

# Elementary Course List

## Kindergarten

**Kindergarten - Math Grade K A/B** - Math Grade K, Semester A, explores counting, counting objects, number sense, adding and subtracting through 5, geometric shapes, and measurement. The topics include counting to 40, counting up to 15 objects, modeling numbers with objects, using the number line, adding and subtracting within 5, identifying and sorting flat shapes, understanding which attributes are measurable, and identifying coins. Math Grade K, Semester B, explores number sense, counting and comparing numbers, adding and subtracting, geometric shapes, money, and data. The topics include counting to 100, adding and subtracting within 10 using different strategies, identifying groups of 10, ordering numbers on a number line, classifying objects, collecting data using picture graphs, identifying coins, and exploring three-dimensional shapes.

**Kindergarten - English Grade K A/B** - English Grade K, Semester A, offers a comprehensive introduction to language elements, firmly grounded in the Science of Reading. Through various strategies, students begin to develop as proficient and confident readers by combining phonemic awareness, phonics, fluency, vocabulary, and comprehension. The course emphasizes a structured phonics approach, systematically and explicitly teaching students the relationship between phonemes and graphemes. This learning is then applied as they begin to read short stories and poems. Students explore comprehension concepts, including character, setting, and plot in fiction, as well as main idea and key details in nonfiction texts. Interactive storybook readers enhance engagement, allowing students to listen to the story read aloud, which supports the development of listening comprehension and vocabulary. Assessments are designed to reinforce and evaluate students' understanding of reading skills and concepts, providing immediate feedback to guide their learning journey. English Grade K, Semester B, continues the exploration of foundational language concepts essential for early reading and writing, structured around the Science of Reading framework. It emphasizes the critical elements of phonemic awareness by teaching students to identify and blend sounds. Students also learn to recognize the structure of words and sentences, enhancing their syntactic and semantic understanding. Students develop reading comprehension skills in activities such as identifying the roles of authors and illustrators, understanding different text structures, and using textual evidence to ask and answer focused questions. Students are exposed to a variety of texts, including informational, historical, and opinion pieces, through interactive storybooks that can be read aloud to support listening comprehension and fluency. Writing instruction is integrated into projects that teach them about the writing process. These projects, focused on informational and research writing, develop students' ability to express ideas clearly and effectively, reflecting the Science of Reading's emphasis on the interconnectedness of reading and writing skills.

**Kindergarten - Science Grade K A/B** - Science Grade K, Semester A, examines basic scientific processes and methods. Those processes and methods are then used to identify the senses, classify matter, and describe energy, motion, and force. It also explores the engineering design process through designing a structure that will reduce the effects of the Sun on Earth. Science Grade K, Semester B, explores key characteristics of plants and animals and how they function in various settings, such as rainforests, deserts, rivers, and oceans. It also explores how plants and animals can change the environments in which they live. It will explore the components that make up Earth, and it will explore the various weather changes.

**Kindergarten - Social Studies Grade K A/B** - Social Studies Grade K, Semester A, explores students' roles and responsibilities as citizens within the context of civics, geography, economics, and history. Students will also learn about their own culture and how it impacts understanding of oneself and others, as well as be introduced to aspects of our National culture. Social Studies Grade K, Semester B, explores how to solve problems, the need for rules and laws, and how they help communities. Topics ask students to examine their place in the world and learn about the environment and what it is made up of. Lastly, it will explore American symbols, traditions, and holidays.

**Kindergarten - Art Grade K** - Art Grade K introduces the basic tools, elements, and principles of visual art. The course explores art forms such as drawing, painting, sculpture, and photography. Topics include lines, shapes, patterns, color, texture, and subject matter. In addition to examining how visual art can represent a culture, the course explores why artworks and museums are important to the community. The course concludes with the basics of critiquing visual artworks and the importance of distinguishing fact from opinion.

**Grades K-3 - Introduction to Computers** Grades K-3 provides essential background knowledge and practical instruction in the use of computers. Topics include how technology has shaped people and the world, how to be a safe and responsible digital citizen, and how to communicate and collaborate using digital tools. The course targets beginner-level skills in computer troubleshooting, keyboard use, word processing, slideshow software, spreadsheets, and basic internet skills.

**Kindergarten - Health Education Grade K** - Health Education Grade K explores physical, emotional, and social well-being through the exploration of health and safety behaviors. Topics include human growth and development, nutrition, hygiene, healthy habits, disease prevention, interpersonal communication, and personal safety. The course includes two projects: "Solve a Health Problem" and "Ready, Set, Health Goal!"

**Kindergarten - Physical Education Grade K A/B** - Physical Education Grade K, Semester A, introduces movements and motor skills important to maintaining a healthy body. The course explores movements done in place, such as curling, stretching, and bending, as well as movements that help students travel, such as running, skipping, hopping, leaping, jumping, and galloping. Topics include foundational motor skills like throwing, catching, dribbling, and kicking a ball. The course also teaches about nutrition, and good sports behaviors (safety, following rules, taking turns, and dealing with disagreements). Physical Education, Grade K, Semester B, reinforces locomotor movement concepts, including patterns, pathways, speeds, and start/stop signals. The course explores non-locomotor movements while stretching, rotating, extending, and flexing the body into wide, curled, and narrow body shapes, and explores how muscles help the body move when pushing, pulling, jumping, gripping, and climbing. Topics include foundational motor skills such as jumping rope, volleying, striking with a paddle or racket, striking with a bat, and striking with a golf club, as well as goal-setting, taking responsibility, sharing with others, and solving problems.

## 1st Grade

**1st Grade - Math Grade 1 A/B** - Math Grade 1, Semester A, explores number sense and counting skills, operations such as addition and subtraction, measurement, geometry, and data collection. The topics include skip counting, composing and decomposing numbers, strategies for adding and subtracting, word problems, comparing and ordering lengths, identifying coins and their values, classifying two-dimensional shapes based on their attributes, understanding parts of a whole, and collecting data to create bar graphs and picture graphs. Math Grade 1, Semester B, explores number sense and counting skills up to 120, operations such as addition and subtraction within 20, geometry, data collection, money, and telling time. The topics dig deeper into skip counting, finding place value, using strategies to fluently add and subtract within 10, and solving addition and subtraction word problems within 20. Topics also include finding the value of a collection of coins, classifying three-dimensional shapes based on their attributes, comparing numbers, collecting data to create bar graphs and picture graphs, telling and writing time to the hour and half-hour.

**1st Grade - English Grade 1 A/B** - English Grade 1, Semester A, begins with the fundamentals of literacy, emphasizing the Science of Reading's explicit instruction in phonological awareness. Students start by learning to write and articulate the alphabet. Students progress to a focused exploration of consonants and vowels, teaching them to recognize, pronounce, and utilize these sounds effectively in various word contexts. Students practice these skills by writing letters, words, and complete sentences, and by illustrating scenes inspired by their readings. Reading is a central component of the curriculum, featuring a diverse selection of texts including poetry, narrative fiction, and informational materials. Through these texts, students identify themes, characters, settings, events, and main ideas. They also analyze supporting details and discern the author's purpose, developing critical thinking and analytical skills. The course includes two narrative writing projects, which are designed to apply students' understanding of text structures and enhance their creative expression. These projects encourage students to apply their phonetic knowledge and comprehension skills to authentic writing tasks, demonstrating the interconnectedness of reading and writing, as endorsed by the Science of Reading principles. English Grade 1, Semester B, advances the literacy development of first-grade students by focusing on vocabulary expansion and phonological skills, key components of the Science of Reading. Students explore new words, experiment with sounds and syllables, and study the structure of well-crafted sentences. Reading comprehension is a central focus, with students engaging deeply with a range of texts. They learn to ask and answer questions about the content, draw conclusions, and

connect ideas across texts. Reading materials include poetry, fairy tales, informational texts, and opinion pieces. Writing is integrated through projects, including an informational writing project and an opinion writing project. These tasks are designed to reinforce students' understanding of text structures and encourage them to express their thoughts clearly and persuasively. Through these strategies, the course reinforces the interconnectedness of reading and writing and the importance of a systematic approach to literacy education as recommended by the Science of Reading.

**1st Grade - Science Grade 1 A/B** - Science Grade 1, Semester A, investigates and applies the engineering design process to the concepts of light and sound. The course examines objects based on their properties of matter and compares different life cycles and organisms. Motion, forces, and the flow of energy are also described in the course. Science Grade 1, Semester B, explores how living things stay alive and survive, how plants and animals help solve human problems, and how plants and animals help solve human problems. It describes various celestial objects, such as the sun, moon, and stars. Lastly, it will explain changes in daylight across different seasons and weather conditions, and describe natural resources.

**1st Grade - Social Studies Grade 1 A/B** - Social Studies Grade 1, Semester A, examines how a community functions and how each member contributes to the community for the common good through the study of civics, geography, economics, and history. Students will study their local community and learn about characteristics that define urban, suburban, and rural communities. Democratic principles and participation in government are introduced. Community resources, environment, change over time, and cause/effect are examined. Social Studies Grade 1, Semester B, examines who producers and consumers are, how the world economy works and what it entails, how the environment affects human life, and how humans affect the environment now and throughout history. Activities include researching how people and groups have protected the environment.

**1st Grade - Art Grade 1** - Art Grade 1 explores the basic tools, elements, and principles of visual art. The course explores art forms such as drawing, painting, sculpture, and photography. Topics include lines, shapes, patterns, color, texture, balance, imagery, symbol, and subject matter. In addition to examining how visual art can represent a culture, the course explores why artworks and museums are important to the community. The course concludes with critiquing visual artworks and determining what gives art value.

**Grades K-3 - Introduction to Computers Grades K-3** - Introduction to Computers Grades K-3 provides essential background knowledge and practical instruction in the use of computers. Topics include how technology has shaped people and the world, how to be a safe and responsible digital citizen, and how to communicate and collaborate using digital tools. The course targets beginner-level skills in computer troubleshooting, keyboard use, word processing, slideshow software, spreadsheets, and basic internet skills.

**1st Grade - Health Education Grade 1** - Health Education Grade 1 explores physical, emotional, and social well-being through the exploration of health and safety behaviors. Topics include human growth and development, nutrition, hygiene, healthy habits, disease prevention, interpersonal communication, and personal safety. The course includes two projects: "Solve a Health Problem" and "Ready, Set, Health Goal!"

**1st Grade - Physical Education Grade 1 A/B** - Physical Education Grade 1, Semester A, builds on the skills developed in kindergarten and helps students develop greater competency in movements and motor skills. The course explores warm-up and cool-down exercises, such as bending, stretching, twisting, and curling. Topics include more advanced skills in running, skipping, hopping, leaping, jumping, and galloping; dance and creating dance routines; gymnastics; obstacle courses; and the importance of nutrition. Physical Education Grade 1, Semester B, reinforces manipulative skills and provides practice and repetition to develop mature movement patterns. Topics include manipulative skills such as dribbling with the hands and feet, kicking, tossing, throwing overhand, catching, and striking with short- and long-handled implements. The course reinforces and expands on short and long rope jumping skills as well as the benefits of being active, following directions, food choices, food groups, the functions of the heart, trying challenging activities, accepting feedback, and playing well with others.

## 2nd Grade

**2nd Grade - Math Grade 2 A/B** - Math Grade 2, Semester A, explores fluently adding and subtracting within 100 using mental strategies; understanding addition and subtraction within 200 using concrete models or drawings and

strategies; and applying these addition and subtracting skills in solving one- and multi-step real-world problems; reading and writing numbers up to 1,200 in different forms; counting numbers up to 1,200 in 1s, 5s, 10s, and 100s; plotting, comparing and ordering numbers up to 1,200; and finally building the foundation for multiplication and division by making equal groups of objects. Math Grade 2, Semester B, explores number sense and counting skills up to 120, operations such as addition and subtraction within 20, geometry, data collection, money, and telling time. The topics dig deeper into skip counting, finding place value, using strategies to fluently add and subtract within 10, and solving addition and subtraction word problems within 20. Topics also include finding the value of a collection of coins, classifying three-dimensional shapes based on their attributes, comparing numbers, collecting data to create bar graphs and picture graphs, telling and writing time to the hour and half-hour.

**2nd Grade - English Grade 2 A/B** - English Grade 2, Semester A, rooted in the Science of Reading, offers comprehensive units of reading and language instruction. Each lesson begins with a phonics based component covering skills like decoding, blending, spelling patterns, and word endings. Spelling and sight words are integrated into each unit. Foundational language skills instruction provides guided and independent practice opportunities focused on parts of speech, sentence structure, word meanings and relationships. Reading selections include fables and folktales from diverse cultures, short stories, and a variety of poem types. Reading and writing topics demonstrate concepts such as character, setting, story structure, central message, point of view, dialogue, figurative and descriptive language. There is a project-based writing component to enhance language skills taught. English Grade 2, Semester B, based on the principles of the Science of Reading, presents in-depth units on reading and language arts. Each lesson begins with phonics-based instruction, addressing skills such as decoding, merging sounds, recognizing spelling patterns, and understanding suffixes. Integration of spelling and sight words occurs within every segment. Instruction in fundamental language skills includes both guided and solo practice, focusing on elements like parts of speech, constructing sentences, and understanding word definitions and connections. The reading materials span fables and folktales from a range of cultures, brief narratives, and assorted types of poetry. In exploring reading and writing, the curriculum highlights elements like character analysis, setting, plot structure, core themes, perspectives, conversational text, and the use of metaphorical and descriptive expressions. The curriculum incorporates a writing project component to bolster the language abilities covered.

**2nd Grade - Science Grade 2 A/B** - Science Grade 2, Semester A, digs deeper into the methods and tools scientists use. It explores the needs, life cycle, traits, and structures of plants and animals. That knowledge is then used to design a solution to a problem that will be tested and revised. Knowledge of matter, energy, motion, and forces is also gained through small experiments. Science Grade 2, Semester B, explores the structures of the human body, compares living things in different environments, and digs deeper into natural resources. Explorations include the different types of landforms and bodies of water, and how to map both. The course examines how Earth's surface is altered by weathering, erosion, earthquakes, volcanoes, hurricanes, and floods. It digs deeper into the weather, seasons, and objects in the sky, such as the sun and moon.

**2nd Grade - Social Studies Grade 2 A/B** - Social Studies Grade 2, Semester A, explores students' lenses, expanding their understanding of how their world is interconnected globally through the study of geography and economics. Students will develop a spatial understanding of the world around them, so they can understand how other cultures and civilizations are interconnected and have influenced who we are as a community, state, and Nation. United States history, world history, and civics will also be taught in a comparative context using various stories from the United States and around the world. Social Studies Grade 2, Semester B, examines who producers and consumers are, how the world economy works and what it entails, how the environment affects how humans live, and how humans affect the environment now and throughout history. Activities include researching how people and groups have protected the environment.

**2nd Grade - Art Grade 2** - Art Grade 2 explores the tools, elements, and principles of visual art from different cultures. The course explores art forms such as drawing, sketching, architecture, painting, sculpture, photography, and textile art. Topics include lines, shapes, patterns, balance, movement, rhythm, mood, repetition, expression, emphasis, theme, and solving design issues. The course concludes with the importance of community art and how to repurpose objects to create something new.

**Grades K-3 - Introduction to Computers** Grades K-3 - Introduction to Computers Grades K-3 provides essential background knowledge and practical instruction in the use of computers. Topics include how technology has shaped people and the world, how to be a safe and responsible digital citizen, and how to communicate and collaborate using digital tools. The course targets beginner-level skills in computer troubleshooting, keyboard use, word processing, slideshow software, spreadsheets, and basic internet skills.

**2nd Grade - Health Education Grade 2** - Health Education Grade 2 explores physical, emotional, intellectual, and social well-being through the exploration of health and safety behaviors. Topics include human growth and development; disease prevention; good hygiene; healthy habits; food and nutrition; physical activity; general health; health care; health effects of alcohol, tobacco, and drugs; interpersonal communication; and personal safety. The course includes two projects: “Make Decisions about Your Health” and “Set Short-Term Health Goals.”

**2nd Grade - Physical Education Grade 2 A/B** - Physical Education Grade 2, Semester A, provides instruction on a variety of movements and physical activities for good health and the chance to demonstrate those skills. Topics include warming up (stretches with curling, bending, and twisting), exercises for specific body parts, movements like rolling, hopping, skipping, jumping, sliding, and running, and the importance of nutrition. Basketball is introduced to develop dribbling, passing, throwing, and catching skills. Physical Education Grade 2, Semester B, expands on foundational movements and motor skills important to maintaining a healthy body. The course explores moderate and vigorous activities such as jogging and sprinting, traveling along different pathways, around, under, and over obstacles, and sports such as baseball, volleyball, and soccer, as well as different types of dances. Topics include foundational motor skills like striking, serving, dribbling, and kicking a ball, as well as moving to a beat and rhythm, and good sports behaviors such as safety, following rules, and sportsmanship.

## 3rd Grade

**3rd Grade - Math Grade 3 A/B** - Math Grade 3, Semester A, explores number sense; place values; operations such as addition, subtraction, and multiplication; measurement; and representing data. The topics include exploring numbers up to 100,000; using place value to plot, compare, and order numbers; rounding to the nearest tens and hundreds; using different strategies to add and subtract numbers up to 1,000; multiplication; finding area and perimeter; finding volume in liters and mass in grams and kilograms; using measurement and other data to create scaled pictures and bar graphs; and using scaled pictures and bar graphs to gather information and compare data sets. Math Grade 3, Semester B, explores arithmetic patterns, operations such as multiplication and division, geometry, fractions, perimeter, area, time, measurement, data, and finances. Topics include explaining arithmetic patterns using properties of operations, identifying types of geometric lines, composing and decomposing fractions, generating equivalent fractions, calculating the perimeter of polygons, and using multiplication to solve for area. Topics will also include reading and writing time to the nearest minute, measuring length in customary units, measuring liquid volume, mass, and temperature, interpreting and representing data on various graphs, and understanding concepts in personal finance.

**3rd Grade - English Grade 3 A/B** - English Grade 3, Semester A, rooted in the Science of Reading, offers comprehensive units of reading and language instruction. Each lesson begins with a phonics or language based component covering skills like sentence structure, parts of speech, syllabication, decoding, spelling patterns, word endings and relationships. Spelling and sight words are integrated into each unit. Reading selections include fables and folktales from diverse cultures, short stories, and a variety of poem types. Reading and writing topics demonstrate concepts such as character, setting, story structure, central message, point of view, dialogue, theme, figurative and descriptive language. There is a project-based writing component to enhance language skills taught. English Grade 3, Semester B, based on the Science of Reading principles, provides detailed units for both reading and language studies. Initiating each lesson is a section focused on either phonics or linguistic elements, enhancing abilities in areas such as parts of speech, sentence crafting, syllable division, decoding, recognizing spelling patterns, suffixes, and word interrelations. Integration of both spelling and recognition words is a key part of each module. The literary materials selected encompass fables and tales from various cultures, concise narratives, and diverse forms of poetry. The curriculum addresses reading and writing by exploring key literary elements including characters, settings, narrative framework, primary themes, perspectives, conversational writing, and the use of

symbolic and vivid language. Additionally, the course includes a project-based writing activity, aimed at reinforcing the language concepts introduced.

**3rd Grade - Science Grade 3 A/B** - Science Grade 3, Semester A, examines the states, properties, and changes that happen to matter. It also explores the forms of energy, investigates concepts of electricity and magnetism, and describes motion and forces. Knowledge of all these concepts leads to exploring the technological advancements that improve everyone's lives. Science Grade 3, Semester B, investigates plants and animals, and how traits are passed from parent to offspring. It examines how plants are sorted into flowering and nonflowering categories. Animal characteristics are described and grouped into major categories based on key traits. Topics include climate and weather, our solar system, and natural resources.

**3rd Grade - Social Studies Grade 3 A/B** - Social Studies Grade 3, Semester A, explores the geography, history, politics, and economics at the local, state, national, and tribal levels. Students will learn about working together as a community, government services, physical and cultural features of the North American region, resources, industry, and why people migrate within the United States and to the United States from other countries. Social Studies Grade 3, Semester B, explores how to use sources to learn about the First Peoples to construct a narrative of American Indian Nations. Explorations include topics of the Pueblo people, influential people, and groups from some states. Activities include making an argument about the past based on reasoning, examples, and details from sources, as well as constructing a narrative of explorers and settlers in the Southwest United States to describe the expansion into the West.

**3rd Grade - Art Grade 3** - Art Grade 3 explores the tools, elements, and principles of visual art from different cultures. The course explores interpreting messages in art forms such as drawing, sketching, architecture, painting, illustration, sculpture, photography, and textile art. Topics include lines, shapes, patterns, balance, movement, rhythm, mood, repetition, expression, emphasis, theme, and solving design issues. The course projects and portfolio encourage evaluation of personal, professional, and community art.

**Grades K-3 - Introduction to Computers Grades K-3** - Introduction to Computers Grades K-3 provides essential background knowledge and practical instruction in the use of computers. Topics include how technology has shaped people and the world, how to be a safe and responsible digital citizen, and how to communicate and collaborate using digital tools. The course targets beginner-level skills in computer troubleshooting, keyboard use, word processing, slideshow software, spreadsheets, and basic internet skills.

**3rd Grade - Health Education Grade 3** - Health Education Grade 3 explores physical, emotional, intellectual, and social well-being through the exploration of health and safety behaviors. Topics include human growth and development; disease prevention; good hygiene; healthy habits; food and nutrition; physical activity; general health; health care; health effects of alcohol, tobacco, and drugs; interpersonal communication; and personal safety. The course includes two projects: "Make Decisions about Your Health" and "Set Short-Term Health Goals."

**3rd Grade - Physical Education Grade 3 A/B** - Physical Education Grade 3, Semester A, provides instruction on a variety of movements and physical activities. The course covers running, skipping, hopping, and leaping, with an emphasis on good form, balance, and gymnastic sequences. Topics include the effects of physical activity on the body, the importance of good nutrition and quality food, reading nutrition labels, ways to strengthen specific muscle groups, the importance of warming up and cooling down, and instruction in basketball. Physical Education Grade 3, Semester B, explores health-related and skill-related activities to improve fitness and performance in sports such as table tennis, baseball, volleyball, and soccer, as well as in different types of dance. Topics include a review of good sportsmanship, following rules, and how physical activity with others can create positive social interactions.

## **4th Grade**

**4th Grade - Math Grade 4 A/B** - Math Grade 4, Semester A, addresses concepts related to place value, operations with whole numbers and decimals, and data. The instruction covers identifying and using place value for calculations and rounding whole numbers; adding, subtracting, multiplying, and dividing multi-digit whole numbers; adding and subtracting decimals; using operations to solve word problems; representing and interpreting data; and applying mathematical processes and understanding to solve word problems. Math Grade 4, Semester B,

focuses on modeling and solving within a variety of topics. These topics include fractions, geometric shapes, angles, and measurement. It explores comparing fractions, converting fractions to decimals, representing fractions on a number line, adding and subtracting fractions, and multiplying fractions. The instruction also focuses on identifying geometric shapes and angles and measuring time, length, weight, and volume, and applying these skills to real-world scenarios and word problems.

**4th Grade - English Grade 4 A/B** - English Grade 4, Semester A, provides instruction and practice with informational and opinion texts and with foundational language skills and vocabulary. Concepts and/or topics regarding informational and opinion text include key ideas, supporting details, author's purpose, text features, and structure, as well as summary and paraphrase. Additional tasks for opinion text include identifying the audience, the opinion or claim, and the reasoning and evidence. A research project provides instruction and practice on distinguishing paraphrasing from plagiarism. The unique features of historical, scientific, technical, and informative texts are analyzed. Foundational language skills instruction includes guided and independent practice opportunities for recognizing and revising fragments and run-ons, using roots and affixes, and determining word meaning through context clues. Recognizing high-frequency words, spelling grade-appropriate words correctly, and oral reading, as well as exploration of digital text and reference materials. English Grade 4, Semester B, explores literary works such as fiction, drama, and poetry. Reading analysis includes examining plot elements, theme, summary, grammar, point of view, perspective, and figurative language, as well as literary comparison of different types of texts. Writing projects include a personal narrative project.

**4th Grade - Science Grade 4 A/B** - Science Grade 4, Semester A, examines the scientific method, solving problems through engineering, matter, energy, and magnetism. It will also explore space, including Earth's place and movement, as well as the different planets and objects in our solar system. Science Grade 4, Semester B, examines plant and animal organisms, specifically their structures, functions, heredity, and adaptations, as well as their relationship to their environment. Finally, it explores planet Earth. Topics include rock formations, soil properties, fossil fuels, how the Earth's surface is shaped, Earth's features and systems, and how the Earth impacts humans.

**4th Grade - Social Studies Grade 4 A/B** - Social Studies Grade 4, Semester A, examines the earliest periods of America through the study of history, geography, and economics. The course includes a study of the settlement patterns, lifestyles, and governments of early American Indian societies. European exploration and settlement of North America, as well as interaction with American Indian groups, are explored. Social studies skills are applied, and primary sources, maps, graphs, and timelines are used to analyze these periods of early American history. Social Studies Grade 4, Semester B, explores the history, geography, and economics of the original 13 colonies of the United States. This includes indentured servitude, culture mixing, and governments. Trade between Europe, Africa, and the Americas is analyzed so students understand what was traded and the effects of these trades on the colonies. Finally, the New England Colonies, Middle Colonies, and Southern Colonies are examined so students understand the specific location, economy, government, religion, and culture of each area.

**Grades 4-5 - 2D Media Artwork Grades 4-5** - 2D Media Artwork Grades 4-5 introduces concepts and methods for creating digital art and design. The course explores design principles, common applications of digital art, and techniques for brainstorming and developing artistic ideas. Topics include artistic media such as digital photography, 2D computer graphics, web design, and digital illustration, as well as relevant tools, techniques, and skills of each medium. Supporting topics include meaning, audience, impact, and ethics in the creation and use of digital media. Course projects include creating a digital photograph and a web page.

**Grades 4-5 - 3D Graphics and Video Grades 4-5** - 3D Graphics and Video Grades 4-5 explores digital art and design, how life relates to art, and how individual works of art are interpreted. Topics include design principles, types and common applications of digital artwork, techniques for brainstorming and developing an artistic idea, and artistic media (3D computer graphics, animation, digital video, and digital audio). Supporting topics include expression, purpose, meaning, ethics, testing, critique, improvement, presentation, and distribution in the creation and use of digital media. Course projects include creating a digital animation and a piece of digital audio.

**Grades 4-5 - Computer Applications Grades 4-5** - Computer Applications Grades 4-5 explores online networks and software. Topics include word processing software, organizing data, selecting the correct digital tools,

analyzing data, visual representation of data, and troubleshooting software and operating systems. Additional topics include safe digital citizenship, data security, intellectual property, file management, and intellectual property rights.

**Grades 4-5 - Keyboarding** Grades 4-5 focuses on the skills needed to improve typing speed and accuracy in order to format, type, and edit letters, articles, and reports. Topics include proper hand and finger placement, posture, the touch-typing technique, file management, reliable electronic sources, keyboarding, and computer terminology. Course projects include a log to track typing progress and typing a research article.

**Grades 4-5 - Scratch Coding** Grades 4-5 - Scratch Coding introduces the basics and logic of programming language in Scratch. Topics include introducing and using the different tools in Scratch; creating programs that include loops, variables, lists, or conditionals; and identifying and fixing errors in a program. The course concludes with putting the tools and concepts all together to create a larger program.

**4th Grade - Health Education** Grade 4 - Health Education Grade 4 explores physical, mental, emotional, intellectual, and social well-being through the exploration of health and safety behaviors. Topics include understanding the human body, good hygiene, food and nutrition, physical activity, disease and injury prevention, gangs and bullying, the effects of harmful substances, interpersonal skills, managing feelings, and personal safety. The course includes two projects: "Make a Health Decision" and "Set a Personal Health Goal."

**4th Grade - Physical Education** Grade 4 A/B - Physical Education Grade 4, Semester A, promotes well-being through physical activity and includes practice of skills used in sports such as basketball and volleyball. Sport and game topics include moving and balancing the body; catching, throwing, dribbling, volleying, and striking; combining actions to play complex games; executing simple offensive strategies; and engaging in game experiences with peers. Personal fitness topics include setting fitness goals and developing routines with skills such as running and jumping rope. Physical Education Grade 4, Semester B, combines foundational movements and motor skills, including jumping, landing, traveling, and balancing, to create and perform a gymnastics sequence. Topics include manipulative skills needed in baseball (throwing, catching, and batting) and in field hockey and soccer (passing, dribbling, and scoring), elements of folk and partner dances, as well as offense and defense strategies, good sportsmanship, hydration, analyzing fitness assessment results, and the benefits of exercise.

## 5th Grade

**5th Grade - Math** Grade 5 A/B - Math Grade 5, Semester A, addresses concepts related to place value, operations with multi-digit whole numbers, and operations with decimals. The instruction covers identifying and using place value for calculations and rounding decimals; multiplying and dividing multi-digit whole numbers by two-digit numbers; adding, subtracting, multiplying, and dividing decimals; and applying mathematical processes and understanding to solve word problems. Math Grade 5, Semester B, explores number sense, geometric principles, data analysis, and patterns. Number sense topics include adding, subtracting, multiplying, and dividing fractions. Topics include describing and applying the order of operations to evaluate expressions and solve equations. Geometry topics include finding the perimeter and area of two-dimensional shapes and the volume of three-dimensional figures. Data analysis includes exploring various graphs and determining the mean, median, mode, and range. The use of models and problem-solving skills recurs throughout this course as students apply mathematical reasoning to real-world scenarios.

**5th Grade - English** Grade 5 A/B - English Grade 5, Semester A, provides instruction and practice with informational and opinion texts along with foundational language skills. Concepts and/or topics regarding informational and opinion text include key ideas, supporting details, author's purpose, author's perspective, text features and structure, inferences, evidence, summary, and paraphrase. Historical, scientific, and technical texts, as well as digital texts, are included for analysis. Foundational language concepts and/or topics include capitalization, punctuation, sentence types, parts of speech, verb tense, and context clues. Instruction and practice with spelling high-frequency words and syllabication are included, as well. Writing projects include an informational essay and a research project. English Grade 5, Semester B, explores the differences between literal language, such as determining word meaning from roots and affixes using reference materials, and figurative language, including the use of similes, metaphors, idioms, proverbs, and puns. Readings focus on plot, theme, point of view, and

perspective. Reading selections include poetry, drama, folktales, and myths. Writing projects include a personal narrative project and a multimedia project.

**5th Grade - Science Grade 5 A/B** - Science Grade 5, Semester A, identifies important scientific discoveries and the scientific method, describes the engineering design process, and explains different types of technology found in everyday life. It also examines matter, energy, forces, magnetism, and concludes by explaining astronomy and the solar system. Science Grade 5, Semester B, investigates structures and functions of organisms, ecology and evolution, Earth's spheres, the geosphere, engineering and natural resources, and the Sun, Moon, and Earth Systems. Activities include identifying plant and animal anatomy; explaining the flow of matter; describing climate change, evolution, weathering and erosion, seasons, and the moon cycle; and predicting, modeling, and observing across these topics to draw conclusions.

**5th Grade - Social Studies Grade 5 A/B** - Social Studies Grade 5, Semester A, begins with a study of the causes and effects of the American Revolution, investigates how British taxation following the French and Indian War created the discontent that led colonists to declare independence, and then explores the causes of the drafting of the US Constitution. The articles of the Constitution, the powers of each branch of government, and the rights of citizens protected by the Bill of Rights are examined. Social studies skills are applied, and primary sources, maps, graphs, and timelines are used to analyze this period of United States history. Social Studies Grade 5, Semester B, explores United States expansion, The Civil War, Reconstruction, Westward expansion, The Transcontinental Railroad, Economic and Urban Changes, and reform movements. Investigations include key historical events of the topics arranged chronologically, while also refining map skills, working with timelines and graphs, and analyzing causes and effects.

**Grades 4-5 - 2D Media Artwork Grades 4-5** - 2D Media Artwork Grades 4-5 introduces concepts and methods for creating digital art and design. The course explores design principles, common applications of digital art, and techniques for brainstorming and developing artistic ideas. Topics include artistic media such as digital photography, 2D computer graphics, web design, and digital illustration, as well as relevant tools, techniques, and skills of each medium. Supporting topics include meaning, audience, impact, and ethics in the creation and use of digital media. Course projects include creating a digital photograph and a web page.

**Grades 4-5 - 3D Graphics and Video Grades 4-5** - 3D Graphics and Video Grades 4-5 explores digital art and design, how life relates to art, and how individual works of art are interpreted. Topics include design principles, types and common applications of digital artwork, techniques for brainstorming and developing an artistic idea, and artistic media (3D computer graphics, animation, digital video, and digital audio). Supporting topics include expression, purpose, meaning, ethics, testing, critique, improvement, presentation, and distribution in the creation and use of digital media. Course projects include creating a digital animation and a piece of digital audio.

**Grades 4-5 - Computer Applications Grades 4-5** - Computer Applications Grades 4-5 explores online networks and software. Topics include word processing software, organizing data, selecting the correct digital tools, analyzing data, visual representation of data, and troubleshooting software and operating systems. Additional topics include safe digital citizenship, data security, intellectual property, file management, and intellectual property rights.

**Grades 4-5 - Keyboarding Grades 4-5** - Keyboarding Grades 4-5 focuses on the skills needed to improve typing speed and accuracy in order to format, type, and edit letters, articles, and reports. Topics include proper hand and finger placement, posture, the touch-typing technique, file management, reliable electronic sources, keyboarding, and computer terminology. Course projects include a log to track typing progress and typing a research article.

**Grades 4-5 - Scratch Coding Grades 4-5** - Scratch Coding introduces the basics and logic of programming language in Scratch. Topics include introducing and using the different tools in Scratch; creating programs that include loops, variables, lists, or conditionals; and identifying and fixing errors in a program. The course concludes with putting the tools and concepts all together to create a larger program.

**5th Grade - Health Education Grade 5** - Health Education Grade 5 explores physical, mental, emotional, intellectual, and social well-being through the exploration of health and safety behaviors. Topics include understanding the human body, good hygiene, food and nutrition, physical activity, disease and injury prevention,

gangs and bullying, the effects of harmful substances, interpersonal skills, managing feelings, personal safety, the reproductive system, puberty, personal hygiene, and healthy relationships. The course includes two projects: "Make a Health Decision" and "Set a Personal Health Goal."

**5th Grade - Physical Education Grade 5 A/B** - Physical Education Grade 5, Semester A, explores both exercise basics and specific sports. Topics include fundamental aspects of physical activity (safety tips, proper form, and good sportsmanship), personal fitness, and emphasize the importance of regular exercise to encourage lifelong healthy activity. Sports in the course include gymnastics, dance, soccer, baseball, and basketball. Physical Education Grade 5, Semester B, refines and combines foundational movement and motor skills in various sports and activities. Topics include elements of gymnastics, such as weight transfer and jumping to create a routine, manipulative skills of throwing and catching to play a game with a partner, as well as skills for volleyball, field hockey, and tennis. The course also explores being a good sport, giving feedback, sun and water safety, eating healthy, the benefits of exercise, tracking exercise, heart rate, and testing physical fitness.

### **Additional Course**

**Foundational - Foundations in Reading** - Foundations in Reading reviews reading skills that build a strong foundation for effective reading. Topics include: a review of sounds in words by pronouncing initial, medial vowel, and final phonemes by segmenting and blending phonemes. The course begins with reading one-syllable words and moves on to multisyllable words, practicing decoding words in isolation and in the context of sentences, poems, stories, and informational texts. Reading fluency focuses on reading for accuracy, rate, expression, purpose, and understanding.