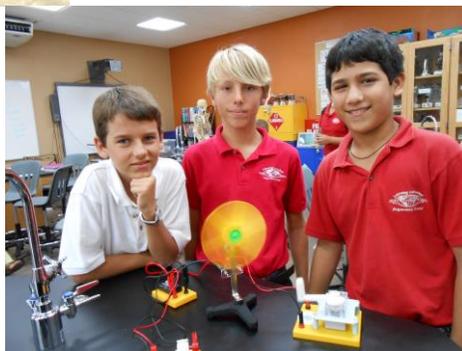




Curriculum Guide



Executive Director.....	Pouneh Alcott
Headmaster.....	Daunesh Alcott
Dean of Academics.....	Mark Beland
Dean of Students.....	Danny Fleming
Middle School Coordinator.....	Preeti Notani

Learning Unlimited Preparatory School

MISSION, PHILOSOPHY AND OBJECTIVES

Mission Statement

Learning Unlimited Preparatory School is founded on the principle of developing each student's potential to the fullest within a safe, positive, and academically challenging environment. The LUPS community is committed to cultivating the value of scholarship, creativity, moral and ethical development and the fellowship of a diverse student body. Recognizing the variety of ways in which students learn, the LUPS faculty and staff strive to empower them to be life-long learners and responsible, compassionate citizens of the world.

Philosophy and Objectives

In order to accomplish the school's mission, Learning Unlimited Preparatory School is committed to creating and maintaining a challenging and rigorous program including (but not limited to) the following:

- Fostering a strong sense of individual and community responsibility and self-confidence.
- Cultivating a lifelong appreciation of learning, resourcefulness and individual potential.
- Providing broad-based, integrated, experiential learning in basic academic disciplines in preparation for higher learning.
- Promoting global awareness and connectivity.
- Providing leadership opportunities.
- Developing critical and creative thinking and problem solving skills
- Promoting ethical and moral conduct respecting cultural diversity and individual differences preparing students for global citizenship.
- Developing communication, research and organizational skills.
- Offering opportunities to every member of the school community to be a partner in learning

Learning Unlimited Preparatory Schools admit students of any race, color, creed, religion, sex, or national origin to all privileges, rights, programs, and activities. The school does not discriminate on basis of race, color, creed, religion, sex, or national origin in administration of educational policies, scholarships, or student activity programs. This statement also applies to the schools' personnel and employment policies.

MIDDLE SCHOOL COURSE REQUIREMENTS and OVERVIEW:

Curriculum Scope and Sequence - Grade 6

Grade 6

English/ Language Arts

Math

Ancient Civilizations

Science

Introduction to Spanish

Enrichment Rotation - Technology, Art, Performing Arts, PE, Health

Course Descriptions - Grade 6

English/Language Arts

In this course students work on developing mastery of the conventions of grammar, usage, mechanics, and style and apply them in their own writing. Writing experiences include expository, descriptive, narrative, and persuasive writing and a simple research paper. In addition to writing and grammar, the students are introduced to a rich mix of classic and modern literature through the study of various short stories and novels. Their vocabularies are broadened and developed not only through the literature, but also through the use of the Everyday Spelling series. Grammar workbooks are used to reinforce the grammar skills taught, and these are directly applied to the students' writing practice. Students read a broad range of literary works, including but not limited to *The Call of the Wild*, *Across Five Aprils*, and *The Martian Chronicles*.

Math

The course is designed to give students a solid foundation in basic mathematical skills. Concepts included in the course are problems involving decimals and fractions, the metric system, basic geometry, algebraic language, decimals, fractions, measurement, rates, patterns and number theory, equations, graphs, probability, basic statistics, and percentages. These concepts are reviewed to provide better retention. Solving simple equations with variables, integers and the coordinate plane are introduced.

Ancient Civilizations

This course of study focuses on geography and history, including important places, people, discoveries, inventions, and revolutions that helped shape the world today. The class covers dominant empires, forms of government, economic systems, and how people have evolved as a whole civilization. Other topics covered include military powers, specific time periods, and the geography of our world.

Science

The sixth grade science course will incorporate topics from Life Science, Earth Science, Physical Science, and Health Science. This course may begin with classification of communities within our ecosystem, as well as the occurring changes and adaptations. Students continue to study cells and their relationship to heredity. Weather and climate will be explored, along with solar radiation and the solar system. Chemical properties also will be introduced, with the final emphasis of the course on the nervous system, global health, and nutrition. Laboratory experiments will coincide with the various units with an introduction to proper laboratory reports.

Spanish 6

The course introduces students who may or may not have had Spanish before to a set of new vocabulary terms, sentence structure, and grammar. A great deal of oral practice and visual cues are used to promote mastery of the new words and sentences. There is an attempt to have students begin to appreciate the diverse cultures of the countries language they are learning.

Enrichment Rotation:

Physical Education & Health 6

This course teaches students the value of physical exercise and discipline. Students are introduced to the various ways of staying healthy for a lifetime through physical activity. The course also focuses on character development and sportsmanship through team activities. Physical education courses teach students the rudiments of a number of sports and provide enjoyment and challenge.

Technology

Sixth grade students will be able at the end of the course to make a minimum improvement in typing speed and accuracy of at least five words per minute more than their first score taken at the beginning of the course. Average improvement curves range from 5-20 WPM adjusted for accuracy. Average adjusted scores at the end of the course range from 25-60 WPM. In the Middle School IT classes, the focus is to establish a foundation of basic computer skills. While promoting strong research capabilities students are also challenged to turn key functions, such as copy/cut & paste, save as/save, open and download into an ingrained habit. Students will begin to understand the basics of Microsoft Excel, Word and PowerPoint through the use of fun and exciting projects.

Art

The middle school art wheel is a fully comprehensive class that covers the basics of art. Students use a variety of mediums including graphite, clay, charcoal, and more. They will also learn about art history from the Greek and Romans up to the Impressionists. This hands-on course teaches the fundamentals of aesthetic appreciation and the skills to create a multitude of art work.

Performing Arts

This performing arts wheel course is designed to introduce students to a variety of productions. Students will practice movement and imitation skills, experience a number of dramatic stories, express character voices, and interpret a variety of scripts. Each student will participate in presentations, improvisations, productions, and theater games. Topics in traditional theater, music, film, and visual arts will be introduced.

Curriculum Scope and Sequence -- Grade 7

Grade 7

English/Language Arts

Math 7

World Geography-Western Hemisphere

Earth Science

Spanish & French

Electives - Technology, Art, PE, Health, Performing Arts

Course Descriptions - Grade 7

English / Language Arts

The seventh grade language arts curriculum is designed to promote the formal study of literature and written composition, exposing students to classical and modern writing forms. Students will write a series of compositions including a research paper, demonstrating the ability to produce complex sentences with a variety of sentence openings and embellishments. Grammar fundamentals will further augment the student's grasp of comprehensive writing. Participation in vocabulary studies will further aid the student in refining reading and writing skills. Students will also employ the use of a college-level dictionary and a thesaurus. Reading comprehending and translating real world problems and brainstorming a course of action is a large part of this course.

Math 7

This middle school course is designed to strengthen students' mathematics foundation before moving into either Pre-Algebra or Math 8 honors. Students also learn the skills necessary for success later in Algebra I. Topics include elementary algebraic equations, inequalities, and polynomials and graphing, as well as review and maintenance of basic math skills. These skills include computation with whole numbers, decimals, integers and rational numbers, solving equations, ratio and proportion, and working with percents. Additionally, students are further exposed to informal geometry, probability, statistics, and problem solving.

World Geography-Western Hemisphere

In this course students will learn about the geography of the world beginning with the basic skills and concepts and progressing through a study of each continent, its people, climate, and culture. Emphasis will be placed on understanding the five basic themes of geography and the effect of climate and topography on the people of each region. Projects assigned in this course will be geared to relevant life skills and creative opportunities.

Earth Science

This course exposes students to a study of the origin of the earth in our solar system and the forces of nature that constantly change its surface. The course uses five independently themed textbooks that cover the topics of Inside Earth, Earth's Changing Surface, Earth's Waters, Weather and Climate, and Astronomy.

Spanish 7

The goal of this course for students who choose to continue a study of Spanish is to help students develop comprehension skills in Spanish through listening and reading activities. At the end of the course, students will be able to understand some ideas and familiar details presented in clear, uncomplicated speech when listening. Additionally, some students will be able to understand short texts enhanced by visual clues when reading. As in all areas of foreign language study, an appreciation of Spanish culture will be a component of the course. Students are expected to participate in the Foreign Language Fair as one major project of the course.

French 7

The goal of this course for students who choose to continue a study of French is to help students develop comprehension skills in French through listening and reading activities. At the end of the course, students will be able to understand some ideas and familiar details presented in clear, uncomplicated speech when listening. Additionally, some students will be able to understand short texts enhanced by visual clues when reading. As in all areas of foreign language study, an appreciation of French culture will be a component of the course. Students are expected to participate in the Foreign Language Fair as one major project of the course.

Enrichment Rotation 7:

Physical Education & Health 7

This course teaches students the value of physical exercise and discipline. Students are introduced to the various ways of staying healthy for a lifetime through physical activity. The course also focuses on character development and sportsmanship through team activities. Physical education courses teach students the rudiments of a number of sports and provide enjoyment and challenge. Teamwork and good sportsmanship are a focus of the course for students at this age. Students take physical education on a daily basis.

Technology

In this course students will be introduced to a hands-on laboratory setting, many of the ins and outs of programming. Many of the procedures and methods used in this course will directly transfer over to other higher-level technology courses where similar programming languages are

utilized. In the Middle School IT classes, the focus is to establish a foundation of basic computer skills. While promoting strong research capabilities students are also challenged to turn key functions, such as copy/cut & paste, save as/save, open and download into an ingrained habit. Students will begin to understand the basics of Microsoft Excel, Word and PowerPoint through the use of fun and exciting projects.

Art

This art course introduces students to the basic principles of drawing, visual theory; design, presentation, and rules of critique. Daily drawing exercises are a major component of the course. Primary projects will include drawing, ceramics (hand building), sculpture, craft construction, acrylic transfers, and others. Students will be expected to have a completed assignment in their Strathmore sketch pad every seven days. Students will be taught the appropriate rules of critique and will practice these rules on a multitude of drawings.

Curriculum Scope and Sequence - Grade 8

Grade 8

English/ Language Arts

Pre-Algebra & Math 8 Honors

World Geography-Eastern Hemisphere

Sint Maarten

Physical Science

Spanish & French

Enrichment Rotation- Technology, Art, PE, Health, Performing Arts

Course Descriptions - Grade 8

English / Language Arts

This course helps students develop writing, grammar, communication skills, and an appreciation of classical and modern literature. They will learn to respond to literature, understand the meanings and origins of words, and express themselves in writing and oral discussions. Exercises to develop some of these skills may include daily writing prompts, journal entries, reading literature, and writing essays. They will build vocabulary through the use of the Vocabulary Workshop series. The course teaches students to write for different purposes, including narration, exposition, persuasion, and description. Assignments also include a research paper written for the purposes of inquiry and research. Students read a broad range of literary works, including but not limited to *The Little Prince*, *Fahrenheit 451*, *Lord of the Flies*, *To Kill a Mockingbird*, *A Midsummer Night's Dream*.

Pre-Algebra

This course continues the transition in mathematics into the realm of Algebra and Geometry. Topics covered in this course include further practice in order of operations, exploring integers, solving one step equations and inequalities, exploring factors and fractions, rational numbers, inductive and deductive reasoning, scientific notation, functions and graphing, converting measurements in the metric system, solving multiple-step equations and inequalities, statistics and probability, measuring area and volume, and polynomials.

Math 8 Honors

The Middle School Impact Math series is designed to incorporate the skills of Algebra I into the three Middle School years. Students who complete the Math 8 Honors course will have the skills to move into Algebra II giving them the opportunity to reach higher level Math course in High School.

World Cultures

This course introduces students to different civilizations and cultures from around the world. Students will study history, current events and other aspects of various regions. Drawing on the

diverse cultures in ST. Maarten, students have the opportunity to give personal insight on many unique life experiences. Presentations, cooperative learning, and class discussions enable students to get a firm grasp on the differences between different cultures.

Physical Science

This course introduces students to a deep, useful knowledge of the main concepts of chemistry and physics. It covers the topics of building blocks of matter and change, scientific measurement, the periodic table, atomic structure, chemical bonding, chemical reactions, motion, forces, energy, magnetism, and electricity. Students will learn to develop critical and analytical thinking skills by learning to apply, use and manipulate the concepts taught in the course rather than just by knowing facts. Laboratory experiments will be a component of the course, and students are taught how to correctly prepare a lab report and present data.

Spanish 8

This course is designed to help students actively gain comprehension skills in modern, conversational Spanish, while also learning cultural aspects of various Spanish-speaking countries. The course will emphasize proper pronunciation, common word usage, colloquial techniques, as well as an in-depth study of spelling and grammatical devices commonly found in the Spanish language. The course will include oral practice, written practice, and incorporates an audio and video program to give students more practice opportunities. Students are expected to participate in the Foreign Language Fair as one major project of the course.

French 8

This course is designed to help students actively gain comprehension skills in modern, conversational French, while also learning cultural aspects of various French-speaking countries. The course will emphasize proper pronunciation, common word usage, colloquial techniques, as well as an in-depth study of spelling and grammatical devices commonly found in the French language. The course will include oral practice, written practice, and incorporates an audio and video program to give students more practice opportunities. Students are expected to participate in the Foreign Language Fair as one major project of the course.

Enrichment Rotation 8:

Physical Education & Health

This course teaches students the value of physical exercise and discipline. Students are introduced to the various ways of staying healthy for a lifetime through physical activity. The course also focuses on character development and sportsmanship through team activities. Physical education courses teach students the rudiments of a number of sports and provide enjoyment and challenge.

Teamwork and good sportsmanship are a continuing focus of the course for students at this age. Additionally, students are exposed to the facts concerning daily exercise as part of a healthy regimen. Students are further encouraged to participate in the team sports programs available at through the athletic department as part of their increasing focus on developing a healthy mind and body.

Technology

In this course, students will learn, in a hands-on laboratory setting, many of the ins and outs of programming. Many of the procedures and methods used in this course will directly transfer over to other higher-level technology courses where similar programming languages are utilized. In the Middle School IT classes, the focus is to establish a foundation of basic computer skills. While promoting strong research capabilities students are also challenged to turn key functions, such as copy/cut & paste, save as/save, open and download into an ingrained habit. Students will begin to understand the basics of Microsoft Excel, Word and PowerPoint through the use of fun and exciting projects.

Art

This art course continues students' exploration of the basic principles of drawing, visual theory, design, presentation, and rules of critique. Daily drawing exercises are a major component of the course. Primary projects will include drawing, ceramics (hand building), sculpture, craft construction, acrylic transfers, and others. Students will be expected to have a completed assignment in their Strathmore sketch pad every seven days. Students will be taught the appropriate rules of critique and will practice these rules on a multitude of drawings. Instructors expect students' sketches and other artwork to have a more mature and refined level of quality at this age. Students are expected to become better versed in some of the major periods and styles of art from a review and study of art history.

Grade 6 Mathematics

Basic Assumptions for Mathematics Education:

- A variety of mathematical concepts presented throughout the Middle School years develop students' proficiency in the use of skills needed in everyday life situations, as well as laying a solid foundation for the High School Mathematics curriculum.
- As students progress from one course to the next, they are expanding their mathematical vocabulary.
- Manipulatives, enrichment material, and one-on-one instruction accommodate the individual needs of students.

Major Concepts/Content:

This course continues to reinforce and expand on the general mathematical skills learned in Grade 5. More depth will be added in Grade 7 in order to have all students ready for either Pre-Algebra or Math 8 Honors in Grade 8.

The content should include, but not be limited to the following:

- Statistics – Real World Use of Whole Numbers
- Connecting Arithmetic to Algebra
- Decimals
- Measuring: The Metric and the Customary Systems
- Patterns and Number Theory
- Operations with Fractions
- Geometry of Polygons and Circles
- Integers
- Coordinate Plane
- Ratio, Proportion and Percent
- Connecting Fractions and Decimals
- Estimation

After successfully completing this course, the student will:

- Read and interpret data in relation to different charts, plots, tables and graphs.
- Calculate the range, mean, median and mode for a set of data.
- Relate numbers with place value, comparing, ordering and estimating.
- Use the order of operation rules to solve arithmetic problems.
- Evaluate expressions and solve basic one step equations.
- Find the value of a variable that makes an equation true.
- Recognize and solve patterns and sequences.
- Represent numbers using powers and exponents.

- Compare, round, order, add, subtract, multiply, divide and estimate decimals.
- Identify and convert units in the metric system.
- Identify and convert units in the customary system.
- Find the perimeter and area of various polygons.
- Find the circumference and area of circles.
- Understand the rules of divisibility, prime and composite numbers, prime factorization, greatest common factors, and least common multiples.
- Perform the following basic operations of fractions:
 - convert between fractions and decimals.
 - write a fraction in lowest terms.
 - convert between improper fractions and mixed numbers.
 - compare, round, and order fractions.
 - add, subtract, multiply, divide, and estimate fractions.
- Perform the following basic geometric operations:
 - construct and measure angles using a protractor
 - classify and measure lines, segments, rays, and angles.
 - identify complementary and supplementary angles.
 - solve problems involving the calculation of the sum of interior angles in triangles.
 - classify triangles according to their angles and sides.
 - classify polygons.
 - name and define various quadrilaterals.
 - identify line of symmetry and rotational
 - identify translations, reflections, rotations and tessellations. .
- Identify and graph points and equations on a coordinate plane.
- Find ratios, percents, and proportions.
- Convert between percents and fractions or decimals.
- Identify congruent and similar figures.
- Identify the distributive property and properties of addition and multiplication.
- Apply objectives learned and critical thinking skills to solve word problems.
- Estimate computations

Grade 6 English

Basic Assumptions for Language Arts Education:

- Reading, writing, speaking, listening and viewing competencies are integrated throughout students' learning experiences.
- As students progress from one course to the next, increases should occur in the complexity of materials and tasks and in the students' independence in the application of skills and strategies.
- Learning tasks and materials accommodate the individual needs of students.

Major Concepts/Content

The purpose of this course is to provide integrated educational experiences in the language arts strands of reading, writing, listening, speaking, and viewing.

The content should include, but not be limited to, the following:

- Using the reading process to construct meaning from a wide range of literary, informational, and technical texts
- Using the writing process to communicate information and ideas
- Using listening, viewing, and speaking strategies
- Understanding the power of language and using language in authentic contexts
- Understanding the common features of a variety of literary forms
- Responding critically to visual, oral, and written texts

After successfully completing this course, the student will:

- Have an understanding of grammatical terminology.
- Have an understanding of grammatical usage and mechanics (parts of speech, agreement, and sentence structure).
- Demonstrate understanding and use of appropriate and effective vocabulary.
 - Use a variety of strategies to analyze words and text, draw conclusions, use context and word structure clues, and recognize organizational patterns.
- Demonstrate consistent and effective use of interpersonal and academic vocabularies in reading, writing, listening, and speaking.
- Read informational, literary, and technical selections for literal, inferential, and interpretive meaning.
- Determine the main idea or essential message in a text and identify relevant details and facts and patterns of organization.

- Identify the author’s purpose and/or point of view in a variety of texts and use the information to construct meaning.
- Recognize logical, ethical, and emotional appeals in texts.
- Use a variety of reading materials to develop personal preferences in reading.
- Know that a literary text may elicit a wide variety of valid responses.
- Identify the characteristics and elements of literary selections and other appropriate texts.
 - Recognize complex elements of plot, including setting, character development, conflicts, and resolutions.
 - Understand various elements of authors’ craft appropriate at this grade level, including word choice, symbolism, figurative language, mood, irony, foreshadowing, flashback, persuasion techniques, and point of view in both fiction and nonfiction.
 - Identify common themes in literature.
- Use process writing strategies and the conventions of standard written English to write for a variety of purposes and audiences.
 - Organize information before writing according to the type and purpose of writing.
 - Draft and revise writing that:
 - Is focused, purposeful, and reflects insight into the writing situation;
 - Conveys a sense of completeness and wholeness with adherence to the main idea;
 - Has an organizational pattern that provides for a logical progression of ideas;
 - Has support that is substantial, specific, relevant, concrete, and/or illustrative;
 - Demonstrates a commitment to and an involvement with the subject;
 - Has clarity in presentation of ideas;
 - Uses creative writing strategies appropriate to the purpose of the paper;
 - Demonstrates a command of language (word choice) with freshness of expression;
 - Has varied sentence structure and sentences that are complete.
 - Has few, if any, convention errors in mechanics, usage, and punctuation.
- Produce final documents that have been edited for:
 - Correct spelling;
 - Correct punctuation, including commas, colons, and semicolons;
 - Correct capitalization;
 - Effective sentence structure;

- Correct common usage, including subject-verb agreement, common noun-pronoun;
 - Agreement, common possessive forms, and with a variety of sentence structures;
 - Proper structure and correct formatting.
- Use listening, viewing, and speaking skills to obtain and convey information and ideas.
 - Listen and use information gained for a variety of purposes, such as gaining information from interviews, following directions, and pursuing a personal interest.
 - Select and listen to readings of fiction, drama, nonfiction, and informational presentations according to personal preferences.
 - Acknowledge the feelings and messages sent in a conversation.
 - Use responsive listening skills, including paraphrasing, summarizing, and asking questions for elaboration and clarification.
 - Use movement, placement, juxtaposition, gestures, silent periods, facial expressions, and other nonverbal cues to convey meaning to an audience.
 - Understand how volume, stress, pacing, and pronunciation can positively or negatively affect an oral presentation.
 - Ask questions and make comments and observations that reflect understanding and application of content, processes, and experiences.
 - Speak for various occasions, audiences, and purposes, including conversations, discussions, projects, and informational, persuasive, or technical presentations.
 - Select and use appropriate language for effective visual, oral, and written communication.
 - Select language that shapes reactions, perceptions, and beliefs.
 - Use literary devices and techniques in the comprehension and creation of written, oral, and visual communications.
 - Distinguish between emotional and logical argument.
 - Apply reference, study, and test-taking skills.
 - Use strategies to clarify meaning, such as rereading, note taking, summarizing, outlining, and writing a grade-level appropriate report.
 - Locate, organize, and interpret written information for a variety of purposes, including classroom research, collaborative decision making, and performing a school or real-world task.
 - Use a variety of reference materials, including indexes, magazines, newspapers, and journals, and tools, including card catalogs and

- computer catalogs, to gather information for research topics.
- Organize information using alphabetical, chronological, and numerical systems.
 - Explore personal interests in written, oral and visual communication.
 - Use a variety of reading materials to develop personal preferences in reading.
 - Select and listen to readings of fiction, drama, nonfiction, and informational presentations according to personal preferences.
 - Respond to a work of literature by interpreting selected phrases, sentences, or passages and applying the information to personal life.
 - Identify specific questions of personal importance and seek to answer them through literature.
 - Identify specific interests and the literature that will satisfy those interests.
 - Know how a literary selection can expand or enrich personal viewpoints or experiences.

Grade 6 Ancient Civilizations

Basic Assumptions for Social Studies Education:

- A variety of geographical concepts will be integrated throughout the students learning experience in order to create an awareness of global locations.
- As students progress from one course to the next, they will move through various periods in human history, building on prior knowledge and expanding their understanding of human history.
- Learning tasks and materials accommodate the individual needs of students.

Major Concepts/Content

The purpose of this course is to provide students with a solid understanding of culture, focusing on how and why civilizations have come to exist throughout the world.

The content should include, but not be limited to, the following:

- Understanding basic geographical concepts and various map skills.
- Understanding what culture is and how it affects a civilization.
- Understanding how a civilization comes to be and the importance of bodies of water for these emerging societies.
- Using these skills to explore the following ancient civilizations:
 - Mesopotamia
 - Egypt and Nubia
 - Greece
 - Rome
 - India
 - China
 - Africa

After successfully completing this course, the student will:

- Clearly understand the idea of culture and all elements entailed in this idea.
- Understand the origin of civilization and its relationship to bodies of water.
- Know how agriculture and domestication allowed for complex societies to emerge.
- Understand geographic proximity and how this allows cultures to affect one another.
- Understand how language, ideas, and institutions of one culture can influence other cultures (e.g., through trade, exploration, and migration).

- Know how major historical developments have had an impact on the development of civilizations.
- Know significant achievements in art and architecture in various urban areas and communities (e.g., the pyramids in Egypt, temples in ancient Greece, bridges and aqueducts in ancient Rome).
- Understand ways in which cultural characteristics have been transmitted from one society to another (e.g., through art, architecture, language, other artifacts, traditions, beliefs, values, and behaviors).
- Understand the historical events that have shaped the development of cultures throughout the world.
- Understand the impact of geographical factors on the historical development of civilizations.
- Know ways in which the spatial organization of a society changes over time.
- Know the human and physical characteristics of different places in the world and how these characteristics change over time.
- Know significant historical leaders who shaped the development of early cultures (e.g., military, political, and religious leaders in various civilizations).
- Know the political, social, and economic institutions that characterized the significant aspects of Eastern and Western civilizations.
- Know the importance of various religions and philosophies to their civilizations.
- Know the importance of religious leaders and philosophers to their ideologies.
- Know the major events that shaped the development of various cultures (e.g., population movements, technological and cultural innovation, and the emergence of new population centers).
- Understand how patterns, chronology, sequencing (including cause and effect), and the identification of historical periods are influenced by frames of reference.
- Understand important technological developments and how they influenced human societies.
- Understand how factors such as culture and technology influence the perception of places and regions.
- Use various map forms (including thematic maps) and other geographic representations, tools, and technologies to acquire, process, and report geographic information including patterns of land use, connections between places, and patterns and processes of migration and diffusion.

Grade 6

Life Science

Basic Assumptions for Science Education:

- A variety of scientific concepts will be integrated throughout the students learning experience in order to create an understanding of the nature of science.
- As students progress from one course to the next, they will move through various areas of science, building on prior knowledge and expanding their understanding of the basic concepts.
- Learning tasks and materials accommodate the individual needs of students.

Major Concepts/Content

The purpose of this course is to provide opportunities for the study of general concepts, exploratory experiences, applications, and activities relating to the life sciences, physical sciences and earth sciences.

The content should include, but not be limited to, the following:

- Understanding classification of living things.
- Demonstrating knowledge of the functional units of living things.
- Demonstrating the knowledge of the principles of ecology.
- Identifying different forms of energy.
- Understanding the vast size of our solar system.
- Describing the structure of an atom.

After completing this course students will be able to:

- Identify different ways to classify living things.
- Distinguish among monera, protista, and fungi.
- Distinguish between two types of internal plant transportation tissues.
- Recognize plant life spans.
- Compare the different plant reproduction processes.
- Distinguish among different types of animals.
- Identify different invertebrate groups.
- Differentiate between cold blooded and warm blooded vertebrates.
- Define populations and explain how populations are measured.
- Outline how communities change.
- Describe factors that influence stability and equilibrium in an ecosystem.
- Know what affects climate.
- Compare and contrast the six land biomes and one marine biome.
- Discuss environmental energy sources.

- Identify environmental processes.
- Describe human-environment interactions.
- Describe different cell structures.
- Distinguish differences between plant and animal cells.
- Describe how cells can be arranged.
- Discover how the atmosphere helps maintain earth's energy balance.
- Identify the characteristics of the layers of the earth's atmosphere.
- Explain what makes up air.
- Summarize the causes of air pollution.
- Paraphrase the definition of a mineral.
- Identify the properties of a mineral.
- Describe how rocks are formed.
- Summarize the causes of erosion.
- Explain how water erodes earth's surface.
- Identify how glaciers, floods, landslides, mudslides, tsunamis and other forces change earth's surface.
- Explain why minerals are so valuable.
- Identify how fossil fuels are used as energy resources.
- Identify the impact that human beings have on the environment.
- Describe the process of desalination.
- Explain why water is a limited resource.
- Explain nature's pollution recovery process.
- Understand the importance of conservation of resources.
- Describe how the sun and earth affect time and seasons.
- Identify how the moon causes tides on earth.
- Explain what an eclipse is.
- Define the solar system.
- Compare the physical characteristics of the inner planets.
- Differentiate the outer planets by their physical characteristics.
- Describe waves and their properties.
- Describe the different types of electromagnetic waves.
- Understand and be able to explain how the sun's energy gets to earth.
- Describe how reflections work.
- Distinguish between refraction and reflection.
- Explain how a lens works.
- Outline how the eye works.
- Conclude that the energy comes from the sun.
- List examples of alternative energy sources.
- Describe thermal energy.
- Identify three ways heat is transferred.
- Identify some of the physical properties of matter.
- Describe chemical properties of matter.

- Understand the structure of an atom.
- Define the periodic table of the elements.
- Identify ionic and covalent bonds.
- Describe chemical formulas.
- Define and describe examples of acids, bases and salts.
- Describe how an indicator is used.
- Explain what causes communicable diseases.
- Tell how disease is communicated.
- Give examples of different agents of disease.
- Identify the protective functions of the body.
- Describe earth as an ecosystem.
- Identify the parts of a clean environment.
- Explain environmental impact.
- Describe ways to protect the environment.
- Describe the functions of the community health agencies in preventing disease locally.
- Describe the functions of various health agencies.
- Explain practices that prevent epidemics.
- Summarize how the body gets energy from food.
- Identify sources and types of macronutrients.
- Summarize the role of the body's digestive system in turning nutrients into energy.
- Describe the function of the heart.
- Explain how the circulatory system works.
- Describe some causes of heart diseases and disorders.

Middle School Art Program Grades 6, 7 & 8

Basic Assumptions:

- Students will be exposed to and develop skills in human and animal anatomy.
- Students will draw from still life set ups in the classroom.
- Students will draw from their imagination.
- Students will participate in class critiques.
- We will continue to reinforce art fundamentals previously introduced in Elementary school.
- We will continue to explore and practice the use of linear perspective.
- Students will be exposed to 20th Century Western Art survey presentations.

Major Concepts/Content

Students should become at ease with drawing and painting people and animals in their pictures. They learn to use light and shadow and how to shade by working on grey scales, which help them to understand gradients of light. Slide presentations are given periodically to expose them to 20th Century art. Students will use a variety of mediums and techniques to encourage aptitude and interest in the arts.

The content should include, but not be limited to, the following:

- Be able to recognize and utilize the elements of art: line, shape, form, color, texture, and space.
- The fundamentals of color.
- Have an awareness of the elements and principles of design in natural and manmade forms.
- Use art as a means of visual communication and expression.
- Experiment with a variety of methods of drawing an image on a flat surface.
- Explore ways to enhance the illusion of depth through linear perspective, foreshortening, overlapping, value change and color.

After successfully completing this course, the student will:

- Create finished pieces for submission to local art competitions.
- Complete studio work which is creative, original and well crafted.
- Cooperation in classroom organization, clean-up, care and maintenance tools and materials.
- Recognize how repetition and variation produce patterns and order in a composition.
- Recognize how artists use line, color, form, texture and composition to make a visual statement.
- Observe and read accounts of artists' work and working processes by viewing slides.
- Build upon art skills developed in grades K-6.

- Foster personal development.
- Understand the role of art in society.

Physical Education Grades 6-8

Major Concepts/Content

Physical Education in Grades 6-8 consists of basic skills for individual and team sports, improvement of fitness levels and an understanding of basic game strategies for team sports and activities.

The Content Should Include But Is Not Limited To:

Physical Education Literacy

- The student demonstrates competency in many movement forms and proficiency in a few forms of physical activity.
 - Combines skills competently to participate in a modified version of team and individual sports, demonstrating mature patterns of manipulative skills (e.g., proper catching techniques).
 - Uses basic offensive and defensive positioning while playing a modified version of a sport.
 - Knows basic skills and safety procedures to participate in outdoor sports.
- The student applies concepts and principles of human movement to the development of motor skills and the learning of new skills.
 - Knows the various ways in which the body can generate force and the mechanical principles involved (e.g., range of motion and speed that the arm or leg travels).
 - Knows how to apply mature patterns of loco-motor, non-locomotor, body-management throwing, catching and striking skills while participating in modified versions of team and individual sports.
 - Describes the principles of training and conditioning for specific physical activities.
 - Knows how to develop game strategies for offensive and defensive play (e.g., the strategies necessary to attack an attended and unattended goal).
- The student analyzes the benefits of regular participation in physical activity.
 - Knows the potential fitness benefits of various activities.
 - Knows how to use a journal to document the benefits of participation in physical activity as part of an individual wellness plan.

Responsible Physical Activity Behaviors

- The student achieves and maintains a health-enhancing level of physical fitness.
 - Knows how to sustain an aerobic activity, maintaining target heart rate, to achieve cardiovascular benefits.

- Describes and applies the principles of training and conditioning for specific physical activities.
 - Knows proper warm-up, conditioning and cool down techniques and the reasons for using them.
 - Knows the difference between muscular strength and muscular endurance, activities that contribute to the improvement of strength and endurance, and the various types of muscular strength and endurance required to perform different activities.
 - Knows how aerobic activity differs from anaerobic activity.
 - Understands the relationships between caloric intake and energy expenditure.
 - Knows the various ways to promote mobility in each joint.
 - Knows how to determine recovery heart rate after exercise.
 - Understands and applies formal and informal modes of fitness assessments (e.g., cardiovascular fitness: a mile walk or run is formal assessment, walking a flight of stairs is informal).
 - Plans and participates in an individualized fitness program.
 - Analyzes the results of fitness assessments to guide changes in a personal fitness program.
 - Achieves and maintains appropriate cardiovascular fitness, flexibility, muscular strength, endurance, and body composition.
 - Explores new ways to achieve activity goals in an individual wellness plan (e.g., walking in addition to playing a team sport).
- The student demonstrates responsible personal and social behavior in physical activity.
 - Demonstrates appropriate responses to emergency situations associated with physical activity (e.g., remain calm, keep injured person still and seek help).
 - Knows the effects of substance abuse on personal health and performance in physical activity.
 - Understands the difference between compliance and noncompliance with game rules and knows the meaning of fair play in age-appropriate activities.
 - Resolves interpersonal conflicts with sensitivity to the rights and feelings of others.

Advocate and Promote Physically Active Lifestyles

- The student understands how participating in physical activity and promotes inclusion and an understanding of the abilities and cultural diversity of people
- The student understands that physical activity provides the opportunity for enjoyment, challenge, self-expression and communication.
 - Identifies forms of physical activity that provide personal enjoyment.

- Recognizes the aesthetic and creative aspects of performance.
- Understands how a commitment to a wellness plan enhances the quality of life (e.g., leads to positive coping skills, healthy eating habits and regular physical activity).
- Knows the long-term physiological, psychological and cultural benefits that may result from regular participation in physical activity.
- Knows the ways in which exercising at home can assist in improving physical ability and performance.

In addition:

- Semi-annual Fitness Assessments are conducted on physical and components of sound health and active lifestyle.

Grade 6 Spanish

Basic Assumptions for Spanish Language:

- This course will provide students with the opportunity to communicate in the target language, using the four language learning skills: listening, speaking, reading and writing.
- Students will also explore aspects of the culture of countries in which the target language is spoken.

Major Concepts/Content:

Since to most students Spanish is not a novelty, the primary goal of this course is to help students to produce speech in the target language. That is, we will review everyday vocabulary and situations that they have studied in the past and we will use them to begin developing proficiency in the four basic skills: listening, speaking, reading and writing. The emphasis is on communication.

The content should include, but not be limited to, the following:

- greetings
- numbers
- calendar
- expressing likes and dislikes
- sports
- food
- clothing
- activities – verbs ending in AR
- telling time
- descriptions
- weather
- students will acquire knowledge of Spanish-speaking world and Hispanic holidays

After successfully completing this course, the student will:

- Have an understanding of grammatical terminology
- Have an understanding of grammatical usage and mechanics (parts of speech, agreement, sentence structure)
- Demonstrate understanding and use of appropriate and effective vocabulary.
- Identify places, food, individuals and other school objects using the target language.

Grade 7 Mathematics

Basic Assumptions for Mathematics Education:

- A variety of mathematical concepts presented throughout the Middle School years develop students' proficiency in the use of skills needed in everyday life situations, as well as laying a solid foundation for the High School Mathematics curriculum.
- As students progress from one course to the next, they are expanding their mathematical vocabulary.
- Manipulatives, enrichment material, and one-on-one instruction accommodate the individual needs of students.

Major Concepts/Content:

This course continues to reinforce and expand on the general mathematical skills learned in Grade 6. More depth to each concept is added in order to have all students ready for either Pre-Algebra or Math 8 Honors in Grade 8.

The content should include, but not be limited to the following:

- Formulas, Expressions, Equations
- Operations with Positive and Negative Exponents
- Operations with Integers
- The Metric and the Customary Systems
- Ratios, Rates, Proportions and Percents
- The Pythagorean Theorem
- Data and Probability
- Equations and Graphs
- Geometry: Surface Area and Volume of Solids
- Linear Relationships
- Solving 2-step Equations

After successfully completing this course, the student will:

- Read and interpret data in relation to different charts, plots, tables and graphs.
- Calculate the range, mean, median and mode for a set of data.
- Relate numbers with place value, comparing, ordering and estimating.
- Use the order of operation rules to solve arithmetic problems.
- Evaluate expressions and solve one and two-step equations.
- Solve and graph basic one and two-step inequalities with one variable.
- Find the value of a variable that makes an equation true.
- Recognize and solve patterns and sequences.
- Identify functions and linear equations.
- Calculate slope of linear equations.

- Graph linear equations using t-tables.
- Use powers, exponents, square and square roots to solve problems.
- Use the Pythagorean Theorem.
- Represent numbers in scientific notation.
- Understand the rules of divisibility, prime and composite numbers, prime factorization, greatest common factors and least common multiples.
- Identify precision of measuring tool, measure in significant digits.
- Identify, order, add, subtract, multiply and divide integers.
- Solve expressions utilizing absolute value.
- Identify and graph points and equations on a coordinate plane.
- Find ratios, percents and proportions.
- Apply the percent proportion and the percent equation.
- Calculate percent of change, sales tax and discount.
- Convert between percents, fractions and decimals.
- Apply the concept of proportion to scale drawings.
- Identify congruent and similar figures.
- Apply proportions to map scales.
- Use proportions to create dilations and enlargements
- Classify solids and calculate volume and surface area.
- Identify the distributive property and properties of addition and multiplication.
- Apply learned objectives and critical thinking skills to solve word problems.

Grade 7

English

Basic Assumptions for Language Arts Education:

- Reading, writing, speaking, listening and viewing competencies are integrated throughout students' learning experiences.
- As students progress from one course to the next, increases should occur in the complexity of materials and tasks and in the students' independence in the application of skills and strategies.
- Learning tasks and materials accommodate the individual needs of students.

Major Concepts/Content.

The purpose of this course is to provide integrated educational experiences in the language arts strands of reading, writing, listening, speaking, and viewing.

The content should include, but not be limited to, the following:

- Using the reading process to construct meaning from a wide range of literary, informational, and technical texts.
- Using the writing process to communicate information and ideas.
- Using listening, viewing, and speaking strategies.
- Understanding the power of language and using language in authentic contexts.
- Understanding the common features of a variety of literary forms.
- Responding critically to visual, oral, and written texts.

After successfully completing this course, the student will:

- Demonstrate understanding and use of appropriate and effective vocabulary.
 - Use a variety of strategies to analyze words and text, draw conclusions, use context and word structure clues, and recognize organizational patterns.
 - Demonstrate consistent and effective use of interpersonal and academic vocabularies in reading, writing, listening, and speaking.
- Have an understanding of grammatical terminology.
- Have an understanding of grammatical usage and mechanics (parts of speech, agreement, sentence structure).
- Read informational, literary, and technical selections for literal, inferential, and interpretive meaning.
 - Determine the main idea or essential message in a text and identify

- relevant details and facts and patterns of organization.
 - Identify the author's purpose and/or point of view in a variety of texts and use the information to construct meaning.
 - Recognize logical, ethical, and emotional appeals in texts.
 - Use a variety of reading materials to develop personal preferences in reading.
 - Know that a literary text may elicit a wide variety of valid responses.
- Identify the characteristics and elements of literary selections and other appropriate texts.
 - Recognize complex elements of plot, including setting, character development, conflicts, and resolutions.
 - Understand various elements of authors' craft appropriate at this grade level, including word choice, symbolism, figurative language, mood, irony, foreshadowing, flashback, persuasion techniques, and point of view in both fiction and nonfiction.
 - Identify common themes in literature.
 -
- Use process writing strategies and the conventions of standard written English to write for a variety of purposes and audiences.
 - Organize information before writing according to the type and purpose of writing.
 - Draft and revise writing that:
 - Is focused, purposeful, and reflects insight into the writing situation;
 - Conveys a sense of completeness and wholeness with adherence to the main idea;
 - Has an organizational pattern that provides for a logical progression of ideas;
 - Has support that is substantial, specific, relevant, concrete, and/or illustrative;
 - Demonstrates a commitment to and an involvement with the subject;
 - Has clarity in presentation of ideas;
 - Uses creative writing strategies appropriate to the purpose of the paper;
 - Demonstrates a command of language (word choice) with freshness of expression;
 - Has varied sentence structure and sentences that are complete.
 - Has few, if any, convention errors in mechanics, usage, and punctuation.
 - Produce final documents that have been edited for:
 - Correct spelling;
 - Correct punctuation, including commas, colons, and semicolons;
 - Correct capitalization;
 - Effective sentence structure;
 - Correct common usage, including subject-verb agreement, common noun-pronoun;
 - Agreement, common possessive forms, and with a variety of sentence

- structures;
 - Including parallel structure; and correct formatting.
- Use listening, viewing, and speaking skills to obtain and convey information and ideas.
 - Listen and use information gained for a variety of purposes, such as gaining information from interviews, following directions, and pursuing a personal interest.
 - Select and listen to readings of fiction, drama, nonfiction, and informational presentations according to personal preferences.
 - Acknowledge the feelings and messages sent in a conversation.
 - Use responsive listening skills, including paraphrasing, summarizing, and asking questions for elaboration and clarification.
 - Use movement, placement, juxtaposition, gestures, silent periods, facial expressions, and other nonverbal cues to convey meaning to an audience.
 - Understand how volume, stress, pacing, and pronunciation can positively or negatively affect an oral presentation.
 - Ask questions and make comments and observations that reflect understanding and application of content, processes, and experiences.
 - Speak for various occasions, audiences, and purposes, including conversations, discussions, projects, and informational, persuasive, or technical presentations.
- Select and use appropriate language for effective visual, oral, and written communication.
 - Select language that shapes reactions, perceptions, and beliefs.
 - Use literary devices and techniques in the comprehension and creation of written, oral, and visual communications.
 - Distinguish between emotional and logical argument.
- Apply reference, study, and test-taking skills.
 - Use strategies to clarify meaning, such as rereading, note taking, summarizing, outlining, and writing a grade-level appropriate report.
 - Locate, organize, and interpret written information for a variety of purposes, including classroom research, collaborative decision making, and performing a school or real-world task.
 - Use a variety of reference materials, including indexes, magazines, newspapers, and journals, and tools, including card catalogs and computer catalogs, to gather information for research topics.
 - Organize information using alphabetical, chronological, and numerical systems.
- Explore personal interests in written, oral and visual communication.
 - Use a variety of reading materials to develop personal preferences in reading.

- Select and listen to readings of fiction, drama, nonfiction, and informational presentations according to personal preferences.
- Respond to a work of literature by interpreting selected phrases, sentences, or passages and applying the information to personal life.
- Identify specific questions of personal importance and seek to answer them through literature.
- Identify specific interests and the literature that will satisfy those interests.
- Know how a literary selection can expand or enrich personal viewpoints or experiences.

Grade 7

World Geography-Western Hemisphere

Basic Assumptions for Social Studies Education:

- A variety of geographical concepts will be integrated throughout the students' learning experience in order to create an awareness of global location.
- As students progress from one course to the next, they will move through various periods in human history, building on prior knowledge and expanding their understanding of human history.
- Learning tasks and materials accommodate the individual needs of students.

Major Concepts/Content.

The purpose of this course is to give students and understanding of the differences in cultures and their development throughout history.

The content should include, but not be limited to, the following:

- Understanding geographical concepts and various map skills.
- Understanding the importance of location and environment in the development of societies.
- Understanding the dynamic of movement and the spread of ideas.
- Understanding the effects of the ancient cultures on modern trends in societies.
- Interpreting a variety of graphs and charts.
- Researching primary source material.
- Developing critical thinking skills.
- Writing comprehensive essays.
- Presenting information in different ways.
- Using these skills to explore the following aspects of societies:
 - Themes and Elements of Geography
 - Earth's Interlocking Systems
 - Bodies of Water and Landforms
 - Climate and Vegetation
 - Environmental Issues and Challenges
 - Human Geography
 - Economics and Resources
 - Government
 - Culture
- Using these skills to explore the following regions and their societies:
 - The United States
 - Canada
 - Latin America
 - Mexico

Middle America and Spanish-Speaking South America
Brazil
Western Europe

After successfully completing this course, the student will:

- Understand how social, cultural, economic and environmental factors contribute to the dynamic nature of regions.
- Understand past and present trends in human migration and cultural interaction and their impact on physical and human systems.
- Understand how the allocation of control of the Earth's surface affects interactions between people in different regions.
- Understand the global impacts of human changes in the physical environment.
- Understand the relationships between resources and the exploration, colonization, and settlement of different regions of the world.
- Have been introduced to comprehensive essay writing using multiple sources of information.

Grade 7 Earth Science

Basic Assumptions for Science Education:

- A variety of scientific concepts will be integrated throughout the students learning experience in order to create an understanding of the nature of science.
- As students progress from one course to the next, they will move through various areas of science, building on prior knowledge and expanding their understanding of the basic concepts.
- Learning tasks and materials accommodate the individual needs of students.

Major Concepts/Content

The purpose of this course is to provide opportunities for the study of general concepts, theories, and processes relating to the earth/space sciences, and their applications through exploratory investigations and activities.

The content should include, but not be limited to, the following:

- Understanding the interrelationships of earth processes over time that form rocks, fossils, and soil.
- Understanding the processes of the ocean.
- Describing the characteristics of the atmosphere.
- Identifying components of the universe.

After completing the course students will be able to:

- Describe what geologists do.
- List the characteristics of earth's crust, mantle and core.
- Explain how heat is transferred.
- Identify what causes convection currents.
- Describe the theory of continental drift.
- List the evidence used by Alfred Wegener to form his theory and why scientists rejected it.
- Describe the process of seafloor spreading.
- Explain the process of subduction.
- Explain the theory of plate tectonics.
- Describe the three types of plate boundaries.
- Describe how stress forces affect rock.
- Describe the types of faults, why faults form and where they occur.
- Describe how movement along faults changes earth's surface.
- Describe how energy of an earthquake travels through earth.

- Identify different kinds of seismic waves.
- Name the scales used to measure the strength of an earthquake.
- Describe how earthquakes cause damage and the kinds of damage they cause.
- Explain what can be done to reduce earthquake hazards.
- Describe how geologists monitor faults.
- Explain how geologists determine earthquake risk.
- Identify where earth's volcanic regions are found and explain why they are found there.
- List the characteristics used to identify rocks.
- Identify and describe the three major groups of rocks.
- Identify the characteristics used to classify igneous rocks.
- Describe how sedimentary rocks are formed.
- List and describe the three major types of sedimentary rocks.
- Describe the formation of coral reefs.
- Explain how coral reefs become organic limestone deposits on land.
- Describe the conditions under which metamorphic rocks form.
- Identify ways in which geologists classify metamorphic rocks.
- Describe the rock cycle.
- Explain the role played by the plate tectonics in the rock cycle.
- List the factors that determine the topography of earth's surface.
- Name and describe the main types of landforms.
- Identify the four "spheres" that make up earth's surface.
- Explain how maps and globes represent earth's surface.
- Identify the equator and prime meridian and state how latitude and longitude are used to locate points on earth's surface.
- Describe how satellites and computers are used in mapmaking.
- Describe a topographic map.
- Explain how elevation, relief and slope are shown on topographic maps.
- Identify the Global Positioning System.
- Explain what fossils are and how most fossils form.
- Describe what fossils tell about how organisms have changed over time.
- Identify and describe different types of fossils.
- Describe several ways that scientists determine the relative age of rocks.
- Describe how geologists use index fossils to date rocks.
- Describe the process of radioactive decay.
- Explain how the absolute age of a rock can be determined using radioactive dating.
- Describe the geologic time scale and explain why it is used.
- Identify the different units of the geologic time scale.
- Identify and describe the major events in earth's geologic history.
- Identify and describe the major developments of life on earth.

- Describe the characteristics of waves and explain how they form.
- Describe how waves change near the shore and explain what a tsunami is.
- Identify the effects of waves on beaches and coastlines.
- Explain what causes tides and the daily and monthly tide cycles.
- Describe how people can use the energy of tides.
- Identify the salinity, gas content and temperature of ocean water.
- Describe how ocean conditions change with depth.
- Identify the forces that cause surface currents and deep currents.
- Describe how surface currents affect climate on land.
- Describe the exploration of the ocean and its floor and identify the factors that make ocean floor research difficult.
- Describe features of the ocean floor and the processes that have shaped the ocean floor.
- Describe the factors that affect where ocean organisms live.
- Identify the conditions that organisms in the rocky intertidal zone must overcome.
- Name and describe the major types of coastal wetlands.
- Describe the conditions in the neritic zone that support organisms.
- Describe conditions and identify where algae live in the open ocean.
- Explain how the supply of fish in a fishery changes from year to year and list sources of water pollution.
- Identify the ocean's living and nonliving resources and explain how they can be protected.
- State how the atmosphere is important to living things.
- Identify the gases that are present in earth's atmosphere.
- Name the main sources of air pollution.
- Explain how photochemical smog and acid rain form.
- Identify some of the properties of air.
- Name instruments that are used to measure air pressure.
- Explain how increasing altitude affects air pressure and density.
- Describe the characteristics of the main layers of the atmosphere.
- Identify the factors that influence temperature and precipitation.
- Explain what causes the seasons.
- Name the five main climate regions.
- Identify the sources of information that can be used to study ancient climates.
- Describe how earth's surface changes during an ice age.
- List the theories that have been proposed to explain natural climate change.
- Explain how human activities might be affecting the temperature of earth's atmosphere.
- Describe how human activities have affected the ozone layer.
- Identify the effects of earth's rotation and revolution.

- Explain what causes the seasons.
- Explain what causes the phases of the moon.
- Compare the causes of solar and lunar eclipses.
- Explain what causes tides.
- Explain how rockets travel in space.
- Describe what satellites and space stations are used for.
- Describe the features of the moon's surface.
- Explain what scientists learned about the moon from space exploration.
- Describe the origin and structure of the moon.
- Explain how the heliocentric and geocentric models of the solar system differ.
- Describe Kepler's discovery about the planets' orbits
- Identify two factors that keep the planets in their orbits.
- Explain how the sun gets its energy.
- Identify the layers of the sun's atmosphere.
- Describe some features of the sun's surface.
- Describe the main characteristics of the inner planets.
- Describe the main characteristics of the gas giant planets.
- Explain how Pluto differs from the other outer planets.
- Describe the characteristics of comets and asteroids.
- Identify where meteoroids come from.
- Describe what living things need to exist on earth.
- Explain why scientists are looking at Mars and Europa for signs of life.

Grade 7 Foreign Language

Basic Assumptions for Grade 7:

- During the course of study emphasis will be placed on developing the four language skills, but the emphasis will be placed listening, speaking and reading skills along with cultural information and interaction.
- At this introductory level the responses will be age appropriate and based on student experiences and reasonable expectations.

Major Concepts/Content:

- Students will review the sound system and syntax of the language under study.
- Students will continue to develop their speaking skills and show some ability to understand and communicate in the target language. It should be noted that the language they will use at this level would still be simple.

The content should include, but not be limited to, the following:

- Reacting in a limited way to given social situations (e.g. introducing oneself).
- Understanding and producing appropriate memorized expressions and sequences in oral and written form in the target language.
- Understanding and responding using at least one sentence, to provide oral and written responses to structured questions.
- Using the target language to produce “age appropriate” responses to oral and / or visual stimuli.
- Writing affirmative, negative or interrogative statements using the appropriate syntax of the target language.

After successfully completing this course, the student will:

- Show comprehension by producing memorized and or appropriate responses to oral and or visual stimuli.
- Produce oral responses to structured questions using simple one-sentence responses in the target language.
- Identify places, food, individuals and other age appropriate material using the target language.
- Respond / react in a limited way to specific social situations e.g. providing personal information.
- Read aloud-simple dialogues, phrases and reading passages thus showing some familiarity with correct pronunciation and intonation in the target language.
- Write simple affirmative, negative or interrogative statements using the appropriate word order of the target language.

Grade 8 Pre-Algebra

Basic Assumptions for Pre-Algebra Education:

- A variety of mathematical concepts presented throughout the Middle School years develop students' proficiency in the use of skills needed in everyday life situations, as well as laying a solid foundation for the High School Mathematics curriculum.
- As students progress from one course to the next, they are expanding their mathematical vocabulary.
- Manipulatives, enrichment material, and one-on-one instruction accommodate the individual needs of students.

Major Concepts/Content.

This course builds on the skills students have learned in Grade 6 and 7. It reinforces foundational mathematical skills and develops algebraic concepts and processes.

The content should include, but not be limited to, the following:

- Working with Integers
- Solving one-step Equations and Inequalities
- Exploring Factors and Fractions
- Working with Rational Numbers
- Solving two-step Equations and Inequalities
- Functions and Graphing
- Ratio, Proportion and Percent
- Statistics and Probability
- Applying Algebra to Geometry

After successfully completing this course, the student will:

- Use order of operations to evaluate expressions.
- Evaluate expressions containing variables.
- Write equations and inequalities to solve problems.
- Identify various properties and use them to solve problems.
- Solve open sentences.
- Graph on number lines and coordinate planes.
- Compare, order, add, subtract, multiply and divide integers.
- Solve expressions utilizing absolute value.
- Solve equations and inequalities requiring multi-step process utilizing distributive property, getting variables to one side, and all basic operations.
- Find the greatest common factor of two or more monomials.

- Multiply and divide monomials.
- Use powers, exponents, squares and square roots to solve problems.
- Perform the following in relation to rational numbers:
 - Estimate, add, subtract, multiply and divide.
 - Solve equations and inequalities.
 - Solve problems involving patterns and sequences.
 - Write numbers in scientific notation.
 - Find the range, mean, median and mode of a set of data.
 - Convert measurements within the metric and customary systems.
 - Graph linear equations and inequalities.
 - Solve systems of equations.
 - Identify rate of change and direct variation.
- Identify and solve problems utilizing basic trigonometric ratios.
- Utilize the distance and midpoint formulas.
- Perform operations for ratios, decimals, fractions, percents and proportions.
- Find probability and odds.
- Calculate probability from data and geometric models.
- Identify and utilize permutations and combinations as a means of counting outcomes.
- Identify theoretical and experimental probability.
- Calculate probability of independent and dependent events.
- Use probability and statistics to make predictions.
- Perform the following geometric operations:
 - Construct a circle graph.
 - Identify relationships of intersecting, parallel, and skew lines.
 - Solve problems involving the calculation of the sum of interior angles in polygons.
 - Identify properties of congruent and similar figures and solve problems using indirect measurement.
 - Classify and draw polygons.
 - Identify and draw transformations.
 - Find the perimeter of polygons and circumference of circles.
 - Find the area of polygons, circles and complex figures.
 - Find surface area and volume of prisms, cones, cylinders and pyramids.
- Use the Pythagorean Theorem.
- Identify the relationship of various number sets in the Real number system.
- Identify, classify, add, subtract and multiply polynomials.

Grade 8 Math Honors

Basic Assumptions for Pre-Algebra Education:

The new Impact Mathematics series for Middle School is designed to incorporate and accelerate math skills up to and including Algebra I by the completion of the eighth grade. This enables these students to have room for Calculus in their senior high school year.

Major Concepts/Content.

This course builds directly on the skills mastered in grade 7 and expands into Algebra on all levels.

The content should include, but not be limited to, the following:

Algebra

- Analyzing and representing linear functions
- Solving linear equations and systems of linear equations
- Understanding the proportionality of a linear equation – the slope being the constant rate of change
- Simplifying, factoring, expanding and rearranging algebraic expressions containing polynomials
- Solving and graphing inequalities and systems of inequalities
- Understanding and graphing quadratic relationships
- Solving quadratic equations

Geometry and Measurement

- Understanding angle relationships
- Constructing angles using a compass
- Understanding and constructing transformations

Data Analysis and Number Operations

- Understanding percent and proportions
- Using integer exponents and radicals
- Calculating growth and decay
- Analyzing and modeling data
- Practicing counting strategies

Grade 8

English Regular and Honors

Basic Assumptions for Language Arts Education:

- Reading, writing, speaking, listening and viewing competencies are integrated throughout students' learning experiences.
- As students progress from one course to the next, increases should occur in the complexity of materials and tasks and in the students' independence in the application of skills and strategies.
- Learning tasks and materials accommodate the individual needs of students.

Major Concepts/Content.

The purpose of this course is to provide integrated educational experiences in the language arts strands of reading, writing, listening, speaking, and viewing.

The content should include, but not be limited to, the following:

- Using the reading process to construct meaning from a wide range of literary, informational, and technical texts.
- Using the writing process to communicate information and ideas
- Using listening, viewing, and speaking strategies.
- Understanding the power of language and using language in authentic contexts.
- Understanding the common features of a variety of literary forms.
- Responding critically to visual, oral, and written texts.

After successfully completing this course, the student will:

- Demonstrate understanding and use of appropriate and effective vocabulary.
 - Use a variety of strategies to analyze words and text, draw conclusions, use context and word structure clues, and recognize organizational patterns.
 - Demonstrate consistent and effective use of interpersonal and academic vocabularies in reading, writing, listening, and speaking.
- Have an understanding of grammatical terminology.
- Have an understanding of grammatical usage and mechanics (parts of speech, agreement, sentence structure).
- Read informational, literary, and technical selections for literal, inferential, and interpretive meaning.
 - Determine the main idea or essential message in a text and identify relevant

- details and facts and patterns of organization.
 - Identify the author’s purpose and/or point of view in a variety of texts and use the information to construct meaning.
 - Recognize logical, ethical, and emotional appeals in texts.
 - Use a variety of reading materials to develop personal preferences in reading.
 - Know that a literary text may elicit a wide variety of valid responses.
- Identify the characteristics and elements of literary selections and other appropriate texts.
 - Recognize complex elements of plot, including setting, character development, conflicts, and resolutions.
 - Understand various elements of authors’ craft appropriate at this grade level, including word choice, symbolism, figurative language, mood, irony, foreshadowing, flashback, persuasion techniques, and point of view in both fiction and nonfiction.
 - Identify common themes in literature.
- Use process writing strategies and the conventions of standard written English to write for a variety of purposes and audiences.
 - Organize information before writing according to the type and purpose of writing.
 - Draft and revise writing that is:
 - Focused, purposeful, and reflects insight into the writing situation;
 - Conveys a sense of completeness and wholeness with adherence to the main idea;
 - Has an organizational pattern that provides for a logical progression of ideas;
 - Has support that is substantial, specific, relevant, concrete, and/or illustrative;
 - Demonstrates a commitment to and an involvement with the subject;
 - Has clarity in presentation of ideas;
 - Uses creative writing strategies appropriate to the purpose of the paper;
 - Demonstrates a command of language (word choice) with freshness of expression;
 - Has varied sentence structure and sentences that are complete;
 - Has few, if any, convention errors in mechanics, usage, and punctuation;
 - Produce final documents that have been edited for:
 - Correct spelling;
 - Correct punctuation, including commas, colons, and semicolons;
 - Correct capitalization;

- Effective sentence structure;
 - Correct common usage, including subject-verb agreement, common noun-pronoun
 - Agreement, common possessive forms, and with a variety of sentence structures,
 - Including parallel structure and correct formatting.
- Use listening, viewing, and speaking skills to obtain and convey information and ideas.
 - Listen and use information gained for a variety of purposes, such as gaining information from interviews, following directions, and pursuing a personal interest.
 - Select and listen to readings of fiction, drama, nonfiction, and informational presentations according to personal preferences.
 - Acknowledge the feelings and messages sent in a conversation.
 - Use responsive listening skills, including paraphrasing, summarizing, and asking questions for elaboration and clarification.
 - Use movement, placement, juxtaposition, gestures, silent periods, facial expressions, and other nonverbal cues to convey meaning to an audience.
 - Understand how volume, stress, pacing, and pronunciation can positively or negatively affect an oral presentation.
 - Ask questions and make comments and observations that reflect understanding and application of content, processes, and experiences.
 - Speak for various occasions, audiences, and purposes, including conversations, discussions, projects, and informational, persuasive, or technical presentations.
- Select and use appropriate language for effective visual, oral, and written communication.
 - Select language that shapes reactions, perceptions, and beliefs.
 - Use literary devices and techniques in the comprehension and creation of written, oral, and visual communications.
 - Distinguish between emotional and logical argument.
- Apply reference, study, and test-taking skills.
 - Use strategies to clarify meaning, such as rereading, note taking, summarizing, outlining, and writing a grade-level appropriate report.
 - Locate, organize, and interpret written information for a variety of purposes, including classroom research, collaborative decision making, and performing a school or real-world task.

- Use a variety of reference materials, including indexes, magazines, newspapers, and journals, and tools, including card catalogs and computer catalogs, to gather information for research topics.
- Organize information using alphabetical, chronological, and numerical systems.
- Explore personal interests in written, oral and visual communication.
 - Use a variety of reading materials to develop personal preferences in reading.
 - Select and listen to readings of fiction, drama, nonfiction, and informational presentations according to personal preferences.
 - Respond to a work of literature by interpreting selected phrases, sentences, or passages and applying the information to personal life.
 - Identify specific questions of personal importance and seek to answer them through literature.
 - Identify specific interests and the literature that will satisfy those interests.
 - Know how a literary selection can expand or enrich personal viewpoints or experiences.

Special Honors Note

The Honors level of this course requires students to work independently and in groups in note taking, critical investigation and writing, and in other areas of the course curriculum. The additional instructional time is used to elevate the curriculum's depth and breadth. Students engage in discussion, analysis, and class presentations, which prepare them for the type of engagement with literature and writing, which they will experience in high school. Assessment is more rigorous and additional material is covered.

Grade 8

World Geography- Eastern Hemisphere

Basic Assumptions for Social Studies Education:

- A variety of **geographical** concepts will be integrated throughout the students' learning experience in order to create an awareness of global location.
- As students progress from one course to the next, they will move through various periods in human history, building on prior knowledge and expanding their understanding of human history. Students will learn to utilize and interpret primary sources in developing their understanding.

Major Concepts/Content.

The purpose of this course is to give students an understanding of the differences in cultures and societies throughout human history with a ***focus on human interaction with the earth.***

The content should include, but not be limited to, the following:

- Understanding geographical concepts and various map skills.
- Understanding the importance of location and environment in the development of societies.
- Understanding the dynamic of movement and the spread of ideas.
- Interpreting a variety of graphs and charts.
- Researching primary source material.
- Developing critical thinking skills.
- Writing comprehensive essays.
- Presenting information in a variety of ways.
- Using these skills to explore the following aspects of societies:
 - language
 - customs
 - Religion
 - heritage
 - diffusion
 - science and technology
- Using the skills to explore the following regions and themes:
 - Europe
 - Ancient Greece, Ancient Rome, Middle-Ages, the World Wars
 - Russia and Central Asia
 - Africa
 - Southwest Asia and India
 - Asia
 - China, Japan, Korea, Southeast Asia

After successfully completing this course, the student will:

- Understand how social, cultural, economic and environmental factors contribute to the dynamic nature of regions.
- Understand past and present trends in human migration and cultural interaction and their impact on physical and human systems.
- Understand how the allocation of control of the Earth's surface affects interactions between people in different regions.
- Understand the global impacts of human changes in the physical environment.
- Understand the relationships between resources and the exploration, colonization, and imperialism of different regions of the world.
- Understand the concept of sustainable development.
- Understand transformations in the political and social realms from the Age of Absolutism through the Glorious Revolution to the French Revolution.
- Understand significant political developments in Europe in the 19th century.
- Understand cultural, religious, political, and technological developments of civilizations in Asia.
- Understand political and cultural features of the Mongol Empire and the Empire's impact on Eurasian peoples.
- Understand the significant economic, political and cultural interactions among the peoples of Africa, Europe, Asia and the Americas during the Age of Discovery and the European Expansion.
- Know the significant ideas and texts of Buddhism, Christianity, Hinduism, Islam, and Judaism, and their spheres of influence in the age of expansion.
- Understand how ideas and beliefs, decisions and chance events have been used in the process of writing and interpreting history.
- Use chronology, sequencing, and patterns to examine interpretations of an event.
- Identify and understand themes in history that cross scientific, economic and cultural boundaries.
- Understand how cultural and technological characteristics can link or divide regions.
- Evaluate conflicting sources and materials in the interpretation of a historical event or episode.
- Use a variety of maps, geographic technologies and other advanced graphic representations to depict geographic problems.
- Understand the advantages and disadvantages of using maps from different sources and different points of view.
- Be able to produce a comprehensive essay using multiple sources of information.

Grade 8 Physical Science

Basic Assumptions for Science Education:

- A variety of scientific concepts will be integrated throughout the students learning experience in order to create an understanding of the nature of science.
- As students progress from one course to the next, they will move through various areas of science, building on prior knowledge and expanding their understanding of the basic concepts.
- Learning tasks and materials accommodate the individual needs of students.

Major Concepts/Content

Physical science is a yearlong course dedicated to teaching the basic concepts of both chemistry and physics. Math is an integral aspect to both chemistry and physics, and thus is incorporated into physical science. Physical science strives to teach an understanding of matter's composition and the changes that it undergoes, as well as the physical laws of nature. Many lab activities accompany the course content to emphasize the concepts taught.

The content should include, but not be limited to, the following:

- Understanding composition, changes and states of matter.
- Describing the organization of the periodic table.
- Understanding physical and chemical changes.
- Understanding Newton's Laws.
- Demonstrating knowledge of the Electromagnetic Spectrum.

After completing this course students will be able to:

- Define and compare elements, compounds, mixtures, atoms and molecules.
- Compare chemical changes to physical changes.
- Explain how chemical bonds are changed during chemical reactions.
- Identify evidence of chemical reactions.
- Describe the information conveyed in a chemical reaction.
- Apply the principle of conservation of mass to balancing chemical equations.
- Identify and describe the three categories of chemical reactions.
- Describe the relationship of energy to chemical reactions.
- List factors that control the rate of chemical reactions.
- Identify the three conditions necessary to maintain fire.
- List fire safety measures for the home.
- Describe the structure of an atom and define protons, neutrons and electrons.
- Explain the role of valence electrons in forming chemical bonds.
- Describe the organization of the periodic table.

- Identify the groups within the periodic table and state what properties elements in a group have in common.
- Explain the differences between an atom and an ion.
- Describe how an ionic bond forms.
- Identify properties of ionic compounds.
- Describe how covalent bonds form.
- Identify properties of molecular compounds.
- Distinguish between polar and nonpolar bonds and polar and nonpolar compounds.
- Distinguish between chemical and physical changes of matter.
- Identify characteristic properties of matter and explain their uses.
- Compare mixtures and a pure substance and describe elements and compounds.
- Explain the difference between weight and mass.
- Calculate the density of substances using SI units for mass and volume.
- Explain how atoms are the particles that make up a matter.
- Describe Dalton's theory of atoms.
- Identify chemical bonds as holding atoms together in molecules.
- Describe how the density of gold allows it to be panned.
- Describe how copper and iron are extracted from their ores.
- Define and differentiate solids, liquids and gases in terms of shape and volume.
- Compare the particle motion in solids, liquids and gases.
- Define the relationship between the volume and pressure of gas and state Boyle's law.
- Define the relationship between the pressure and temperature of a gas.
- Define the relationship between the volume and the temperature of a gas and state Charles's Law.
- Construct and interpret graphs of Charles's and Boyle's Laws.
- Describe the differences between physical and chemical changes.
- Explain how energy is involved in changes of matter.
- Describe changes of states.
- Define chemical reactions and explain ways that energy can change in chemical reactions.
- State key events in the historical development of the periodic table.
- List the information in the periodic table and describe how it is organized.
- Describe uses of the periodic table.
- Define valence electrons and tell how they are related to the periodic table.
- Explain why carbon can form bonds in many different arrangements.
- List different forms of pure carbon.
- Identify the properties many organic compounds have in common.
- Define hydrocarbons and describe the kinds of carbon chains in them.
- Define and name examples of substituted hydrocarbons.
- List the four main classes of polymers in living things and name examples.
- Compare the polymers in living things to one another.
- Identify nutrients found in food other than polymer nutrients.

- Explain when an object is in motion.
- Calculate an object's speed and velocity.
- Calculate how fast earth's tectonic plates move.
- Describe what happens to the motion of an object as it accelerates
- Calculate acceleration.
- Explain how balanced and unbalanced forces are related to motion.
- State Newton's first law of motion.
- Explain how force and mass are related to acceleration.
- Identify the factors that determine the friction force between two surfaces.
- Explain how mass differs from weight.
- State the universal law of gravitation.
- State Newton's third law of motion.
- State the law of conservation of momentum.
- Explain how a rocket lifts off the ground.
- Describe the forces that keep a satellite in orbit.
- Describe the six types of simple machines.
- Explain how a machine makes work easier.
- Define magnetic poles and describe the interaction between like and unlike magnetic poles.
- Define magnetic fields and describe magnetic field lines.
- Define magnetic domain and state how magnetic domains are lined up in magnetized material.
- Identify the magnetic properties of earth and compare the magnetic and geographic poles.
- Describe some of the effects of earth's magnetic fields.
- Describe the relationship between electric current and a magnetic field.
- Define and give examples of conductors and insulators.
- Identify the characteristics of an electric circuit.
- Identify characteristics of an electric current.
- Describe the interaction of like and unlike electric charges.
- Define and describe static electricity and state how it differs from electric current.
- Describe lightning and other forms of static discharge.
- Define waves and identify what causes them.
- Identify and compare the three main types of waves.
- List and describe the basic properties of waves.
- Describe how a wave's speed is related to its wavelength and frequency and calculate a wave's speed.
- Identify and compare reflection, refraction, and diffraction.
- Describe the two types of interference of waves.
- Identify and describe resonance.
- Describe what creates seismic waves.
- Identify the different types of seismic waves.

- Describe an electromagnetic wave and its properties.
- Describe properties of light in relation to particles and to electromagnetic waves.
- List and compare different types of electromagnetic waves.
- Describe how the electromagnetic spectrum is arranged.
- Name uses for waves of the electromagnetic spectrum.
- Identify and compare different types of light bulbs.
- Identify the factors that determine the color of an object.

Special Honors Note

The honors classes are more challenging than regular classes, requiring more extensive research and writing, and additional questions on tests, midyear and final examination. It involves extended reading assignments that connect with the curriculum. Students are required to do writing assignments that address and extend the course curriculum.

Grade 8 Foreign Language

Basic Assumptions for Grade 8:

- This course will provide students with the opportunity to communicate in the target language, using the four language learning skills: listening, speaking, reading and writing.
- Students will also explore aspects of the culture of countries in which the target language is spoken.

Major Concepts /Content:

This course builds on the content presented in Grades 6 and 7 and also reinforces the four language skills: listening, speaking, reading and writing.

The content should include, but not be limited to:

- Demonstrating an understanding of simple spoken language involving the use of basic vocabulary and language structures.
- Participating in dialogues and simple conversations, using oral and written forms of the target language.
- Demonstrating knowledge of the syntax of negative, affirmative and interrogative sentences using the target language.
- Narrating and describing events in the Present, Present Progressive and simple Future Tense using oral and written forms.

After successfully completing this course, the students will:

- Listen and respond to simple statements, questions and commands.
- Use visual / verbal cues to interpret simple oral messages in presentations and guided dialogues.
- Identify cultural aspects of the target language (e.g., use of formal and familiar forms of address).
- Use standard pronunciation in the target language (for words and in phrases and sentences).
- Use basic vocabulary and language structures to ask and answer questions and to make statements (e.g., identify family members and everyday objects).
- Greet people and respond to simple forms of greetings.
- Read a variety of simple texts (e.g., dialogues and simple stories) for comprehension, consolidation of oral skills and expansion of vocabulary.
- Use visual cues to determine the meaning of texts in print and other media (e.g., simple, age appropriate advertisements).
- Respond to reading materials in various ways (e.g., answer questions, draw a poster showing the meaning of a text).

- Demonstrate some knowledge of the culture of countries where the language is spoken (festivals and celebrations e.g., bullfighting, day of the dead etc.).
- Write complete but simple sentences using basic vocabulary and language structures (e.g., describe self or family members).
- Write answers to simple questions.
- Write for specific purposes using a model (e.g., write a simple paragraph of about 8-10 sentences).
- Use reflexive verbs to narrate the activities they do in a single day.
- Use resources to communicate more effectively in their writing (e.g., vocabulary from bilingual, visual dictionaries).