

LANGUAGE ARTS (Illinois Learning Standards 1-3) Goal – Read fluently & understand a variety of written materials as well as communicate, listen and develop a command of the language demonstrated through thinking and writing.

Reading

Goal: To create passionate, lifelong readers who read a variety of materials for educational purposes, as well as for enjoyment, with fluency and understanding. Students will:

- Be surrounded in an environment rich with a variety of literary works.
- Identify books that are of interest to them.
- Use classtime almost daily to enjoy independent novels.
- Share books that they have read with their peers and their teacher.
- Will be exposed to an assortment of poems
- Read chorally daily to increase reading fluency
- Journal in order to recount and reflect on various aspects of the novels and how it relates to their lives, or to the world or to others.
- Develop the important skills that good readers use on a routine basis. These skills include previewing, questioning, predicting, inferring, connecting, summarizing, and evaluating literature.

Writing

Goal: To become independent writers who use a variety of techniques to convey meaning. Students will:

- Practice grammar by working with sentence patterns.
- Strengthen and increase sophisticated vocabulary that they began in the 7th grade.
- Employ “Show, not tell” descriptive writing
- Practice elaboration in their writing.
- Practice a variety of writing processes, but will focus on persuasive, narrative, and expository for ISAT testing.

Language Arts is composed of several interrelated areas: writing, spelling, listening, and speaking. At the middle school level, the student is encouraged to learn to communicate clearly through development in these areas.

MATHEMATICS (Illinois Learning Standards 6-10) Goal – Identify, describe and investigate patterns and challenges with numbers, quantities, data, numerical relationships and operations in order to investigate, reason, visualize and problem solve.

Pre-Algebra

- Write and solve multi-step equations and inequalities.
- Find simple interest and compound interest.
- Solve problems by writing equations.
- Determine whether a relation is a function.
- Solve linear equations.
- Solve systems of linear equations and inequalities.
- Solve problems by graphing.
- Use properties of figures to solve problems.
- Classify geometric figures.
- Construct figures.
- Solve a problem by drawing a diagram.
- Find the areas of figures.
- Find the surface area of space figures.
- Find the volumes of space figures.
- Solve a problem by making a model.
- Find the square roots of numbers.
- Find the missing measures of right triangles.
- Use the Distance and Midpoint Formulas.
- Solve a problem by writing a proportion.
- Use graphs to represent data.
- Find theoretical probability and experimental probability.
- Find permutations and combinations.
- Solve problems by doing simulations.
- Use arithmetic and geometric sequences.
- Graph nonlinear functions.
- Perform operations with polynomials.
- Solve a problem using multiple strategies.

Algebra

- Use variables to transform English phrases into mathematical expressions.
- Use the order of operations to simplify expressions.
- Explore function rules and learn to identify relationships within functions.
- Use scatterplots to show relationship between two sets of data.
- Calculate with whole numbers, decimals, fractions, and integers.
- Use the Distributive Property to simplify expressions.
- Calculate theoretical and experimental probabilities.
- Solve equations with variables on both sides, using properties of equality.
- Use proportions to measure objects indirectly.
- Solve and graph inequalities.
- Write and solve compound inequalities.
- Study function rules, and model data using equations, tables, and graphs.
- Use inductive reasoning for recognizing number patterns called sequences.
- Write linear equations and recognize their different forms.
- Understand how the slope of a line can be interpreted in real-world situations.
- Determine whether the graphs of two linear equations are parallel or perpendicular.
- Solve system of two equations with two variables.

	<p>Algebra Continued:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Solve linear system, including graphing, substitution, and elimination. <input type="checkbox"/> Apply properties of exponents, and see how exponents are used to write a geometric sequence. <input type="checkbox"/> Graph exponential functions by making a table of values. <input type="checkbox"/> Categorize polynomials by their degree and number of terms. <input type="checkbox"/> Add, subtract, and multiply polynomials. <input type="checkbox"/> Solve quadratic equations by various techniques such as factoring, finding square roots, completing the square, and applying the Quadratic Formula. <input type="checkbox"/> Simplify expressions containing radicals. <input type="checkbox"/> Solve radical equations.
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SCIENCE (Illinois Learning Standards 11-13) Goal – *Develop an understanding of the inquiry process through experimentation as it relates life, physical, and earth & space sciences while integrating technology and connecting knowledge to everyday life.*

<p>Through the science curriculum classroom instruction will stress kinesthetic learning with artistic, personal expression, and visual means.</p> <p>Students will use the Scientific Method</p> <ul style="list-style-type: none"> <input type="checkbox"/> As a foundation for all scientific processing /evaluating/ experimentation. <input type="checkbox"/> As a basis for career decisions in field. <input type="checkbox"/> To document cause and effect studies (including student input, or the lack of it). <p>Students will use the microscope</p> <ul style="list-style-type: none"> <input type="checkbox"/> As a primary tool in scientific investigation <input type="checkbox"/> To foster awareness of concepts not readily seen with the naked eye. <p>Students will study cytology in order to</p> <ul style="list-style-type: none"> <input type="checkbox"/> Describe and understand relationship of plant/ animal cell structure <input type="checkbox"/> Consider career facets in field <input type="checkbox"/> Study relationship of functions based on structure/ environment <input type="checkbox"/> Describe organelles, cell types, and unique characteristics <p>Students will learn through the study of Zoology</p> <ul style="list-style-type: none"> <input type="checkbox"/> To see and grasp relationships of various life forms <input type="checkbox"/> Compare/contrast differing life forms. <input type="checkbox"/> Start pre-anatomical analysis. <input type="checkbox"/> Describe phyla, tissue, organs, systems and how they pertain to Phyla traits. <p>Students will learn through the study of Anatomy</p> <ul style="list-style-type: none"> <input type="checkbox"/> To understand how parts work to serve the whole body. <input type="checkbox"/> Relationships of functions as they pertain to the environment. <input type="checkbox"/> the frog and human anatomy. 	<p>Students will study Genetics in order</p> <ul style="list-style-type: none"> <input type="checkbox"/> to understand growth and sexual reproduction with DNA and related parts <input type="checkbox"/> to compute various genetic combinations / family history issues <input type="checkbox"/> to identify career opportunities in the field <input type="checkbox"/> to comprehend Mendel, mitosis, meiosis, and Punnett Square combinations. <p>Students will use metrics as a tool of trade in science and understand the logistics of its use.</p> <p>Students will study Botany in order to</p> <ul style="list-style-type: none"> <input type="checkbox"/> do structural analysis of plants and its importance. <input type="checkbox"/> understand plant reproduction and functions. <input type="checkbox"/> understand leaf and flower photosynthesis and pollination types. <p>During the study of Ecology, students will learn</p> <ul style="list-style-type: none"> <input type="checkbox"/> how nature works (biomes, climate, food chains, niches, etc.). <input type="checkbox"/> how man impacts the environment <input type="checkbox"/> ecological and environmental issues and possible plans of action. <p>Students will study Entomology so that they</p> <ul style="list-style-type: none"> <input type="checkbox"/> can learn to use different methods of learning about and evaluating insects (75% of all life) <input type="checkbox"/> can understand structural similarities and differences of the major orders
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SOCIAL SCIENCE (Illinois Learning Standards 14-18) Goal – To prepare students to become citizens of a culturally diverse, democratic society in an interdependent world so that they may make informed and reasoned decisions for the public good

Goal 1: Students should leave knowing the essential aspects of US History from 1870's to present

Specific topics and vocabulary:

- The Industrial Revolution...**patents, trademarks, copyrights, robber baron, philanthropy, corporation, trust, monopoly
- Imperialism...**financial-cultural-military motivations
- Reform Efforts...**tenements, slums, sweatshops, Upton Sinclair, Jane Addams, lynching, racial discrimination
- World Wars I and II...**alliances, negotiations process, military technology, League of Nations, United Nations
- The Roaring 20's...** flapper, speakeasy, Prohibition, Harlem Renaissance, assembly line
- The Great Depression...**overproduction, lay-offs, New Deal, fireside chats, Bonus Army
- The Cold War...**communism, containment, dictatorship, censorship, defection
- Korean and Vietnam Wars...**escalation, maps of countries and negotiated borders
- Civil Rights...**segregation, integration, Thurgood Marshall, Linda Brown, Little Rock 9, civil disobedience

Goal 2: Students should leave knowing the fundamentals of government, how it functions, and their roles as citizens

Specific topics:

- Federal Constitution and review of Illinois Constitution** (the Federal Constitution addresses *all other subjects*, such as impeachment, voting procedures, legal process)

Goal 3: Students should leave with a basic understanding of the economy and influential factors that determine success and failure.

Specific topics:

- Conditions of the business cycle...**boom, bust, depression, recession, stock
- Trade relationships...**import, export, treaties
- Supply and demand ...**prices, inflation, consumer influence
- A broad understanding of the DOW Jones and other economic measurements**
- Lay-offs versus fired**

Besides traditional assessments, all overall goals are achieved through practical applications to present-day circumstances. Concepts are reinforced *daily* through discussion of relevant current events topics.

PHYSICAL EDUCATION (Illinois Learning Standards 19-21) Goal – To provide students with the opportunity to develop and apply skills needed for participation in personal fitness activities that contribute to a healthy lifestyle.

- Continue to refine skills and demonstrate control in a variety of sports-
- Compare and contrast efficient and inefficient movement patterns
- Demonstrate knowledge of rules, safety and strategies during physical activity-using basic offensive and defensive strategies, and developing cooperative strategies in team and individual sport
- Know and apply the principles and components of health-related fitness while participating in activities associated with the principles of training (FITT)

- Assess individual fitness levels-record and evaluate fitness scores, calculate resting and target heart rate, set realistic goals based on fitness data, develop and implement an individual fitness plan
- Demonstrate individual responsibility while participating in cooperative games and team building activities- remaining on task, establishing roles, displaying leadership when necessary, working cooperatively and contributing to the success of the group

HEALTH AND SOCIAL SKILLS (Illinois Learning Standards 22-24) Goal – To facilitate positive behaviors and attitudes (character education, career education, and health education) that lead to a lifetime of good health.

During Science class, students will participate in drug and sex education study so that they can <ul style="list-style-type: none"> <input type="checkbox"/> understand the effects of drugs on systems of body <input type="checkbox"/> make decisions based on fact and not social fads <input type="checkbox"/> understand cause and effect relationships of sexual matters <input type="checkbox"/> be informed about medical/scientific analysis of various methods/ decisions/ facts <input type="checkbox"/> 	<input type="checkbox"/>
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MUSIC (Illinois Learning Standards 25-27) Goal –

<input type="checkbox"/> <i>Currently under development</i>	<input type="checkbox"/>
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VISUAL ART (Illinois Learning Standards 25-27) Goal – Identify the elements and principles of art so an awareness of one’s surroundings will allow students to increase other areas of learning.

<ul style="list-style-type: none"> <input type="checkbox"/> Describe elements/ principles of art that unify a work of art <input type="checkbox"/> Critique a work of art using appropriate language in a positive constructive manner <input type="checkbox"/> Compare and contrast works of art in 2 or more art forms that share similar artistic components <input type="checkbox"/> Demonstrate knowledge and skills to create 2 and 3D works 	<ul style="list-style-type: none"> <input type="checkbox"/> Understand processes, traditional tools and modern technologies used in the arts <input type="checkbox"/> Analyze how the arts function in history, society and everyday life <input type="checkbox"/> Compare and contrast how the arts function in ceremony, technology and politics
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FAMILY AND CONSUMER SCIENCE Goal –

<input type="checkbox"/> <i>Currently under development</i>	<input type="checkbox"/> <input type="checkbox"/>
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TECHNOLOGY (National Educational Technology Standards) Goal –

<ul style="list-style-type: none"> <input type="checkbox"/> <i>Developed during 2009-2010 school year</i> <input type="checkbox"/> 	<input type="checkbox"/>
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