Reading/Language Arts
5th Grade

Benchmark Code – Subject: Language Arts = LA

Strand 1= Literature
Strand 2= Informational Text
Strand 3= Foundational Skills
Strand 4= Writing
Strand 5= Communication
Strand 6= Language
Strand 7= Media Literacy

Code: Subject.Grade.Strand#.Standard#. Benchmark#
Example: LA.5.1.4.3 – Language Arts, Fifth grade, Strand 1, Standard 4, Benchmark 3

Strand 1: Literature

Standard 1: The student reads closely to identify key ideas and details in literature.

Benchmark Code	Benchmark
LA.5.1.1.1	The student will quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.
LA.5.1.1.2	The student will determine a theme of a story, drama, or poem from details in the text, including how characters in a story or drama respond to challenges or how the speaker in a poem reflects upon a topic; summarize the text.
LA.5.1.1.3	The student will compare and contrast two or more characters, settings, or events in a story or drama, drawing on specific details in the text (e.g., how characters interact).

Standard 2: The student identifies the craft and structure of a story or selection.

Benchmark Code	Benchmark
LA.5.1.2.1	The student will determine the meaning of words and phrases as they are used in test, including figurative language such as metaphors and similes.
LA.5.1.2.2	The student will explain how a series of chapters, scenes, or stanzas fits together to provide the overall structure of a particular story, drama, or poem.

LA.5.1.2.3	The student will describe how a narrator's or speaker's point of view influences how events are described.
Standard 3: The student integrates knowledge and ideas in literature.	
Benchmark Code	Benchmark
LA.5.1.3.1	The student will analyze how visual and multimedia elements contribute to the meaning, tone, or beauty of a text (e.g., graphic novel, multimedia presentation of fiction, folktale, myth, poem).
LA.5.1.3.2	The student will compare and contrast stories in the same genre (e.g., mysteries and adventure stories) on their approaches to similar themes and topics.
Standard 4: The student increases own range of reading and level of text complexity in literature.	
Benchmark Code	Benchmark
LA.5.1.4.1	The student will read and comprehend literature, including stories, dramas, and poetry, at the high end of the grades 4-5 text complexity band independently and proficiently, with scaffolding as needed at the high end of the range by the end of the year.
Strand 2: Informational Text	
Standard 1: The student reads closely to identify key ideas and details in informational text.	
Benchmark Code	Benchmark
LA.5.2.1.1	The student will quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.
LA.5.2.1.2	The student will determine two or more main ideas of a text and explain how they are supported by key details; summarize the text.
LA.5.2.1.3	The student will explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific information in the text.
Standard 2: The student identifies the craft and structure of a story or selection.	
Benchmark Code	Benchmark
LA.5.2.2.1	The student will determine the meaning of general academic and domain-specific words and phrases in a text relevant to a *grade 5 topic or subject area.*
LA.5.2.2.2	The student will compare and contrast the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in two or more texts.

LA.5.2.2.3	The student will analyze multiple accounts of the same event or topic, noting important similarities and differences in the point of view they represent.
Standard 3: The student integrates knowledge and ideas in informational text.	
Benchmark Code	Benchmark
LA.5.2.3.1	The student will draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently.
LA.5.2.3.2	The student will explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point(s).
LA.5.2.3.3	The student will integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably.
Standard 4: The student increases own range of reading and level of text complexity in informational text.	
Benchmark Code	Benchmark
LA.5.2.4.1	The student will read and comprehend informational texts, including history/social studies, science, and technical texts, at the high end of the grades 4-5 text complexity band independently and proficiently by the end of the year.
Strand 3: Foundational Skills	
Standard 1: Phonics and Word Recognition. The student knows and applies grade-level phonics and word analysis skills in decoding words.	
Benchmark Code	Benchmark
LA.5.3.1.1	The student will use combined knowledge of all letter-sound correspondences, syllabication patterns and morphology (e.g., roots and affixes) to read accurately unfamiliar multisyllabic words in context and out of context.
Standard 2: The student reads with sufficient accuracy and fluency to support comprehension.	
Benchmark Code	Benchmark
LA.5.3.2.1	The student will read on-level text with purpose and understanding.

LA.5.3.2.2	The student will read on-level prose and poetry orally with accuracy, appropriate rate, and expression on successive readings.
LA.5.3.2.3	The student will use context to confirm or self-correct word recognition and understanding, rereading as necessary.

Strand 4: Writing	
Standard 1: Text Types and Purposes	
Benchmark Code	Benchmark
LA.5.4.1.1	The student will write opinion pieces on topics or texts, supporting a point of view with reasons and information. The opinion piece should introduce a topic or text clearly, state an opinion, and create an organizational structure in which ideas are logically grouped to support the writer's purpose; provide logically ordered reasons that are supported by facts and details; link opinion and reasons using words, phrases, and clauses (e.g., *consequently, specifically*); and provide a concluding statement or section related to the opinion presented.
LA.5.4.1.2	The student will write informative/explanatory texts to examine a topic and convey ideas and information clearly. The informative/explanatory text should introduce a topic clearly, provide a general observation and focus, and group related information logically; include formatting (e.g., *headings*), illustrations, and multimedia when useful to aiding comprehension; develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic; link ideas within and across categories of information using words, phrases, and clauses (e.g. *in contrast, especially*); use precise language and domain-specific vocabulary to inform about or explain the topic; and provide a concluding statement or section related to the information or explanation presented.
LA.5.4.1.3	The student will write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences; The narrative piece should orient the reader by establishing a situation and introducing a narrator and/or characters; organize an event sequence that unfolds naturally; use narrative techniques, such as dialogue, description, and pacing, to develop experiences and events or show the responses of characters to situations; use a variety or transitional words, phrases, and clauses to manage the sequence of events; use concrete words and phrases and sensory details to convey experiences and events precisely; and provide a conclusion that follows from the narrated experience or events.

Standard 2: Production and Distribution of Writing	
Benchmark Code	Benchmark
LA.5.4.2.1	The student will produce clear and coherent writing in which the development and organization are appropriated to task, purposes, and audience.
LA.5.4.2.2	With guidance and support from peers and adults, the student will develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.
LA.5.4.2.3	With some guidance and support from adults, the student will use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate a sufficient command of keyboarding skills to type a minimum of two pages in a single setting.
Standard 3: Research to Build and Present Knowledge	
Benchmark Code	Benchmark
LA.5.4.3.1	The student will conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.
LA.5.4.3.2	The student will recall relevant information from experiences or gather relevant information from print and digital sources; summarize or paraphrase information in notes and finished work; and provide a list of sources.
LA.5.4.3.3	The student will draw evidence from literary or informational texts to support analysis, reflection, and research.
Standard 4: Range of Writing	
Benchmark Code	Benchmark
LA.5.4.4.1	The student will write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single setting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.
Strand 5: Communication	
Standard 1: Penmanship. The student engages in the writing process and writes to communicate ideas and experiences.	
Benchmark Code	Benchmark
LA.5.5.1.1	The student will demonstrate fluent and legible writing skills.

Standard 2: Listening and Speaking. The student effectively applies listening and speaking strategies.	
Benchmark Code	Benchmark
LA.5.5.2.1	The student will come to discussions prepared, having read or studies required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion.
LA.5.5.2.2	The student will follow agreed-upon rules for discussions and carry out assigned roles.
LA.5.5.2.3	The student will pose and respond to specific questions by making comments that contribute to the discussions and elaborate on the remarks of others.
LA.5.5.2.4	The student will review the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions.
LA.5.5.2.5	The student will summarize a written text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.
LA.5.5.2.6	The student will summarize the points a speaker makes and explain how each claim is supported by reasons and evidence.
LA.5.5.2.7	The student will report on a topic or text or present an opinion, sequencing ideas logically and using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.
LA.5.5.2.8	The student will include multimedia components (e.g., graphics, sound) and visual displays in presentations when appropriate to enhance the development of main ideas or themes.
LA.5.5.2.9	The student will adapt speech to a variety of contexts and tasks, using formal English when appropriate to task and situation.
Strand 6: Language	
Standard 1: Language Conventions. The student demonstrates command of the convention of stand English grammar and usage when writing or speaking.	
Benchmark Code	Benchmark
LA.5.6.1.1	The student will use correct structure for complex sentences with dependent clauses appropriately, write compound sentences, and uninterrupted dialogue correctly, and consistently use a complete range of sentences correctly.
LA.5.6.1.2	The student will explain the function of conjunctions (including correlative e.g. either/or, neither/or) and interjections in general and their function in particular sentences.
LA.5.6.1.3	The student will consistently use plural nouns and singular possessive nouns correctly and experiment with plural possessives.
LA.5.6.1.4	The student will consistently write in the present tense correctly.

LA.5.6.1.5	The student will consistently use the past tense for regular and irregular verbs from the grade level verb list correctly, begin to use the present perfect appropriately, and begin to use the past perfect in oral language and experiments in writing.
LA.5.6.1.6	The student will recognize and correct inappropriate shifts in verb tense.
LA.5.6.1.7	The student will consistently use subject, object, and possessive pronouns correctly, begin to use reflexive pronouns appropriately, and experiment with indefinite and relative pronouns.
LA.5.6.1.8	The student will consistently write in the future tense correctly.
LA.5.6.1.9	The student will consistently use adjectives correctly and compare adjectives and use adverbs correctly.
LA.5.6.1.10	The student will consistently use prepositional phrases correctly in sentences.
LA.5.6.1.11	The student will consistently use capital letters for all proper nouns and titles correctly and for indicated abbreviations and uninterrupted/split dialogue appropriately.
LA.5.6.1.12	The student will consistently use commas in dates and items in a series correctly and begin to use them to introduce clauses.
LA.5.6.1.13	The student will consistently use new punctuation in writing: quotation marks in dialogue, apostrophes in contractions and possessives, periods in abbreviations correctly, and underlining, quotation marks, or italics to indicate titles of works.
Standard 2: Vocabulary Acquisition and Use. The student determines the meaning of unknown words and phrases, understands word relationships in own meanings, and uses acquired words and phrases.	
Benchmark Code	Benchmark
LA.5.6.2.1	The student will use context (e.g., cause/effect relationships and comparisons in text) as a clue to the meaning of a words or phrase.
LA.5.6.2.2	The student will use common grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., *photograph, photosynthesis*).
LA.5.6.2.3	The student will consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation and determine or clarify the precise meaning of key words and phrases.
LA.5.6.2.4	The student will interpret figurative language, including similes and metaphors, in context.
LA.5.6.2.5	The student will recognize and explain the meaning of common idioms, adages, and proverbs.

LA.5.6.2.6	The student will use the relationship between particular words (e.g., synonyms, antonyms, homographs) to better understand each of the words.
LA.5.6.2.7	The student will acquire and use accurately grade-appropriate general academic and domain-specific words and phrases, including those that signal contrast, addition, and other logical relationships (e.g., *however, although, nerertheless, similarly, moreover, in additions).*

Strand 7: Media Literacy

Standard 1: Media Literacy. The student develops and demonstrates an understanding of media literacy as a life skill that is integral to informed decision making.	
Benchmark Code	Benchmark
LA.5.7.1.1	The student will use a variety of reliable media sources.
Standard 2: Technology. The student develops the essential technology skills for using and understanding conventional and current tools, materials and processes.	
Benchmark Code	Benchmark
LA.5.7.2.1	The student will select and use appropriate available technologies to enhance communication and achieve a purpose (e.g., video, presentations).
LA.5.7.2.2	The student will determine and use the appropriate digital tools (e.g., word processing, multimedia authoring, web tools, and graphic organizers) for publishing and presenting a topic.

Math
5th Grade

Benchmark Code = Subject: Math = M

Strand 1 – Numbers
Strand 2 – Measurement
Strand 3 – Probability and Statistics
Strand 4 – Geometry
Strand 5 – Algebra

Code: Subject.Grade#.Strand#.Standard#. Benchmark#
Example: M.5.1.4.3 – Math, Fifth Grade, Strand 1, Standard 4, Benchmark 3

Strand 1: Numbers

Standard 1: The student understands that every natural number can be written as a product of prime numbers in only one way (apart from order).

Benchmark Code	Benchmark
M.5.1.1.1	The student will extend knowledge of prime and composite numbers up to 100.
M.5.1.1.2	The student will compose composite numbers into products of factors in different ways and identify which of these combinations are products of prime factors.
M.5.1.1.3	The student will read, write, and analyze numbers with six figures.

Standard 2: The student knows how to divide whole numbers.

Benchmark Code	Benchmark
M.5.1.2.1	The student will use a reliable algorithm for division of whole numbers.
M.5.1.2.2	The student will divide numbers up to 1,000 by numbers up to 100 using long division or some comparable approach.

Standard 3: The student understands why and how to approximate or estimate.

Benchmark Code	Benchmark
M.5.1.3.1	The student will know and use mental methods to calculate or estimate the answers to division problems.

Standard 4: The student understands how to add and subtract fractions.

Benchmark Code	Benchmark
M.5.1.4.1	The student will add fractions with unequal denominators by rewriting them as equivalent fractions with equal denominators.
M.5.1.4.2	The student will add and subtract mixed numbers.
M.5.1.4.3	The student will find the unknown in simple equations involving fractions.

Standard 5: The student understands what it means to multiply fractions and know how to do it.	
Benchmark Code	Benchmark
M.5.1.5.1	The student will explain how multiplying a fraction by a whole number can be interpreted as repeated additions of the fraction.
M.5.1.5.2	The student will explain how multiplying two fractions can be interpreted in terms of an area model.
M.5.1.5.3	The student will explain that the product of positive number with a positive fraction less than 1 is smaller than the original number.
Standard 6: The student understands and uses the interpretation of a fraction as division.	
Benchmark Code	Benchmark
M.5.1.6.1	The student will understand why the fraction a/b can be considered an answer to the division problem a/b.
M.5.1.6.2	The student will understand how to divide a fraction by a fraction and to solve related problems.
M.5.1.6.3	The student will express division with remainder in the form of mixed numbers.
M.5.1.6.4	The student will understand division as the inverse of multiplication and vice versa.
Standard 7: The student understands how to multiply terminating decimals by whole numbers.	
Benchmark Code	Benchmark
M.5.1.7.1	The student will recognize that multiplying a terminating decimal by a whole number is equivalent to multiplying a fraction by a whole number.
M.5.1.7.2	The student will explain how to place the decimal point in an answer to a multiplication problem both by estimation and by calculation.
M.5.1.7.3	The student will recognize that when a number is a multiplied by a power of 10, the place value of the digits in the number are increased according to the power 10; the reverse happens when a number is a divided by a power of 10.
Standard 8: The student understands the notation and calculation of positive whole number powers.	
Benchmark Code	Benchmark
M.5.1.8.1	The student will recognize and use the definition and notation for exponents.
Standard 9: The student solves multi-step problems using percentages, proportional problems, multi-digit positive numbers, fractions, and decimals.	
Benchmark Code	Benchmark
M.5.1.9.1	The student will solve problems of various multi-step tasks, word problems contextual questions, and real-world settings.

M.5.1.9.2	The student will translate a problem's verbal statements or contextual details into diagrams, symbols, and numerical expressions.
M.5.1.9.3	The student will express answers in appropriate verbal or numerical form.
M.5.1.9.4	The student will solve problems that require a mixture of arithmetic operations, parentheses, and arithmetic laws (commutative, distributive, and associative).
M.5.1.9.5	The student will use mental arithmetic with simple multiplication and division of whole numbers, fractions, and decimals.

Strand 2: Measurement

Standard 1: The student makes, records, displays, and interprets measurements of everyday objects.

Benchmark Code	Benchmark
M.5.2.1.1	The student will select appropriate units to make measurements and include units in answers.
M.5.2.1.2	The student will recognize and use measures of weight and temperature.
M.5.2.1.3	The student will record measurements to a reasonable degree of accuracy, using fractions and decimals as needed to achieve the desired detail.
M.5.2.1.4	The student will use a calculator to find answers to questions associated with measurements when needed.
M.5.2.1.5	The student will create graphs and tables to represent and communicate data.

Strand 3: Probability and Statistics

Standard 1: The student finds, interprets, and uses the average mean of a set of data.

Benchmark Code	Benchmark
M.5.3.1.1	The student will calculate the average of a set of data that includes whole numbers, fractions, and decimals.

Strand 4: Geometry

Standard 1: The student measures angles in degrees and solves related problems.

Benchmark Code	Benchmark
M.5.4.1.1	The student will explain the definition of degree and be able to measure angles in degrees.

M.5.4.1.2	The student will know and use the measures of common angles.
M.5.4.1.3	The student will interpret and prepare circle graphs (pie charts).
M.5.4.1.4	The student will know how to do basic constructions using a straightedge and compass.
M.5.4.1.5	The student will complete the following basic constructions: (a) drop a perpendicular from a point on a line (b) bisect an angle, (c) erect the perpendicular bisector of a line, and (d) construct a hexagon on a circle.
Standard 2: The student finds the area of other geometric figures that can be paved by triangles.	
Benchmark Code	Benchmark
M.5.4.2.1	The student will calculate perimeters and areas.
M.5.4.2.2	The student will interpret and plot points on the coordinate plane.
M.5.4.2.3	The student will associate an ordered pair of numbers with a point in the first (upper right) quadrant, and conversely any such point with an ordered pair of numbers.
M.5.4.2.4	The student will identify characteristics of the set of points that define vertical and horizontal line segments of geometric figures.
Strand 5: Algebra	
Standard 1: The student finds the unknown in simple linear equations.	
Benchmark Code	Benchmark
M.5.5.1.1	The student will mentally solve equations that require only simple calculation.
Standard 2: The student evaluates and represents simple expressions.	
M.5.5.2.1	The student will translate between simple expressions, tables of data, and graphs on the coordinate plane.
M.5.5.2.2	The student will use the conventions for order of operations (including powers).
M.5.5.2.3	The student will evaluate expressions.
M.5.5.2.4	The student will understand the importance of not dividing by zero.

Social Studies
5th Grade

Benchmark Code – Subject: SS

Strand 1: Historical Understandings
Strand 2: Geographical Understandings
Strand 3: Government and Civics
Strand 4: Economic Understandings

Grade.Strand#Standard#.Benchmark#
Example: SS.3.1.4.3 –Social Studies, Fifth Grade, Strand 1, Standard 4, Benchmark 3

Strand 1: Historical Understandings

Standard 1: The student describes how early North American civilizations developed.	
Benchmark Code	Benchmark
SS.5.1.1.1	The student will explain how geographic factors influenced the migration of people from Asia to North America.
SS.5.1.1.2	The student will describe how the early peoples of North America used natural resources to meet their needs.
Standard 2: The student describes early exploration and colonization of the Americas.	
Benchmark Code	Benchmark
SS5.1.2.1	The student will recognize the importance of the Era of Discoveries.
SS5.1.2.2	The student will describe how explorers came to America from different parts of the world to claim land for their country (European explorers, routes, obstacles, and accomplishments).
SS.5.1.2.3	The student will recognize key characteristics of America and Europe during the 18th century.
SS5.1.2.4	The student will recognize key characteristics of the colonization and rise of New Spain.
SS.5.1.2.5	The student will compare and contrast life in the New England, Mid-Atlantic, and Southern colonies.
SS.5.1.2.6	The student will describe colonial life in America as experienced by various people including large landowners, farmers, artisans, women, indentured servants, slaves, and Native Americans.
SS.5.1.2.7	The student will describe examples of cooperation and conflict between the early settlers and native tribes.
SS.5.1.2.8	The student will understand the cases of the American Revolution, the ideas and interests involved in shaping the revolutionary movement, and reasons for the American victory.
SS.5.1.2.9	The student will understand the impact of the American Revolution on politics, economy, and society.

SS.5.1.2.10	The student will understand the institutions and practices of government created during the Revolution and how these elements were revised between 1787 and 1815 to create the foundation of the American political system based on the U:S: Constitution and the Bill of Rights.

Strand 2: Geographical Understandings

Standard 1: The student understands important issues and events of the 21st century.	
Benchmark Code	Benchmark
SS.5.2.1.1	The student will compare and contrast current events or issues to past historical events (use of natural resources, struggles of social classes etc.)
SS.5.2.1.2	The student will apply critical skills to organize and use information from charts, graphs, maps, and other visuals.

Strand 3: Government/Civics

Standard 1: The student discusses social coexistence and the importance of laws.	
Benchmark Code	Benchmark
SS.5.3.1.1	The student will understand social norms and purpose, including urban norms, morals, and laws/jurisdiction.
SS.5.3.1.2	The student will understand laws and citizenship, including rights and duties of citizenship, the branches of government, and forms of justice.
SS.5.3.1.3	The student will understand individual rights: equality, liberty, and security.

Strand 4: Economic Understandings

Standard 1: The student recognizes basic economic understandings in relation to the United States.	
Benchmark Code	Benchmark
SS.5.4.1.1	The student will identify and use basic economic concepts of trade, opportunity cost, specialization, voluntary exchange, and price incentives.
SS.5.4.1.2	The student will describe how new products and inventions make an impact on the economy.

Science Curriculum
Grade: 5

Benchmark Subject: Science = S

Strand 1 = Life ScienceTHIS IS THE ONE
Strand 2 = Chemistry
Strand 3 = Earth Science
Strand 4 = Physics
Strand 5 = Scientific Inquiry

Code - Subject.Grade.Strand#.Standard#.Benchmark#
Example: S.5.2.1.1 – Science, fifth grade , Strand 2, Standard 1, Benchmark 1
Lab = Science Lab in English

Strand 1: Life Science

Standard 1: The student learns about a variety of organisms. The student uses appropriate tools such as the compound light microscope to observe similarities and differences among them.

UNIT 4: MICROSCOPES AND CELLS

Benchmark Code	Benchmark
S.5.1.1.1.	The student will observe and describe that some living things consist of a single cell that needs food, water, air, a way to dispose of waste and an environment in which to live.
S.5.1.1.3	The student will identify at least five differences between plant and animal cells.
S.5.1.1.4	The student will identify seven organelles in animal and nine organelles in plant cells.
S. 5.1.1.5	The student will connect organization of cells to different organizations, such as schools or factories.
S. 5.1.1.6	The student will infer how cells organize forming tissues, tissues forming organs, organs forming systems to form a living organism.

Standard 2: The student reviews the parts and function of the ear and connects it to sound energy.

UNIT 5: ENERGY AND SOUND (connected to physics-energy and sound unit)

S. 5.1.2.1	The student will realize how sound waves may be heard by identifying the functions of the ear parts.
S. 5.1.2.2	The student will understand objects such as cotton swabs should not be inserted in the ear canal.
S. 5.1.2.3	Identify hearing as an important sense that can save you and realize loud sound and other situations that may harm the body.

Strand 2: Chemistry	
Standard 1: The student learns that mixtures can be classified as homogeneous and heterogeneous and they can be separated by various means. UNIT 2: MIXTURES	
Benchmark Code	Benchmark
S.5.2.1.1	The student will identify homogeneous and heterogeneous mixtures and their characteristics.
S.5.2.1.2	The student will identify solutions as homogeneous mixtures formed by solute and solvent.
S.5.2.1.3	The student will identify water as the universal solvent and become aware of its importance in life.
S.5.2.1.4	The student will identify that there are various means to separate mixtures. The student demonstrates filtration, crystallization, and decantation as methods to separate mixtures.
S.5.2.1.5	The student will practice making mixtures and separating them.

Strand 3: Earth Science	
Standard 1: The student becomes aware of human's negative effects on our environment and the responsibility each person should have in protecting, preventing and improving it. The student relates the planet's health to health in people. UNIT 4 AND 5: LOVE YOUR PLANET MONTH	
Benchmark Code	Benchmark
S.5.3.1.1	The student will explain that in any particular environment, some kinds of plants and animals survive well, some do not survive as well, and some cannot survive at all.
S.5.3.1.2	The student will explain how changes in an organism's habitat are sometimes beneficial and sometimes harmful.
S.5.3.1.3	The student will identify causes of pollution affecting air, water, and soil and its consequences.
S.5.3.1.4	The student will identify how humans are an important factor causing pollution, erosion, deforestation, and extinct species.
S.5.3.1.5	The student will recall the use of fossil fuels and their role in pollution while becoming aware of alternative energy sources and their pros and cons.
S.5.3.1.6	The student becomes active in promoting respect for the environment. The student prevents, protects and helps improve the environment by different ways.

Strand 4: Physics	
Standard 1: The student identifies energy is everywhere either as potential or kinetic and basics on aeronautics focusing on propulsion. UNIT 1: PROPULSION. SPACE WEEK	
Benchmark Code	Benchmark
S.5.4.1.1	The student will identify Energy is any force or activity that causes change and it is present in everything either in the potential or the kinetic form.
S.5.4.1.2	The student will identify basics of aeronautics such as aerodynamics, propulsion, materials, and stability and control.
S.5.4.1.3	The student will identify propulsion as the force that moves something forward : the force that propels something.
S.5.4.1.4	The student will become aware propulsion is the study of how to design an engine that will provide the thrust that is needed for a plane to take off and fly through the air. The engine provides the power for the airplane. The study of propulsion is what leads the engineers determine the right kind of engine and the right amount of power that a plane will need.
S.5.4.1.5	The student will follow the scientific method and use scientific skills to make and analyze a water rocket, a balloon rocket, a CD –balloon hovercraft and other simple projects to realize the uses of propulsion.
Standard 2: The student identifies energy is everywhere either as potential or kinetic and relates it to vibrations and waves producing sound. The student connects sound waves to the 3 main parts of the ear and their function. (connected to Biology) UNIT 5: ENERGY AND SOUND	
Benchmark Code	Benchmark
S.5.4.2.1	The student will identify Energy is any force or activity that causes change and it is present in everything either in the potential or the kinetic form.
S.5.4.2.2	The student will observe and explain that objects move at different rates, with some moving very slowly and some moving too quickly for people to see them; such as sound and light waves.
S.5.4.2.3	The student will identify and apply vibration in a variety of ways to produce sound waves.
S.5.4.2.4	The student will know waves are classified as transverse and longitudinal.
S.5.4.2.5	The student will compare and contrast electricity, sound and earthquakes as results of energy flow.
S.5.4.2.6	The student will produce different tones and infer they are produced by the number (frequency) of sound waves.
S.5.4.2.7	The student will conclude sound is an expression of energy.

Standard 3: The student describes, explores, and learns the parts and uses of microscopes. UNIT 4: MICROSCOPES AND CELLS (connected to biology-microscopes and cells)	
Benchmark Code	Benchmark
S.5.4.3.1	The student will know basic history about microscopes and their inventors.
S.5.4.3.2	The student will compare and contrast antique, old and actual compound microscopes.
S. 5.4.3.3	The student will identify different types of microscopes and their main uses.
S.5.4.3.4	The student will explore and learn the parts and function of the compound microscope.
S.5.4.3.5	The student will use and handle the compound microscope properly.
S.5.4.3.6	The student will explore and learn the parts and function of the dissecting microscope.
S.5.4.3.7	The student will use and handle the dissecting microscope properly.
S.5.4.3.8	The student will analyze the importance of the use of microscopes in different fields of study and careers.

Strand 5: Scientific Inquiry

Standard 1: The student applies scientific skills and follows the scientific method throughout the units and especially in the science fair project. ALL UNITS. UNIT 3: SCIENCE FAIR PROJECT	
Benchmark Code	Benchmark
S.5.5.1.1	The student will observe, predict, hypothesize, classify, make and use models, identify and control variables, experiment, compare and contrast, define operationally, measure, collect, record and analyze data, infer/explain and communicate results in different activities in and outside school.
S.5.5.1.2	The student will give use different ways scientists investigate natural phenomena and identify processes all scientists use, such as collections of relevant evidence, the use of logical reasoning, and the application of imagination in devising hypotheses* and explanations, in order to make sense of the evidence. *Hypothesis: an informed guess or tentative explanation for which there is not yet much evidence.
S.5.5.1.3	The student will know and follow the steps of the scientific method.
S.5.4.1.4	The student will locate information in reference books, back issues of newspapers and magazines, CDs, DVDs and computer databases.
S.5.4.1.5	The student will select tools, such as cameras, cell phones, iPods, iPads, among others and social media for capturing and communicating information and results.
S.5.4.1.6	The student prepares tables and graphs, identify relationships they reveal and explains findings and can relate how he/she conducts investigations to how the scientific enterprise functions as a whole.

S.5.4.1.7	The student will recognize and explain that hypotheses are valuable, even if they turn out not to be true, they lead to meaningful investigations.
S.5.4.1.8	The student will understand that computers and other appliances have become invaluable in science because they speed up and extend people's ability to collect, store, compile, and analyze data; prepare research reports; and share data and ideas with investigators all over the world.
S.5.4.1.9	The student will identify technology as essential to science for such purposes as access to outer space and other remote locations, sample collection and treatment, measurement, data collection and storage, and computation and communication of information.
S.5.4.1.10	The student will analyze and interpret a given set of findings, demonstrating that there may be more than one good way to do so.
Standard 2: The student identifies applications of science in everyday life.	
S.5.4.1.11	The student will give examples of employers who hire scientists, such as colleges and universities, businesses and industries, hospitals, and many government agencies.
S.5.4.1.12	The student will identify places where scientists work, including offices, classrooms, laboratories, farms, factories, sports and natural field settings ranging from space to the ocean floor.
S.5.4.1.13	The student will conclude science is involved in every aspect of life.