the coordinate plane to solve real-world and mathematical problems. Classify two-dimensional figures based on their properties.	[6] Solve real-world and mathematical problems involving area, surface area, and volume.	[7] Draw, construct, describe and relate geometrical figures. Solve real-life problems involving angle measure, area, surface area, and volume.	[8] Understand congruence and similarity. Apply the Pythagorean Theorem. Solve real-world problems involving volume of cylinders, cones and spheres.

English Language Arts Continuum

Reading Literature: Key Ideas and Details								
[K] With prompting and support, ask and answer questions about key details in a text, retell familiar stories, and identify characters, settings, and major events in a story.	[1] Ask and answer questions about key details. Retell stories, including key details, and understand their central message. Describe characters, settings, and major events using key details.	[2] Ask and answer who, what, where, when, why, and how. Recount stories, including fables and folktales, and determine their moral. Describe how characters respond to challenges.	[3] Answer questions by referring explicitly to the text. Recount stories, including myths, and explain how the moral is conveyed. Explain how characters' actions contribute to event order.	[4] Refer to examples when drawing inferences. Determine a theme of a story, drama, or poem and summarize. Describe in depth a character, setting, or event drawing on specific details.	[5] Quote accurately to explain explicit meaning and to draw inferences. Determine how characters respond to challenges and summarize. Contrast characters, settings, or events.	[6] Cite evidence to analyze explicit meaning and inferences. Determine particular details indicating theme. Summarize without opinion. Describe how plot unfolds & character response.	[7] Cite several pieces of textual evidence to analyze explicit meaning and inferences. Analyze theme development. Summarize objectively. Analyze interaction of story elements.	[8] Cite the strongest evidence supporting analysis of meaning. Analyze theme's relationship to story elements. Analyze how dialogue or incidents propel action or reveal character aspects.
Reading Literature: Craft and Structure								
[K] Ask and answer questions about unknown words in a text. Recognize common types of texts like storybooks or poems. With prompting and support, name the author and illustrator of a story.	[1] Identify words and phrases that suggest feelings or appeal to the senses. Explain differences between books that tell stories and books that give information. Identify who is telling the story.	[2] Describe how words and phrases supply rhythm and meaning. Describe the overall structure of a story. Acknowledge differences in the points of view of characters.	[3] Use text to determine meaning, distinguishing literal from nonliteral language. Describe how successive parts build on earlier sections. Distinguish their own point of view from the characters'.	[4] Determine allusion to mythological characters. Explain differences between poems, drama, and prose. Refer to structural elements of a text. Contrast first and third-person narrations.	[5] Determine figurative language such as metaphors and similes. Explain how chapters, scenes, or stanzas fit together to provide structure. Describe how point of view influences description.	[6] Determine figurative and connotative meanings. Analyze impact of word choice. Analyze how sections develop theme, setting, or plot. Explain how point of view develops.	[7] Analyze impact of rhymes and repetitious sounds. Analyze how form contributes to meaning. Analyze how an author develops and contrasts the points of view of different characters.	[8] Determine analogies or allusions. Contrast structure and analyze how it contributes to meaning and style. Analyze how points of view of characters and readers create suspense or humor.
Reading Literature: Integration of Knowledge and Ideas								
[K] With prompting and support, describe the relationship between illustrations and the story, and compare and contrast the adventures and experiences of characters in familiar stories.	[1] Use illustrations and details in a story to describe its characters, setting, or events. Compare and contrast the adventures and experiences of characters in stories.	[2] Use the illustrations and words in a print or digital text to demonstrate understanding of its characters, setting, or plot. Compare and contrast two or more versions of the same story.	[3] Explain how specific aspects of illustrations contribute to what is conveyed by the words. Compare and contrast the themes, settings, and plots of stories written by the same author.	[4] Make connections between the text and a visual or oral presentation. Compare and contrast the treatment of similar themes and topics and patterns of events in stories and myths.	[5] Analyze how visual and multimedia elements contribute to meaning, tone, or beauty. Compare and contrast stories in the same genre on their approaches to similar themes and topics.	[6] Compare and contrast the experience of reading to listening or viewing. Compare and contrast texts in different forms or genres in terms of their approaches to similar themes and topics.	[7] Contrast a text to its audio, filmed, staged, or multimedia version. Contrast a fictional portrayal of a time, place, or character and a historical account of the same period.	[8] Analyze the adaptation of a filmed or live production of a text. Analyze how modern fiction draws on themes, patterns of events, or character types from myths or traditional stories.
Reading Informational Text: Key Ideas and Details								
[K] With prompting and support, ask and answer questions about key details, identify the main topic and retell key details, and describe the connection between two individuals, events, or ideas.	[1] Ask and answer questions about key details in a text. Identify the main topic and retell key. Describe the connection between two individuals, events, ideas, or pieces of information.	[2] Ask and answer who, what, where, when, why, and how. Identify the topic of a text and of specific paragraphs. Describe connections between historical events or scientific ideas.	[3] Answer questions with explicit references. Recount key details and explain how they support the main idea. Describe the time, sequence, or cause/effect relationship between concepts.	[4] Refer to examples when drawing inferences. Explain how key details support the main idea and summarize. Explain events, procedures, or concepts including what happened and why.	[5] Quote accurately to explain explicit meaning and draw inferences. Explain how key details support main ideas. Summarize. Use information to explain the interactions of ideas.	[6] Cite evidence to analyze explicit meaning and inferences. Determine details indicating a central idea. Summarize without opinion. Analyze the exposition of individuals, events, or ideas.	[7] Cite several pieces of evidence to analyze explicit meaning and inferences. Analyze development of central ideas. Summarize objectively. Analyze how ideas influence individuals or events.	[8] Cite the strongest evidence supporting analysis of meaning. Analyze how a text makes connections among and distinctions between individuals, ideas, or events.

English Language Arts Continuum

Reading Informational Text: Craft and Structure								
[K] Ask and answer questions about unknown words in a text. Identify the front cover, back cover, and title page of a book. With prompting and support, name the author and illustrator.	[1] Ask and answer questions to determine or clarify the meaning of words and phrases. Use text features to locate information. Distinguish information provided by illustrations or words.	[2] Determine word and phrase meaning across grade 2 topics. Use text features to locate information efficiently. Identify the main purpose, including what the author wants to explain.	[3] Determine academic and domain-specific word meaning across grade 3 topics. Use search tools to locate information efficiently. Distinguish their own point of view from the authors'.	[4] Determine academic and domain-specific word meaning across grade 4 topics. Describe overall structure. Contrast a firsthand and secondhand account of the same event or topic.	[5] Determine academic and domain-specific word meaning across grade 5 topics. Contrast structure in two or more texts. Note similarities and differences in multiple accounts of a topic.	[6] Determine figurative, connotative, and technical meanings. Analyze how particular sections develop ideas. Determine an author's point of view or purpose and how it is conveyed.	[7] Analyze impact of word choice on meaning and tone. Analyze organizational structure. Analyze how the author distinguishes his or her position from that of others.	[8] Determine analogies or allusions. Analyze the structure of a paragraph and concept refinement. Analyze how the author acknowledges and responds to conflicting evidence.
Reading Informational Text: Integration of Knowledge and Ideas								
[K] With prompting and support, relate illustrations and the text, identify author's reasons of support, and identify similarities and differences between two texts on the same topic.	[1] Use illustrations and details in a text to describe its key details. Identify the reasons an author gives to support points in a text. Identify similarities and differences in two texts.	[2] Explain how specific images clarify a text. Describe how reasons support specific points the author makes. Compare and contrast the most important points presented in two texts.	[3] Use information from illustrations and the text to demonstrate understanding. Describe the logical connection between sentences and paragraphs. Contrast key details in two texts.	[4] Interpret information presented visually, orally, or quantitatively. Explain how an author uses reasons and evidence to support particular points. Integrate information from two texts.	[5] Locate an answer or solve a problem efficiently using print or digital sources. Identify which reasons and evidence support which points. Integrate information from several texts.	[6] Trace and evaluate argument. Distinguish claims supported by reasons and evidence from claims that are not. Contrast one author's presentation of events with that of another.	[7] Assess whether reasoning is sound and evidence is relevant and sufficient. Analyze how two authors emphasize different evidence or advancing different interpretations of facts.	[8] Delineate and evaluate specific claims. Recognize irrelevant evidence. Analyze conflicting information and identify where texts disagree on matters of fact or interpretation.
Writing: Opinions/Arguments								
[K] Use a combination of drawing, dictating, and writing to compose opinion pieces about a topic or text.	[1] Write to state an opinion on a topic or text, supply a reason for the opinion, and provide some sense of closure.	[2] Introduce a topic, state an opinion, supply supporting reasons, use linking words to connect opinion and reasons, and provide a conclusion.	[3] Introduce a topic, state an opinion, and create an organizational structure. Use linking words to connect opinion and reasons. Provide a concluding statement.	[4] Introduce a topic clearly, state an opinion, and create an organizational structure grouping related ideas. Provide reasons supported by facts and details and a related concluding section.	[5] Introduce a topic clearly, state an opinion, and create an organizational structure logically grouping ideas. Provide logically ordered reasons supported by facts and details.	[6] Write arguments to support claims with relevant evidence using credible sources. Use words, phrases, and clauses to clarify the relationships among claims. Maintain a formal style.	[7] Introduce claims and acknowledge alternate claims. Support claims with logical reasoning and relevant evidence, using accurate, credible sources. Create cohesion among ideas.	[8] Introduce claims, distinguish claims from alternate claims, and organize the evidence logically. Create cohesion and clarify the relationships among claims, counterclaims, and evidence.
Writing: Informative/Explanatory								
[K] Use a combination of drawing, dictating, and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic.	[1] Write informative/explanatory texts in which they name a topic, supply some facts about the topic, and provide some sense of closure.	[2] Write informative/explanatory texts in which they introduce a topic, use facts and definitions to develop points, and provide a concluding statement or section.	[3] Introduce an informative topic and group related information together. Develop the topic with facts, definitions, and details. Use linking words. Provide a concluding statement.	[4] Introduce a topic clearly and group related information in paragraphs. Link ideas with concrete facts, details, or quotations. Use precise vocabulary. Provide a concluding section.	[5] Introduce a topic clearly, provide a focus, and group related information logically. Develop the topic and link ideas within and across categories of information. Use precise language.	[6] Develop the topic with relevant facts, definitions, concrete details, quotations, or examples. Use transitions to clarify the relationships among ideas. Use precise language and a formal style.	[7] Clearly introduce and preview the topic. Develop ideas with relevant facts, concrete details, quotations, and examples. Use transitions to create cohesion. Use precise language and a formal style.	[8] Organize ideas into broad categories. Develop the topic with relevant, well-chosen facts and examples. Use varied transitions to create cohesion. Use precise language and a formal style.

English Language Arts Continuum

Writing: Narrative								
[K] Use a combination of drawing, dictating, and writing to narrate a single event or several loosely linked events, tell about the events in order, and provide a reaction to what happened.	[1] Write narratives to recount two or more sequenced events, include some details regarding what happened, use temporal words to signal event order, and provide some sense of closure.	[2] Write narratives to recount a well elaborated event or short sequence of events, include details to describe actions, thoughts, and feelings, use temporal words, and provide a sense of closure.	[3] Establish a situation. Introduce a narrator or characters. Naturally unfold events. Use dialogue and describe actions, thoughts, and feelings to develop experiences or characters' responses.	[4] Orient the reader by establishing a situation and characters. Naturally unfold events. Use concrete words and phrases and sensory details to convey experiences and events precisely.	[5] Use narrative techniques, such as dialogue, description, and pacing to develop events or show characters' responses. Use descriptive language. Provide a narrative conclusion.	[6] Engage the reader by establishing a context. Organize a natural, logical event sequence. Develop experiences, events, and characters. Signal shifts from one time frame or setting to another.	[7] Engage the reader by establishing a context and point of view. Organize a natural, logical event sequence. Develop experiences, events, and characters. Signal shifts in time frame or setting.	[8] Use narrative techniques, such as dialogue, pacing, description, and reflection to develop experiences, events, and/or characters. Show the relationships among experiences and events.
Reading Foundations								
[K] Demonstrate basic knowledge of letter-sound correspondences by producing the primary sound for each consonant and the 5 short vowel sounds.	[1] Understand and produce both short and long vowel sounds. Represent both with the common spellings for the five major vowels.	[2] Know the spelling-sound correspondences for common consonant digraphs as well as final -e and vowel teams for representing long vowel sounds.	[3] Decode two syllable words following basic patterns by breaking the words into syllables, including words with inflectional endings.	[4] Identify words with inconsistent but common spelling-sound correspondences and decode words with common prefixes and suffixes.	[5] Read with sufficient accuracy and fluency to support comprehension.			
Language: Grammar								
[K] Print letters. Use frequently occurring nouns, verbs, and prepositions. Form regular plural nouns orally. Understand and use question words. Produce and expand complete sentences.	[1] Use common, proper, possessive, singular, plural nouns. Use personal, possessive, indefinite pronouns. Use temporal verbs. Use adjectives, conjunctions, determiners, prepositions.	[2] Use collective nouns and irregular plural nouns. Use reflexive pronouns. Use past tense irregular verbs. Use adjectives and adverbs. Expand and rearrange simple and compound sentences.	[3] Use regular/ irregular plural nouns/verbs. Ensure subject-verb/ pronoun-antecedent agreement. Use comparative/ superlative adjectives/adverbs. Use conjunctions.	[4] Use relative pronouns, progressive verb tenses, modal auxiliaries, and prepositional phrases. Order adjectives within sentences. Correct fragments, run-ons, and frequently confused words.	[5] Explain the function of conjunctions, prepositions, and interjections. Use verb tense to convey various times, sequences, states, and conditions. Correct shifts in verb tense.	[6] Recognize and correct pronoun use. Recognize variations from standard English in writing and speaking, and identify and use strategies to improve expression in conventional language.	[7] Explain the function of phrases and clauses in general and their function in specific sentences. Recognize and correct misplaced and dangling modifiers. Vary sentences.	[8] Explain the function of verbals. Use verbs in the active and passive voice. Use verbs in the indicative, imperative, interrogative, conditional, and subjunctive mood.
Language: Mechanics								
[K] Capitalize the first word in a sentence and the pronoun I. Recognize end punctuation. Write a letter for most consonant and short-vowel sounds. Spell simple words phonetically.	[1] Capitalize dates and people's names. Use end punctuation. Use commas in dates and words in a series. Use conventional spelling for high-frequency words. Spell untaught words phonetically.	[2] Capitalize proper nouns. Use commas in greetings and closings of letters. Use apostrophes in contractions and possessives. Generalize spelling patterns. Use tools to check spelling.	[3] Capitalize appropriate words in titles. Use commas in addresses. Use commas and quotation marks in dialogue. Form and use possessives. Add suffixes to base words.	[4] Use correct punctuation. Use commas and quotation marks to mark direct speech and quotations. Use a comma before a coordinating conjunction in a compound sentence.	[5] Use a comma to separate an introductory element. Use a comma to set off a tag question and to indicate direct address. Use formatting to indicate titles of works.	[6] Use punctuation, such as commas, parentheses, or dashes, to set off nonrestrictive/ parenthetical elements.	[7] Use a comma to separate coordinate adjectives.	[8] Use punctuation, such as commas, ellipsis, or dashes to indicate a pause or break. Use an ellipsis to indicate an omission.

English Language Arts Continuum

Language: Vocabulary Acquisition and Use								
[K] Apply new meanings for familiar words. Use inflections and affixes to determine meaning. Demonstrate understanding of verbs and adjectives by relating them to their opposites.	[1] Use sentence-level context as a clue to word meaning. Identify root words and their inflectional form. Define words by category and by one or more key attributes.	[2] Determine meaning when forming new words with prefixes. Use root words to determine meaning. Predict the meaning of compound words. Distinguish related verbs and adjectives.	[3] Determine meaning when forming words with affixes. Distinguish literal and nonliteral meanings. Distinguish descriptions of states of mind or degrees of certainty.	[4] Use context and Greek and Latin affixes and roots to determine meaning. Explain the meaning of similes, metaphors, idioms, adages, and proverbs. Relate words with similar meanings.	[5] Interpret figurative language. Use digital or print reference materials. Use the relationship between words, like synonyms, antonyms, and homographs to better understand them.	[6] Verify the preliminary determination of the meaning of a word or phrase. Interpret figures of speech. Distinguish among the associations of words with similar definitions.	[7] Consult print or digital, general and specialized reference materials. Distinguish among the connotations of words with similar denotations.	[8] Demonstrate understanding of figurative language, word relationships, and nuances. Gather vocabulary knowledge when considering a word important to comprehension or expression.

Science Continuum

Science Processes								
[K] Use the five senses for purposeful observations. Raise questions. Make sense of observations and investigations. Demonstrate understanding through models and activities.	[1] Recognize the importance of multiple trials before drawing conclusions or presenting findings. Make purposeful observations to raise questions, investigate, and make meaning of findings.	[2] Make quantitative measurements. Organize data. Use evidence when communicating scientific ideas. Plan and conduct simple investigations. Generate questions based on observations.	[3] Use appropriate units of measure. Conduct simple, fair investigations. Use data to separate fact from opinion. Compare data from multiple trials. Identify environmental problems.	[4] Practice and apply inquiry skills as a process of testing ideas. Logically use evidence to formulate explanations, refine observations, measure, collect data and analyze.	[5] Generate scientific questions based on research. Consider fair tests, variables, and multiple trials. Relate findings to real-world problems. Share and discuss data collaboratively.	[6] Control multiple variables. Clarify the difference between scientific explanation and evidence. Confirm or challenge beliefs about the natural world. Design solutions to world challenges.	[7] Recognize different kinds of questions suggest different investigative approaches. Evaluate strengths and weaknesses of findings and the claims of others.	[8] Review experimental procedures, examine evidence, identify faulty reasoning, point out statements that go beyond the evidence, and suggest alternative explanations for observations.
Life Science								
[K] Identify that living things have basic needs. Identify and compare living and nonliving things.	[1] Mimick plant or animal parts to solve a human problem. Determine survival behaviors of parents and offspring. Construct an evidence-based account that offspring are like their parents.	[2] Investigate plant growth needs. Model animals dispersing seeds or pollinating plants. Make observations of plants and animals to compare the diversity of life in different habitats.	[3] Explore functions and structures in plants and animals that help them survive in their environment. Classify plants and animals by observable physical characteristics.	[4] Explore energy requirements of living organisms. Explore individual differences in organisms. Investigate food webs and the impact of environmental changes.	[5/6] Understand the main function of specialized animal systems. Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.	[5/6] Classify organisms by energy source. Explore interdependent relationships in ecosystems. Understand biotic and abiotic factors in an ecosystem. Explore how humans affect change.	[7] Use microscopy to explore single and multi-cellular organisms. Describe growth and development by cell division. Compare sexual and asexual reproduction.	[8] Argue with empirical evidence and scientific reasoning to explain animal behaviors and plant structures. Evaluate competing design solutions for maintaining biodiversity.
Earth Science								
[K] Identify different Earth materials and recognize the Earth materials necessary to grow plants.	[1] Use observations of the sun, moon, and stars to describe predictable patterns. Make observations at different times of year to relate the amount of daylight to the time of year.	[2] Show evidence that Earth events occur quickly or slowly. Compare solutions to prevent wind or water erosion. Model land and water. Identify solid and liquid water found on Earth.	[3] Explore causes of change on the Earth's surface and identify Earth materials. Explore natural resources and describe how humans protect and harm the environment.	[4] Model the motion of Earth and moon. Describe the apparent movement of sun and moon. Explore the history of Earth through fossils. Compare fossils of life forms with existing organisms.	[5/6] Model and explain Earth's place in the universe. Model, graph, and reason with data about Earth's systems, resources, and ways humans use science ideas to protect the environment.	[5/6] Analyze and interpret data to construct an explanation based on evidence for how geoscience processes have changed the Earth's surface at varying times and spatial scales.	[7] Explore the water cycle and the composition of the atmosphere. Explore frontal boundaries, major air masses, and the jet stream. Understand implications of pollution and climate change.	
Physical Science								
[K] Describe motion, compare motion, and develop an understanding of forces and their relationship to changes in motion. Understand that gravity affects the motion of all objects.	[1] Investigate the sound of vibrating materials. Observe that light is required to see different materials placed in light. Communicate over a distance using light or sound.	[2] Classify material properties. Test properties for an intended purpose. Deconstruct to create new objects. Provide evidence that heating and cooling changes can only sometimes be reversed.	[3] Explore force and motion. Explore light and shadow. Demonstrate that objects absorb heat energy when exposed to light. Explore vibrations of sound to create pitch.	[4] Describe heat production. Demonstrate conductors of heat and electricity, and electromagnet construction. Measure and observe properties of matter and changes in state.	[5/6] Observe and measure materials based on their properties. Model and describe matter as made up of microscopic particles. Use models to describe energy transfer from the sun to animals.	[5/6] Support an argument that the gravitational force exerted by Earth on objects is directed down.	[7] Explore light energy transfer to chemical energy through photosynthesis and wave energy transfer. Explore physical and chemical properties and change. Understand the Periodic Table.	[8] Understand chemistry and physics in terms of properties of matter, atomic structure, force, forms of energy, energy transformation, chemical bonds, entropy, and change.

Social Studies Continuum

History								
[K] Distinguish yesterday, today, tomorrow. Create a timeline using personal events. Identify beginning, middle, and end. Describe ways people learn about the past.	[1] Distinguish past, present, future, days, weeks, and months. Investigate family history. Retell details in sequence. Use historical artifacts to draw conclusions. Identify holidays.	[2] Distinguish years and decades. Differentiate event descriptions. Exemplify individual roles in creating history. Identify a past problem and resolution. Construct a local historical narrative.	[3] Sequence early Michigan history. Use primary/secondary sources. Draw on American Indians' stories. Compare people's environmental interactions. Describe causal relationships.	[4] Use examples from Michigan history (from statehood to the present) as a case study for learning about U.S. geography, economics, and government.	[5/6] Use case studies to explore the goals and challenges of European exploration and colonization of the Americas. Compare how American Indians adapted to or modified the environment.	[5/6] Understand historical impact on geography from the beginnings of society, through early civilizations, pastoral societies, classical traditions, and major empires.	[7] Understand world history from the beginnings of society, through early civilizations, pastoral societies, classical traditions, and development of world religions.	[8] Understand American history from the revolution and new nation through expansion and reform, the Civil War, Reconstruction, and the development of an industrial U.S.
Geography								
[K] Recognize maps and globes represent places. Identify location with positional words. Describe places in the classroom. Describe ways to use the environment to meet needs and wants.	[1] Describe relative and absolute location. Distinguish land and water on maps and characteristics of place. Describe family diversity. Describe environmental modifications or adaptations.	[2] Construct maps and legends. Use relative location, distance, direction, scale. Relate community and region characteristics. Describe land use, transportation, community diversity.	[3] Use cardinal directions and thematic maps. Describe Michigan diversity. Describe movement of goods, people, and information. Describe cultural preservation. Analyze natural resource use.	[4] Use intermediate directions. Use geographic tools to describe elevation, climate, and patterns of population density. Define U.S. regions. Identify migration factors and cultural development.	[5/6] Locate peoples in the desert Southwest, Pacific Northwest, Great Plains nomadic nations, and woodland peoples east of the Mississippi River. Compare environment adaptation.	[5/6] Use paper based and electronic mapping and graphing techniques to represent and analyze spatial patterns of different environmental and cultural characteristics	[7] Relate people, places and environments in world history. Conduct research on global topics and issues, compose persuasive essays, and develop a plan for action.	[8] Argue the consequences of territorial expansion on American Indians, the institution of slavery, and the relations between free and slaveholding states.
Civics and Government								
[K] Identify our country's flag. Explain why people cannot do whatever they want. Describe fair ways to make decisions. Describe examples of self-discipline and individual responsibility.	[1] Identify reasons for rules. Explain how fair and just decisions can be made or conflicts might be resolved. Identify U.S. symbols. Describe responsibilities. Identify good citizenship.	[2] Explain local government purpose. Distinguish government/private action, responsibilities. Balance individual rights with common good. Exemplify enforcement, interpretation of laws.	[3] Describe Michigan's representative government and constitution's purpose. Describe state funding. Explain legislature, judiciary. Identify citizen rights and responsibilities.	[4] Examine the purpose and function of government in the U.S. Constitution Preamble. Explore federal limits of power and taxation. Identify guaranteed rights, right limits, and responsibilities.	[5] Describe roles of the Continental Congresses in unifying the colonies. Explain why colonists wanted to separate from Great Britain. Describe the challenges in creating a new government.	[6] Analyze competing ideas about government purposes and forms. Explain geopolitical relationships, challenges, and cooperation needed to address international issues.	[7] Contrast monarchies, theocracies, dictatorships, and representative governments. Explain how governments form policies and policy inconsistencies among countries.	[8] Analyze antebellum reform. Evaluate the causes, key events, and complex consequences of the Civil War and Reconstruction. Contrast the U.S. in 1800 with 1898.
Economics								
[K] Describe economic wants. Distinguish between goods and services. Recognize situations in which people trade.	[1] Distinguish producers/consumers of goods/services. Describe consumption of goods/services. Explain scarcity/choice. Describe trade, earning money, and how money simplifies trade.	[2] Identify opportunity cost. Describe how local businesses meet wants. Describe resources needed to produce goods and services. Show people depend on trade to meet their wants.	[3] Relate scarcity, choice, opportunity costs, incentives. Relate entrepreneurship, specialization, and interdependence of state, national and global economies.	[4] Apply concepts of price, competition, incentives. Develop understanding of specialization, division of labor, competition, interdependence and explore effects on productivity.	[5] Describe causes/effects of the Stamp Act, Boston Tea Party, and Intolerable Acts. Describe the advantages and disadvantages of each side during the American Revolution.	[6] Explain economic systems, incentive variation. Describe impact of government policies. Propose generalizations about economic interdependence. Diagram movement of products.	[7] Apply circular flow to a public service. Explain economic impact of trade. Explain how communications innovations have affected economic interactions and where and how people work.	[8] Contrast the Northeast and South with respect to agriculture, industry, labor, transportation, immigration, race and class relations before and after the Civil War.

Social Studies Continuum

Public Discourse, Decision Making, and Citizen Involvement								
[K] Identify classroom issues. Use graphs to explain information. Compare their viewpoint with others'. Express a position on a classroom issue. Implement a plan to help or inform others.	[1] Identify public issues in the school community. Analyze graphic data. Identify alternative resolutions. Express a position and justify with a reasoned argument.	[2] Identify public issues in the local community. Analyze graphic data. Evaluate alternative resolutions. Exemplify how core democratic value conflicts lead to differing resolutions.	[3] Identify public issues in Michigan. Analyze graphic data, evaluate alternative resolutions. State a position and refine a reasoned argument. Know how, when, and where to inform others.	[4] Identify public issues in the U.S. Analyze data and evaluate resolutions. Increase proficiency in communicating positions on sophisticated public issues with a reasoned argument.	[5] Identify contemporary public issues related to the U.S. Constitution and related factual, definitional, and ethical questions. Express a position and justify with a reasoned argument.	[6] Trace public policy origins, analyze perspectives, and evaluate resolutions. Deeply examine to make reasoned decisions. Write arguments expressing and justifying decisions.	[7] Demonstrate how to conduct activities to advance public policy views, report results, and evaluate effectiveness. Contribute to solving an international problem.	[8] Identify, research, analyze, discuss, and defend a position on a national public policy issue. Apply core democratic values or constitutional principles to justify argument.