**Grade 8 Math:** Students are introduced to the foundational skills needed for more advanced mathematics courses and develop the skills needed to solve mathematical problems. Students perform operations involving numbers, sets, and variables; know the basic properties of real numbers; solve and use first degree equations and inequalities; understand functions, relations, and graphs; solve and use systems of equations and inequalities; solve problem involving integral exponents; solve problems involving polynomials and rational algebraic expressions; factor polynomials; simplify rational and irrational expressions; solve and use quadratic equations.

Grade 8 ELS (English Language Skills): Grade 8 English Language Skills expands grammar skills needed for effective writing. The essay is the focus of higher level skills in these lessons on homographs, homonyms, direct/indirect objects, semi-colons, colons, hyphens, idioms, transitions, complex sentences and paragraphs.

**Grade 8 Reading:** Grade 8 Reading emphasizes reading fluency to ensure students are prepared for high school English Literature courses. Concepts include elements of literature, poetry, idioms, analogies, the biography, the autobiography, author's purpose, point of view, character study, analogies, and metaphors. Students are required to write eight (8) book reviews from book selections at their appropriate reading level.

**Grade 8 Social Studies:** Grade 8 Social Studies explores critical events and notable people throughout American History. These include, but are not limited to, America to 1620, Christopher Columbus, Queen Isabella, John Peter Zenger and his newspaper business, George Washington, Benedict Arnold, Matthew Lyon, the American Revolution, America in the 1820's, the Jacksonian Era, America during 1850-1875, and the Gilded Age 1870-1900.

**Grade 8 Science:** *Part 1:* Earth Science: Students develop elementary concepts about the earth, its materials, processes, and history. Concepts include the scientific method, the earth's interior, old and new mountains and their formation, rocks and minerals, the causes and consequences of earthquakes, volcanoes, and other crustal movements, old and young rivers and their formation, types of erosion and the results, glacial types and their effects on land formation, the hydrological cycle, ocean currents, changing weather and seasons, the geological time frame, fossil types, scientific theories of the origin of the universe, the Earth/moon relationship, renewable and non-renewable resources, energy sources and their use, map reading skills in everyday applications, and the earth sciences interact with technology and society.

Part 2: Life Science: Students are introduced to cell biology, basic principles of genetics, biological changes through time, classification and taxonomy, structure and function of plants, structure and function of animals, structure and function of the human body, and ecological relationships. Concepts include cell organelles, basic genetic concepts

(including the Punnett square), biological changes over time, the classification systems, structures and function of viruses, monerans, and protists, vascular and nonvascular plants, vertebrate and invertebrates, major human systems, the relationships among individuals, populations, communities, and ecosystems, and how biology interacts with technology and society.

**Grade 7 Math:** Grade 7 Math is an overview of core math skills that prepares students for Algebra and Geometry. Skills include number theory, decimals, data, statistics, fractions, algebraic expressions, equations, ratio and proportion, percent, integers, graphing, rational numbers, probability, geometry, measurement, algebraic patterns, relations, and functions.

**Grade 7 Reading:** Grade 7 Reading enables students to comprehend and analyze narrative and expository text in order to communicate more effectively. The broad scope of reading skills includes main idea and supporting details, analogies, figurative language, context clues, classifying, sequencing, cause and effect, inference, summarizing, point of view, predicting outcomes, text/graphic organizers, and reference materials. Students are required to write eight (8) book reviews from book selections at their appropriate reading level.

**ELS (English Language Skills):** Grade 7 Language Skills combines grammar and writing as a complement to the reading course. Using an across the curriculum format, grammar and usage, parts of speech,

spelling, affixes, punctuation, sentence and paragraph structure, revision, and editing are emphasized to increase effective writing skills.

**Grade 7 Social Studies:** Civics will provide a comprehensive background for the understanding of United States citizenship and the foundations and operation of American government. Students will apply this understanding to current event topics relevant to our nation.

Grade 7 Science: Grade 7 Science includes introductory Earth/Space Science and Physical Science. Earth Space Science focuses on planets, asteroids, comets, galaxies, stars, meteors, constellations, and the sun. Earth Science focuses on earthquakes, volcanoes, metamorphosis, weather, climate, tides, currents, water cycle, pollution, and cosmic affects. Physical Science introduces types of measuring tools, motion, energy, electricity, magnetism, light, and sound waves.

**Grade 6 Mathematics:** Grade 6 Mathematics students practice setting up and evaluating mathematical problems involving whole number operations, decimal operations, integers, equations, properties of addition and multiplication, order of operations, absolute value, expressions, equations, inequalities and relevant application problems.

**Grade 6 Language Arts: Reading** Grade 6 Reading comprehension, vocabulary, fluency and writing skills are increased and reinforced through cross disciplinary selections. Various reading strategies are incorporated into the readings about plants, animals, people, and ideas. Students are

required to write eight (8) book reviews from book selections at their appropriate reading level.

**ELS (English Language Skills):** Grade 6 Language Arts builds on previously learned grammar skills to introduce new grammar concepts. Students improve writing skills through the use of correct sentence structure, increased vocabulary, mechanics, editing, figurative language and using reference materials.

**Grade 6 Social Studies:** Grade 6 Social Studies engages students through geography activities such as mapping and directional skills, locating climate zones, identifying world biomes, identifying Earth's surface patterns, plant and animal habitats of the world's regions.

**Grade 6 Science:** Grade 6 Science students explore introductory physical, life and Earth science concepts by engaging in research and inquiry based activities that result in the creation of an online portfolio illustrating mastery of the course content.

#### **Grade 5 Course Descriptions**

**Mathematics:** Grade 5 Mathematics students learn new key math skills and reinforce previously learned skills needed for secondary math courses. Skills include whole numbers, decimals, number theory, fractions, percent,

probability, data analysis, making and using charts and graphs, Geometry, and measurement.

Reading: Grade 5 Reading includes stories that develop skills in comprehension, vocabulary, fluency and writing. Comprehension skills include critical thinking, main idea, recalling details, inference, drawing conclusions, sequencing, making connections, expressing opinions, character analysis, maps, categorizing. Vocabulary skills include context clues, synonyms, antonyms, comparatives and superlatives, affixes, root words, and compound words. Fluency skills include reading with expression and correct phrasing. Writing skills include figurative language, dialogue, responses, expressing an opinion, sentences, and paragraphs. Students are required to write eight (8) book reviews from book selections at their appropriate reading level.

ELS (English Language Skills): Grade 5 Language Skills reinforce previously learned skills and introduces new concepts that enhance spelling, reading, grammar, and writing. Spelling skills include phonics, visual memory and discrimination, compound words, word endings, affixes, roots and derivatives. Reading skills include vocabulary, context clues, sequencing, synonyms, and antonyms. Grammar skills include punctuation, types of sentences, conjunctions, parts of speech, verb tenses, capitalization, quotations, and double negatives. Writing skills include acrostic poems, narrative, persuasive, expository, express opinion, letter writing, compare and contrast, organizing, and charting.

**Social Studies:** Grade 5 Social Studies students engage in an across the curriculum format to broaden interests in self-awareness, family, school, community, country, people, holidays, and family or cultural traditions.

Science: Grade 5 Science students learn to cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text. They determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings. Students read and comprehend science informational texts to determine or clarify the meaning of unknown and multiple-meaning scientific words and phrases, demonstrating understanding of scientific word relationships. Students acquire and use accurately grade-appropriate general academic and domain-specific words and phrases, gather vocabulary knowledge when considering a word or phrase important to comprehension or expression, and draw evidence from literary or informational texts to support analysis, reflection, and research

### **Grade 4 Course Descriptions**

**Mathematics:** Grade 4 Mathematics students gain a solid foundation in multiplication, division, factors, statistics, patterns, comparison, decimals, measurement, data and analysis. Students use all skills to solve application problems.

**Reading:** Grade 4 Reading presents a variety of fiction and non-fiction reading selections that include skill focused activities in comprehension,

vocabulary and fluency. Phonics, grammar, and spelling are interwoven into the lessons. Comprehension skills include recalling details, making connections, sequencing, character traits, categories, drawing conclusions, inference, graphs, critical thinking, context clues, realism, fantasy, fact vs. opinion. Vocabulary skills include synonyms and antonyms, figurative language, word meanings, analogies, context, homophones. Fluency skills include reading with expression and accuracy. Students are required to write eight (8) book reviews from book selections at their appropriate reading level.

ELS (English Language Skills): Grade 4 English Language Skills introduces new grammar and writing skills as a complement to reading. Short reading selections are the theme for each lesson in spelling, grammar and writing. Reading and vocabulary skills are interwoven into the lessons. Spelling skills include phonics, vowel sounds, consonants, blends, digraphs, compound words, r-controlled, affixes, auditory discrimination. Grammar skills include types of sentences, punctuation, parts of speech, possessive, tenses, quotations, and titles. Writing skills include sentence and paragraph structure through several types of writing experiences.

**Social Studies:** Grade 4 Social Studies is an introduction to the United States government and its presidents. Students expand their map skills to other parts of the world.

**Science:** Grade 4 students are introduced to a variety of science areas as a foundation for content specific science topics. Activities provide hands-on

lessons that can be done at home, as well as text assignments, on the following topics: fossils, animals, birds, insects, human body, nutrition, plants, solar system, earth, weather, magnets, electricity, and machines.

#### **Grade 3 Course Descriptions**

**Mathematics:** Grade 3 Mathematics builds number theory skills in place value, expanded form, rounding, ordering, addition, subtraction, multiplication, division, fact families, fractions, decimals, time, money, shapes, measurement, area, volume, and graphs.

Reading: Grade 3 Reading students engage in developing active reading skills, through fiction and non-fiction short stories. Comprehension, vocabulary and fluency are the primary skills, with phonics and grammar interwoven into the lessons. Comprehension skills include recalling details, drawing conclusions, inference, categorizing, sequencing, main idea, critical thinking, expressing opinions, predictions, comparison, making connections, story structure. Vocabulary skills include synonyms and antonyms, multiple word meanings, rhyme, homophones. Fluency encourages reading with expression, phrasing and accuracy. Students are required to write eight (8) book reviews from book selections at their appropriate reading level.

**ELS (English Language Skills):** Grade 3 English Language Skills motivates students with interesting lessons that complement reading. Spelling skills include vowel and schwa sounds, compound words. Grammar skills include parts of speech, helping verbs, punctuation,

comparative, superlative, tenses. Lessons include writing forms of the following: lists, postcards, a narrative, a summary, a report, descriptions, directions and sentences.

**Social Studies:** Grade 3 Social Studies students participate in relevant studies on communities in early American history, shaping the country, and the state in which they live. Useful map skills include symbols, legends, compass rose, directions, mileage charts, weather, and geographical features.

**Science:** Grade 3 Science draws the student in with a story format. Reading skills are reinforced, as the student's curiosity is addressed in science topics that include mammals, birds, weather, solar system, heat, light, sound, human body.

#### **Grade 2 Course Descriptions**

**Mathematics:** Grade 2 Mathematics reinforces previously learned skills and introduces new concepts. Skills include place value, number words, expanded form, rounding, ordering, addition, subtraction, regrouping, multiplication, division, shapes, fractions, time, money, graphs.

**Reading:** Grade 2 Reading delights the reader with active stories. Skill activities relate to each story in the areas of phonics, comprehension, vocabulary, and fluency. Phonics, grammar, and writing skills are interwoven into the lessons. Phonics skills include short and long vowel sounds, blends, digraphs, rhyme. Comprehension skills include recalling

details, drawing conclusions, sequencing, making connections, following directions, diagram. Vocabulary skills include multiple word meanings, number words, synonyms and antonyms, categories. Fluency skills include reading with expression and accuracy. Students are to write eight (8) book reports from book selections at their appropriate reading level.

**ELS (English Language Skills):** Grade 2 English Language Skills complements the reading course, with short selections that incorporate spelling, grammar, reading, and writing skills. Spelling skills include silent "e", word endings, vowel combinations, blends, digraphs, double consonants, and alphabetical order. Grammar skills include proper nouns, complete sentences, contractions, possessive, parts of speech, and punctuation. Reading skills include context clues, word meanings, word families, picture clues, rhyming words. Writing skills include note-taking, sentences, friendly letter, pre-writing, organizing, listing, and narrative.

**Social Studies:** Grade 2 Social Studies explores history, citizenship, community, geography, and map skills. Students use a variety of skills as they learn, such as labeling, matching, charting, following directions making connections, road signs, keys, and legends.

**Science:** Grade 2 Science draws the student in with a story format. Students read and write to learn about seasons, senses, plants, animals, birds, fish, reptiles, amphibians, insects, butterflies, health, and human body.