

KINDERGARTEN CURRICULUM

Mathematics

- Recognize and write numbers in order to 50
- Randomly name numbers 1-50
- Count by 5's and 10's
- Can count to 100
- Solve simple addition and subtraction problems
- Understands more, less, and equal
- Use tallies to record data up to 20
- Tells time to the nearest hour and half hour
- Understands value of money
- Demonstrates an understanding of calendars including concepts of yesterday, today, and tomorrow, months and days of the week
- Represent data using concrete objects
- Measure and weigh with tools and rank 1st, 2nd/larger, smaller/heavier, lighter
- Provide a reasonable answer when estimating
- Identify, sort, and classify objects
- Identify, describe, and extend simple patterns
- Understands geometric patterns and symmetry
- Geometry – Identify and draw 6 basic shapes
- Creates a simple graph
- Summarizes data from a simple graph

Science

Physical Science

- Use proper safety practices
- Use common scientific equipment
- Participate in an experiment
- Develop questions on scientific topics
- Make predictions to a scientific problem
- Collect and represent data
- Report results
- Identify and compare sources of energy
- Identify types of motion
- Experience force such as push, pull, gravity, and magnetism
- Compare size, shape, color, texture, and odor of matter

Life Science

- Identify and describe daily weather and seasons
- Identify the sun, Earth, and moon in the solar system
- Identify and describe atmospheric conditions
- Identify and describe parts and functions of living things
- Describe living things in their environment
- Describe how living things depend on each other
- Categorize living things by observation

- Describe renewable and non-renewable resources

Language Arts

Reading

- Recognize and say the sound of all letters
- Recognize and name all upper and lower case letters
- Use phonics skills to sound out written works
- Recognize and read 72 site words
- Produce and recognize pairs of rhyming words
- Identify the characters and setting in a story
- Read simple sentences containing site words
- Respond to simple questions about a book's content
- Retell a story in their own words with correct sequence
- Make predictions with illustrations/portions of stories

Writing

- Writes first and last name
- Recognize and read their own writing
- Leave spaces between words when writing
- Use upper and lower case letters and punctuation
- Independently create text with words
- Phonetically write, representing consonant sounds with single letters in the correct sequence
- Spell color, shapes, and number words
- Write text that is related to the picture
- Write daily in journals both with and without prompts and pictures

Social Science

- Recite name, address, and telephone number
- Neighborhoods: city, state, country, and continent
- Recite the Pledge of Allegiance
- Locate our national and state capitals on a map
- Recognize national holidays
- Understand the importance of respecting the environment
- History as the story of our country
- Understand the role of money in society
- Knows what government is and what our leaders do
- Explain how people depend on one another in society
- Identify characteristics of the United States and our various cultures

Social Skills/Health

- Listens to and follows directions/rules
- Understands left and right
- Tie shoes
- Identify major external body parts
- Recognizing the 5 senses and associated body parts
- Develop relationships with peers and identify activities friends can do together
- Uses time appropriately and can work independently

- Share feelings in a range of contexts
- Participate in discussions around a common topic
- Display listening by facing the speaker, making eye contact, and follow a story read orally
- Respect themselves, each other and property
- Displays responsibility
- Make and sort decisions as well as recognize how decisions and choices are made
- Understands various family structures
- Identify personal characteristics that describe self as special and unique
- Identify dangerous situations and seek help from adults

Music

- Actively participates in singing
- Listen, observe, and participate in performances
- Experiences a variety of instruments
- Improvising melodies

Physical Education

- Actively participates in physical activities
- Cooperative skills
- Health related fitness
- Fundamental gross motor skills
- Movement and special awareness

Arts

- Identify materials and tools to paint, draw, and construct
- Explore and create visual images in artwork

Technology

- Experience technology in the regular classroom as a tool for enhancing the regular curriculum
- Identify the components of the computer as well as how to use them and care for them
- Independently use grade appropriate programs
- Introduce basic keyboarding skills
- Utilize technology as a productivity tool
- Create projects with a variety of tools and programs

Bilingual

- Identify the sounds in the alphabet
- Identify 1-3 words that begin with each of the letters of the alphabet
- Count numbers 1-20
- Count by 5's to 100
- Recognize and respond to greetings, directions, and statements
- Identify oral vocabulary for shapes, foods, days of the week, colors, daily weather, seasons, animals, sizes, classroom objects, body, and family

FIRST GRADE CURRICULUM

Mathematics

- Count, read, and write numbers to 100
- Count backward
- Count by 2's, 5's, 10's, and 100's
- Identify place value for each digit in numbers to 100
- Group quantities into ones, tens, hundreds
- Represent 3 digit numbers using concrete materials or pictures
- Use tally marks to record data up to 20
- Master addition facts to 18
- Add 2 digit numbers
- Master subtraction facts with minuends of 11 to 18
- Subtract 2 digit numbers
- Tell time to the nearest hour and half-hour
- Identify and count coins and dollars
- Read and write money amounts to \$1.00
- Demonstrate an understanding of calendars; yesterday, today, tomorrow, months, and days
- Read, understand, and record temperature from a thermometer
- Measure and weigh objects using non-standard units
- Identify and use math symbols (+ - = < >)
- Identify and model fractions $\frac{1}{2}$, $\frac{1}{3}$, and $\frac{1}{4}$
- Identify, read, and extend patterns
- Identify, describe, sort, and compare geometric shapes such as square, rectangle, rhombus, cube, and cylinder
- Draw, read, and interpret a simple graph
- Provide a reasonable answer when estimating

Science

Physical Science

- Use proper safety practices
- Use common scientific equipment
- Participate in an experiment
- Make predictions to a scientific problem
- Collect and represent data
- Report results
- Develop questions on scientific topics
- Identify and compare sources of energy
- Identify types of motion
- Experience force such as push, pull, gravity, and magnetism
- Compare size, shape, color, texture and odor of matter

Life Science

- Identify the sun, Earth, and moon in the solar system
- Identify and describe daily weather and seasons
- Identify and describe atmospheric conditions

- Identify and describe parts and functions of living things
- Describe living things in their environment
- Describe how living things depend on each other
- Categorize living things by observation
- Describe renewable and non-renewable resources

Language Arts

Reading

- Read fiction and non-fiction materials
- Use letter-sound knowledge and appropriate sight words to read
- Use a variety of reading strategies to self-monitor and self-correct miscues that interfere with meaning
- Use text clues and prior knowledge to make and justify predictions
- Describe and compare characters, setting, and events in stories
- Re-tell a story orally in the correct sequence
- Make connections between texts, personal ideas, and lives
- Develop an understanding for literature and phonics through a balanced literacy program
- Use phonetic awareness knowledge to identify and recognize rhyme, letter/sound relationships and patterns in words
- Respond to analytical and interpretive questions based on information in text, graphs, pictures, maps, and diagrams
- Investigate self and teacher selected literature from a variety of authors and cultures
- Transition from emerging to real reading with accuracy and fluency
- Early literacy, reading fluency, and comprehension questions
- Present brief oral reports, using language and vocabulary appropriate to the message an audience (e.g., show and tell)

Writing

- Use appropriate prewriting strategies (e.g., drawing, brainstorming, idea mapping, graphic organizers) to generate and organize ideas with teacher assistance
- Write sentences with correct subject/verb agreement including appropriate capitalization and punctuation
- Write daily in student journals
- Experiment with different forms of creative writing
- Compose a piece of writing with a beginning, middle, and end
- Use the writing process to create expository, narrative, and creative works
- Elaborate and support written content with facts, details, and description
- Reflect on own writing and that of others
- Communicate connections and ideas in all subject areas through written response

Spelling

- Correctly spell words from selected lists
- Correctly spell appropriate high frequency words
- Use phonetic clues and/or developmental spelling to spell unfamiliar words

<p>Social Science</p> <ul style="list-style-type: none"> • Identify school rules and understand the roles and responsibilities of school employees • Analyze the diverse roles and responsibilities of various family structures • Compare different talents, needs, beliefs, attitudes, and emotions of individuals • Identify cardinal directions • Understand cardinal directions • Differentiate between landforms and bodies of water on maps and globes • Recognize and name present and past leaders of the United States • Understand the significance of national holidays • Understand the significance of patriotism through the Flag, Pledge of Allegiance, and National Anthem • Understand fire, bus, school, and home safety • Compare and contrast urban and rural communities • Distinguish between “needs” and “wants” ○ Distinguish between goods and services ○ Apply the concept of trade in given situations
<p>Social Skills/Health</p> <ul style="list-style-type: none"> • Follow directions given orally • Identify and demonstrate appropriate behavior • Identify and demonstrate responsible healthy behaviors (food, exercise, sleep) • Identify and describe body systems • Identify and name the feelings and emotions of one’s self and others • Listen attentively by facing speaker, making eye contact, and paraphrasing what is said • Participate in discussions around a common topic • Ask questions and respond to questions from the teacher and from group members to improve comprehension • Describe potentially dangerous situations, responsible preventative measures and identify when adult help is needed
<p>Music</p> <ul style="list-style-type: none"> ○ Actively participates in singing ○ Experiences a variety of instruments and their sound ○ Listen, observe and participate in musical performances ○ Evaluate music and musical performances ○ Read, compose, and improvise melodies
<p>Physical Education</p> <ul style="list-style-type: none"> ○ Actively participates in physical activities ○ Participates appropriately in organized activities and both competitive and noncompetitive games ○ Apply safe practices and procedures with peers during activities ○ Experience health related fitness ○ Participate in cooperative skills ○ Display fundamental gross motor skills with proper movement and special awareness

Arts
<ul style="list-style-type: none"> ○ Identify materials and tools to paint, draw, and construct ○ Explore and create visual images in artwork
Technology
<ul style="list-style-type: none"> ○ Introduce basic keyboarding skills ○ Independently use grade appropriate programs ○ Identify technology as a productivity tool ○ Demonstrate proper computer care ○ Demonstrate proper uses of the computer ○ Experience technology in the regular classroom as a tool for enhancing the regular curriculum ○ Create projects with a variety of tools and programs
Bilingual
<ul style="list-style-type: none"> ○ Count, add, and subtract numbers from 0-100 ○ Expand vocabulary with age appropriate literature ○ Respond to questions and greetings ○ Identify vocabulary for basic shapes, foods, days of the week and months of the year, colors, weather and seasons, names of animals, sizes, classroom objects, body, family and community, clothes, transportation, and places ○ Name at least two Spanish speaking countries and one characteristic of that culture (for example, a celebration or holiday)

SECOND GRADE CURRICULUM

Mathematics
<ul style="list-style-type: none"> ○ Count by 25's and 100's ○ Identify place value for numbers 1-1000 ○ Read and write whole numbers to 1000 ○ Master addition and subtraction facts to 18 ○ Add 2 and 3 digit numbers ○ Subtract 2 and 3 digit numbers ○ Identify and write a fractional part of a whole ○ Master multiplying by 0, 1, 2, 3, 4, 5 ○ Tell and show time to the hour, half-hour, quarter hour, and five-minute intervals ○ Read and write money amounts to \$10.00 ○ Find the value for a set of coins ○ Knowledge of equivalences in time and measurement ○ Measure and weigh objects using customary and metric units ○ Read temperatures to the nearest five degrees ○ Provide a reasonable answer when estimating ○ Locate points on a number line and coordinate graph ○ Identify, describe, sort, and compare geometric shapes ○ Describe and classify polygons, angles, and line-segments

- Read, draw and interpret a variety of graphs

Science

Physical

- Use proper safety practices
- Use common scientific equipment
- Make predictions to a scientific problem
- Participate in an experiment
- Collect and represent data
- Report results
- Develop questions on scientific topics
- Identify and compare sources of energy
- Identify types of motion
- Experience force such as push, pull, gravity, and magnetism
- Compare size, shape, color, texture, and odor of matter

Life

- Identify and describe daily weather and seasons
- Identify the sun, Earth, and moon in the solar system
- Identify and describe atmospheric conditions
- Identify and describe parts and functions of living things
- Describe how living things depend of each other
- Categorize living things by observation
- Describe renewable and non-renewable resources

Language Arts

Reading

- Use letter-sound knowledge and sight words to read
- Read age appropriate material with fluency and accuracy
- Read fiction and non-fiction materials for specific purposes
- Develop an understanding for literature and phonics through a balanced literacy program
- Use phonetic awareness to identify and recognize rhyme, letter/sound relationships, and patterns in words
- Utilize and apply a variety of reading strategies (e.g., picture clues, decoding, context clues, and rereading for meaning) for the purpose of comprehending a text
- Use a variety of pre-reading and reading strategies to self-monitor and correct miscues that interfere with meaning
- Use text clues and prior knowledge of topics to make and justify predictions
- Describe and compare characters, settings, and events in stories
- Respond to analytical and interpretive questions based on information in text, graphs, pictures, maps, and diagrams
- Investigate both self and teachers-selected literature from a variety of authors and cultures
- Recognize, discuss and re-tell a story, read or heard, in sequential order and identify the main idea
- Distinguish fact from opinion
- Reading fluency and comprehension at or above target scores on AIMS Web

Writing

- Use appropriate prewriting strategies (e.g., drawing, brainstorming, idea mapping, graphic organizers) to generate and organize ideas with teacher assistance
- Compose a focused piece of writing with a beginning, middle, and end
- Write simple sentences with correct subject/verb complement pattern including proper capitalization and punctuation daily
- Use the writing to develop expository, persuasive, narrative, creative, and research works that include an introduction, supporting sentences, and a conclusion
- Experiment with different forms of creative writing (e.g., song, poetry, journaling, short fiction)
- Begin to evaluate and reflect on own writing and that of others
- Present brief oral reports, using language and vocabulary appropriate to the message and audience (e.g., show and tell)
- Elaborate on written content with facts, details, and description
- Incorporate appropriate technology to support writing

Spelling

- Correctly spell words from selected word lists
- Use phonetic clues to spell unfamiliar words
- Correctly spell appropriate high frequency words

Social Science

- Locate the 50 states on a globe or map
- Locate North and South Poles on a globe or map
- Use maps and globes to identify landforms, bodies of water, and countries of the world
- Use the tools of a map or globe (key, title, and compass rose)
- Identify local environment and geographical features
- Explain the purpose of patriotic holidays
- Recognize voting as a way to make choices
- Summarize how laws are made and enforced
- Identify major similarities and differences between people throughout the world
- Explore significant people and events in local history
- Identify significant historical figures in American History and what they represented
- Describe the major events surrounding America becoming independent
- Demonstrate the concept that groups of people working and living together need rules for safety, fairness, and order
- Demonstrate the concept of trade and currency
- Compare and contrast characteristics and diversity of neighborhoods and communities
- Compare and contrast needs and wants
- Analyze the concept of income as it relates to acquiring goods and services
- Describe the interdependent relationship between producers and consumers
- Describe a variety of occupations and the reason for working
- Describe traits of responsible citizens
- Recognize the value of natural resources

<ul style="list-style-type: none"> • Read and interpret various graphs and charts
Social Skills/Health
<ul style="list-style-type: none"> • Identify basic parts of the body and their functions • Identify signs and symptoms of illness • Describe various ways to take care of one's health • Identify personal skills and talents • Identify the feeling of others • Identify and display emotions in an appropriate way • Show ability to listen and control strong emotions • Develop and demonstrate proper safety behaviors • Work cooperatively and productively in groups capable of describing and summarizing a plan for making friends
Music
<ul style="list-style-type: none"> ○ Actively participates in singing ○ Experiences a variety of instruments and their sounds ○ Listen, observe, and participate in musical performances ○ Evaluate music and musical performances ○ Read, compose, and improvise melodies
Physical Education
<ul style="list-style-type: none"> ○ Work cooperatively with others in both competitive and non-competitive activities ○ Demonstrate knowledge of rules and safety during physical activities ○ Participate in activities that promote cardiovascular endurance, muscular strength and a range of motion ○ Identify and experience various levels of physical intensity that cause changes in breathing and heart rate ○ Identify physical strengths and limitations ○ Demonstrate movement and special awareness ○ Display gross motor, fine motor and manipulative skills
Arts
<ul style="list-style-type: none"> ○ Identify and use a variety of materials and tools to paint, draw, and construct artwork ○ Recognize differences and similarities in various works of art ○ Explore and create visual images in artwork ○ Demonstrate special factors such as direction, level, size and shape
Technology
<ul style="list-style-type: none"> ○ Demonstrate an understanding of proper computer care ○ Experience technology in the regular classroom as a tool for enhancing the regular curriculum ○ Independently use grade appropriate programs ○ Gather information through telecommunications ○ Identify technology as a productivity tool ○ Create projects with a variety of tools and programs ○ Create multimedia projects utilizing a wide range of resources and software

Bilingual

- Count, add, and subtract numbers from 0-100
- Identify vocabulary for days of the week and months of the year, family and community, cultures, transportation, sizes, foods, clothes, emotions, verbs, and pronouns
- Identify definite/indefinite articles, diphthongs, and gender concepts
- Identify and use 60 sight words
- Write sentences using simple sentence structure
- Recognize and utilize parts of speech in speaking and writing
- Investigate characteristics of Spanish Speaking nations throughout the world

THIRD GRADE CURRICULUM

Mathematics

- Count by 10's, 100's, and 1000's
- Explore numbers less than "0"
- Identify prime numbers to 1000
- Describe and use ">", "<", and "=" symbols correctly
- Represent, order, and compare decimals
- Estimate whole number computations and determine appropriateness of estimates or exact numbers
- Write numbers in expanded form (e.g., $417 = 400 + 10 + 7$)
- Determine fractional parts of a whole and generate equivalent forms of fractions
- Write and know place values of 7 digit numbers
- Demonstrate fluency with multiplication and division facts
- Use the relationship of multiplication and division fact families to solve for an unknown quantity
- Determine the range, mode, mean, and median of a data set
- Use representations to answer questions concerning fractions, percents, rates, and ratios
- Solve equations with one missing variable
- Solve a problem involving quantitative change
- Measure/calculate length, area, and perimeter and record in appropriate metrics and standard form
- Estimate, solve, and check a series of addition and subtraction number and word problems
- Solve single and multi-step word problems with decimals, fractions, multiplication, and division
- Solve story problems using fact extensions
- Read, record, display, and analyze data
- Predict probability
- Draw a scale map
- Extend geometric and numeric patterns
- Measure the volume of a cube with inch and centimeter cubes

- Compare and contrast 2 and 3 dimensional objects
- Represent a pattern using a table, pictograph, and cubes and make predictions based on these representations
- Identify lines of symmetry and similar shapes
- Draw, name, and measure acute, obtuse, and right angles

Science

Physical

- Use proper safety practices
- Use common scientific equipment
- Participate in an experiment
- Make predictions to a scientific problem
- Collect and represent data
- Report results
- Develop questions on scientific topics
- Identify and compare sources of energy
- Identify types of motion
- Experience force such as push, pull, gravity, and magnetism
- Compare size, shape, color, texture, and odor of matter

Life

- Identify and describe daily weather and seasons
- Identify the sun, Earth, and moon in the solar system
- Identify and describe atmospheric conditions
- Describe renewable and non-renewable resources
- Identify and describe parts and functions of living things
- Describe living things in their environment
- Describe how living things depend on each other
- Categorize living things by observation

Language Arts

Reading

- Identify rhythm and rhyme in original work
- Identify similes
- Identify characters, setting, problem, solution, point of view, and plot in a wide range of fiction
- Analyze root words, prefixes, suffixes, synonyms, and antonyms
- Analyze reading material and answer open ended questions using background knowledge and experience
- Use strategies of predicting, questioning, and comparing to understand non-fiction text
- Compare author's work on common themes
- Verify resources used by citing text
- Reading fluency and comprehension at or above target scores on AIMS Web

Writing

- Use proper grammar, punctuation, capitalization, and spelling
- Correctly spell high frequency words

- Write a fully developed paragraph using a topic sentence, detail, elaboration, and conclusive sentences
- Organize a paragraph with a topic sentence, supporting details, and transition words
- Write daily in journals both with and without prompts
- Use strategies like brainstorming, outlining, and graphic organizers to generate ideas
- Compose letters and short stories
- Write persuasive, narrative, and creative works
- Proofread one's own work and the work of others; revise accordingly

Social Science

- Use basic map reading skills and tools such as the Atlas, compass rose, symbols, landforms, and scales to identify continents, oceans, mountain ranges, latitude, longitude, the prime meridian, and equator
- Identify and examine physical features, natural resources, geographical regions such as rivers, valleys, and lakes as well as landforms, impact of glacial movements and mineral deposits
- Understand the economic development of Illinois with a focus on farming, transportation, and manufacturing
- Describe the basic functions and principles of representative government (state and local) in Illinois with an emphasis on the Illinois Constitution
- Identify the origins, history, locations and religions of various ethnic groups in Illinois
- Investigate the history of Illinois including the Native Americans and early immigrants
- Commemorate the signing of the U.S. Constitution on or around September 17 each year
- Identify local climate and how its characteristics impact our lifestyles and economy
- Construct and interpret pictographs, bar graphs, and line graphs

Social Skills/Health

- Demonstrate positive character traits of respect, responsibility, fairness, caring, trustworthiness, and citizenship
- Display honesty, kindness, justice, discipline, respect for others and moral courage
- Identify healthy lifestyle choices along with healthy foods and the importance of good nutrition
- Restate and carry out a variety of oral instruction
- Demonstrate an understanding of the listening process by responding orally and in writing in formal and informal situations
- Know strategies for resisting peer pressure
- Identify causes of conflict, consequences of violent behavior, non-violent resolution, and relationship between drugs, alcohol, and violence
- Be able to negotiate and accept difference
- Use speaking skills and procedures to participate in group discussions

- Ask questions and respond to questions related to oral presentations and messages in small and large group
- Recognize mood changes, strong feelings, and exhibits control
- Present oral reports using correct language and nonverbal expressions for the intended purpose and message with a suggested organizational format

Music

- Actively participates in singing
- Listen, observe, and participate in performances
- Evaluating music and musical performances
- Listening, analyzing, and describing music
- Reading and noting music
- Performing on a variety of instruments
- Improvising melodies
- Composing and arranging

Physical Education

- Actively participates in physical activities
- Cooperative skills
- Health related fitness activities
- Specialized motor skills and body mechanics

Arts

- Understand and apply media, techniques, and processes
- Understand visual arts in relation to history and cultures
- Reflect on and assess student work
- Make connections between arts and other disciplines
- Choose and evaluate ideas, subject forms, and symbols
- Use knowledge of art elements and principles of design

Technology

- Experience technology in the regular classroom as a tool for enhancing the regular curriculum
- Exhibits keyboarding skills efficiently and effectively
- Independently use grade appropriate programs
- Identify strategies for safe use of the internet
- Discuss basic issues related to responsible use of technology and consequences of inappropriate use
- Create projects and presentations with a variety of tools and programs
- Utilize technology as a productivity tool for problem solving, research and inquiry, self-directed learning and extended learning activities

FOURTH GRADE CURRICULUM

Mathematics

- Determine prime and composite numbers from one to 100
- Show equivalences in number representation
 - Place mixed and decimal numbers on a number line
- Analyze the relationship of the whole to the fraction
 - Make estimates regarding weight, cost, height, circumference, diameter, length, perimeter, area, and volume
- Determine and compare estimates, actual counts, minimum values, ranges, modes, medians, means, ratios and percents
- Convert U.S. and metric units into larger and smaller units
- Identify how choice in units of measurement affects precision
- Read and interpret a scale on a map
- Describe inverse relationships
- Solve number sentences and word problems using addition and subtraction of fractions with unlike denominators as well as decimals
 - Identify and express ratios using appropriate notation
- Create and solve linear equations with variables using manipulatives
 - Determine the distance between points on along horizontal and vertical lines
- Determine and describe the probability of an event
 - Create regular and semi-regular tessellations
- Extend geometric and numeric patterns
 - Identify, describe, classify, and compare relationships using points, lines, planes, and solids
 - Copy a line segment using a compass and straight edge
 - Properly draw an angle using a protector
 - Construct a perpendicular bisector of a line segment
 - Identify rotational symmetry in two and three dimensional shapes
- Identify, compare, analyze, and classify two and three dimensional shapes
- Use formulas for determining area
- Use tables and graphs to analyze patterns and draw conclusions
- Select appropriate tools to measure, draw, and construct figures
- Can construct convincing arguments and proofs to solve problems

Science

Physical

- Describe and explain properties of solids, liquids, and gases
- Describe and compare types of energy
 - Identify and describe sources of energy
 - Describe types of motion, action/reaction and force such as push/pull, gravity and magnetism
 - Compare size, shape, color, texture, and odor of matter
 - Explain constant, variable, and periodic motions

Life

- Identify and describe parts and functions of living things
- Describe relationships of living things
- Describe characteristics of living things and their relationship to their environment
- Categorize living things by observable features
- Describe the life cycles of plants and animals
- Categorize features as inherited or learned

Earth and Space

- Identify and describe patterns of weather and seasonal change
- Identify and describe diverse features of Earth's land, water, and atmosphere conditions
- Identify and explain natural cycles of the Earth's land, water, and atmospheric systems
- Describe and explain short and long term interactions on the Earth
- Describe renewable, non-renewable, and recyclable resources
- Identify the sun, Earth, moon and star patterns in the Solar System
- Explain natural cycles and patterns in the Solar System
- Understand how rotation and revolution impact the Earth

Scientific Process

- Use proper safety practices in all experiments
- Participate in an experiment
- Use appropriate scientific equipment and instruments to conduct experiments
- Make predictions to a scientific problem
- Collect and represent data with a variety of tools
- Report results using technology
- Develop questions on scientific topic
- Construct a device and analyze the result, trouble shoot and problem solve
- Identify and explain ways technology changes ecosystems
- Identify and describe ways science and technology affect people's lives

Language Arts

Reading

- Use a combination of word analysis, vocabulary strategies, root words, and context to determine word meaning
- Recognize similarities and differences of varying styles or point of view
- Demonstrate understanding of structure through the use of graphic organizers, outlining, and teacher modeling
- Use a combination of word analysis and vocabulary strategies to identify new words and meanings
- Formulate questions to determine meaning based on plot, character, action, setting, inferences, and interpretations
- Compare the content and organization of various selections
- Use comprehension strategies to enhance understanding
- Apply self-monitoring and self-correcting strategies continuously to clarify understanding during reading

- Use resources (e.g., newspapers, interviews, technological resources) as applicable to clarify meanings of materials
- Compare ideas from texts representing a variety of times and cultures
- Interpret information from tables, maps, visual aids, and charts to enhance understandings
- Identify and interpret common idioms, similes, analogies, metaphors, synonyms, and antonyms to define words
 - Identify similes
- Analyze reading material and answer open ended questions using background knowledge and experience
- Identify characters, setting, problem, solution, point of view, and plot in a wide range of fiction
- Use strategies of predicting, questioning, and comparing to understand non-fiction text
- Compare author's work on common themes
- Formulate questions to determine meaning based on plot, character, action, or settings
- Apply survey strategies (e.g., use of bold print, organization of content, key words, graphics)
- Verify resources used by citing text
 - Use KWL charts to be able to apply personal background knowledge and experience to literary text
 - Reading fluency and comprehension at or above target scores on AIMS Web

Writing

- Construct complete sentences with proper grammar, subject and verb agreement, capitalization, and punctuation
- Establish central idea, organization, elaboration, and unity in relation to purpose and audience
- Expand ideas using modifiers, subordination, and standard paragraph organization
- Use prewriting strategies like brainstorming, outlining, and graphic organizers to generate ideas
- Organize a paragraph with a topic sentence, supporting details, and transition words
- Write a fully developed paragraph using a topic sentence, detail, elaboration, conclusive sentences, and a variety of sentence types
 - Write daily in journals both with and without prompts
- Write expository, persuasive, narrative, and creative works
- Compose letters, plays, short stories, and poetry
- Produce and format compositions for specific audiences using available technology
- Proofread and revise one's own work and the work of others

Social Science

- Identify and examine physical features, natural resources, geographical regions such as rivers, valleys, and lakes as well as landforms, impact of glacial movements and mineral deposits
- Locate states and major cities in North America
- Identify local climate and how its characteristics impact our lifestyles and economy
- Differentiate between characteristics, functions, and principles of county, state, and federal government and officials as well as the rights and responsibilities of the citizens
- Use basic map reading skills and tools such as the Atlas, compass rose, symbols, landforms, and scales to identify continents, oceans, mountain ranges, latitude, longitude, the prime meridian, and equator
- Define significant features of rural, urban, and suburban communities such as employment, goods and services, local government, and infrastructure development, and maintenance
- Construct and interpret pictographs, bar graphs, and line graphs
- Identify the origins, history, locations, and religions of various ethnic groups in Illinois
- Recognize state symbols such as the flag, bird, tree, etc.
- Understand the origins, history, community locations, customs, and religion of ethnic groups
- Commemorate the signing of the U.S. Constitution on or around September 17 each year
- Analyze the importance of governmental functions such as taxation, providing services, and law enforcement
- Differentiate between good and bad practices
- Demonstrate positive ecological behaviors

Social Skills/Health

- Recognize and use communication skills
- Develop an understanding of the major body systems and their function
- Identify healthy lifestyle choices including healthy foods and the impact of good nutrition
- Use of attentive listening skills to foster better communication and relationships
- Know common causes of stress for children and can successfully resolve them
- Able to resolve conflicts effectively

Music

- Actively participates in singing
- Listen, observe, and participate in performances
- Evaluating music and musical performances
- Performing on a variety of instruments
- Reading and noting music
- Listening, analyzing, and describing music
- Improvising melodies
- Composing and arranging

Physical Education
<ul style="list-style-type: none"> • Actively participates in physical activities • Cooperative skills • Health related fitness activities ○ Specialized motor skills and body mechanics
Arts
<ul style="list-style-type: none"> • Use knowledge of art elements and principles • Understand visual arts in relation to history and cultures ○ Make connections between arts and other disciplines • Reflect on and assess student work • Choose and evaluate ideas, subject forms, and symbols • Understand and apply media, techniques, and processes
Technology
<ul style="list-style-type: none"> ○ Identify strategies for safe use of the internet ○ Discuss basic issues related to responsible use of technology and consequences of inappropriate use ○ Exhibits keyboarding skills efficiently and effectively ○ Experience technology in the regular classroom as a tool for enhancing the regular curriculum ○ Independently use grade appropriate programs ○ Create projects and presentations with a variety of tools and programs ○ Utilize technology as a productivity tool for problem solving, research and inquiry, self-directed learning, and extended learning activities

FIFTH GRADE CURRICULUM

Mathematics
<ul style="list-style-type: none"> ○ Determine and compare estimates, actual counts, minimum values, ranges, modes, medians, means, ratios, and percents ○ Place, compare, and order fractions and decimals by finding their position on a number line ○ Determine prime and composite numbers from 1-100 ○ Represent, order, compare, and graph integers ○ Represent repeated factors ○ Solve number sentences and word problems using addition and subtraction of fractions with unlike denominators and decimals ○ Evaluate and simplify algebraic expression ○ Describe, extend, and make generalizations about given geometric and numeric patterns ○ Identify and express ratios using appropriate notation ○ Convert U.S. and metric units into larger and smaller units ○ Create and solve linear equations ○ Determine the distance between points on horizontal and vertical lines ○ Determine and describe the probability of an event and record as fractions, decimals, or percents

- Create appropriate graphs to display data
- Describe inverse relationships
- Explain how units of measurement affects precision
- Read, interpret, and compare scales on maps
- Collect and represent data by conducting simple experiments over time both with and without technology
- Use tables and graphs to compare, analyze, and draw conclusions
- Create and manipulate regular and semi-regular tessellations
- Select appropriate tools to measure, draw, and construct figures
- Copy a line segment using a compass and straightedge
- Construct a perpendicular bisector of a line segment
- Analyze and classify 2 and 3 dimensional shapes
- Identify rotational symmetry in 2 and 3 dimensional shapes
- Determine congruence in a variety of figures using transformation and measurement of angles and sides
- Plot and read ordered pairs in all 4 quadrants
- Determine unknown angle measurements using clues of relationships and properties
- Construct and defend arguments and proofs to solve problems
- Use formulas for determining area, perimeter, volume, surface area, and circumference
- Determine pi, diameter, radius, and circumference of a circle
- Make estimates and calculate regarding weight, cost, height, circumference, diameter, length, perimeter, area, and volume

Science

Physical

- Explore Newton's 3 Laws of Motion relative to mass, distance, and acceleration
- Perform calculations to determine average speed, velocity, and acceleration
- Analyze actions, reactions, resistance, and friction
- Explore constant, variable, and periodic motion in terms of position, direction, acceleration, and speed in a straight, circular, and inclined paths
- Examine the properties of common elements, compounds, and simple mixtures categorizing heterogeneous and homogeneous samples as well as physical and chemical properties
- Categorizing the properties of common elements
- Explore energy comparing insulation, conduction, convection, and radiation of heat
- Measure and graph temperature variations identifying and explaining patterns

Life

- Distinguish similarities and differences of offspring comparing characteristics of offspring to parents and predict possible genetic combinations
- Compare the stages of simple life cycles, energy requirements, and identifying structures and their functions to cells, tissues, organs, systems, and organisms
- Examine the nature of learned and inherited traits and behaviors
- Examine structural and functional features of organisms and how cells respond to genetic and environmental influences

- Explore patterns at both the micro and macroscopic levels of organisms
- Study the impact of factors effecting organisms such as niches and habitats with a focus on Illinois environments
- Compare adaptations of physical features of organisms to their environments identifying physical features that help plants and animals survive

Earth and Space

- Examine the natural cycles and patterns in the solar system predicting orbits, identifying moon phases, Earth's seasons, and visible constellations
- Diagram the water cycle and explain the changes that occur in the atmosphere such as cloud types and barometric pressure during different weather conditions
- Analyze weather patterns describing short and long term changes in climate and suggest possible causes for the changes
- Describe the process and impact of erosion and weathering
- Examine Earth's land, water, and atmospheric conditions
- Analyze the solar system and planetary characteristics
- Evaluate natural resource quantities, location, and human impact on scarcity

Scientific Process

- Use proper safety practices
- Use appropriate instruments to conduct experiments
- Plan and conduct experiments by selecting appropriate controlled variables, equipment, and tools so that the experiment can be repeated
- Formulate a hypothesis generating if-then, cause-effect statements
- Collect, organize, and appropriately represent data with a variety of tools and measuring devices
- Report the results identifying observations that support or disprove the hypothesis
- Interpret and represent results in a variety of ways including technology

Relevance

- Research the impact of technology and science on society with an emphasis on medical discoveries, ecological impact, human statistics, disease transmittal, transportation, communication, productivity, and economic impact
- Investigate the possibilities of technological discoveries in both the near and long-term future
- Identify and describe ways that science and technology affect people's lives

Language Arts

Reading Strategies

- Identify probable outcomes or actions
- Make comparisons across reading passages
- Distinguish between minor and significant details in a passage
- Identify explicit and implicit main ideas
- Determine the purpose of features of informal text (bold print, organization of content, key words, graphics)
- Identify cause and effect organizational patterns in fiction
- Demonstrate understanding by using sophisticated graphic organizers to represent passage content
- Establish and adjust purposes for reading

Reading Comprehension

- Identify the main idea of a selection when it is not explicitly stated (e.g., by choosing the best alternative title from among several suggested for a given purpose)
- Differentiate between fact and fiction
- Identify or summarize the order of events in a story or nonfiction account
- Distinguish the main ideas and supporting details in any text
- Determine the answer to a literal or simple inference question regarding the meaning of a passage
- Summarize a story or nonfiction passage or identify the best summary
- Draw inferences, conclusions, or generalizations about text and support them with textual evidence and prior knowledge
- Determine whether a set of complex instructions or procedures is complete and therefore, clear. If incomplete, identify what is missing
- Interpret an image based on information provided in a passage
- Draw conclusions from information in maps, charts, graphs, and diagrams
- Determine the author's purpose for writing a fiction or nonfiction text
- Determine how illustrators use art to express their ideas

Reading Fluency and Comprehension

- Reading fluency and comprehension at or above target scores on AIMS Web during each benchmark testing; Fall, Winter, and Spring

Writing

- Use prewriting strategies like brainstorming, outlining, and graphic organizers to generate ideas
- Write daily in journals both with and without prompts
- Establish central idea, organization, elaboration, and unity in relation to purpose and audience
- Expand ideas using modifiers, subordination, and standard paragraph organization
- Organize a paragraph with a topic sentence, supporting details, and transition words
- Write a fully developed paragraph using a topic sentence, detail, elaboration, conclusive sentences, and a variety of sentence types
- Develop multi-paragraph compositions including an introduction, support, and conclusion
- Write expository, persuasive, narrative, and creative works
- Compose letters, plays, short stories, and poetry
- Design a research paper or project using research skills such as developing a question, evaluating data, searching and using a variety of source and creating a final product
- Produce and format compositions for specific audiences using available technology
- Proofread and revise one's own work and the work of others

Vocabulary

- Determine the meaning of words in context when the word has multiple meanings
- Determine the correct use of homonyms, idioms, and analogies using context clues
- Determine the meaning of an unknown word using prefixes, suffixes, word roots as well as word, sentence, and cross sentence clues
- Use synonyms and antonyms to define words
- Use a combination of word analysis and vocabulary strategies to identify new words and meanings

Literary Meaning

- Identify events important to the development of the plot
- Identify setting, including how setting affects plot
- Differentiate among the literary elements of plot, character, setting, and theme
- Recognize points of view in narratives (e.g., first person)
- Identify the author's message or theme
- Interpret literary passages using the following elements of literary structure: rising action, falling action, and resolution
- Determine character motivation
- Determine the causes of character's actions
- Explain the relationship between main and supporting characters
- Determine what characters are like by what they say or do by how the author or illustrator portrays them
- Compare stories to personal experience, prior knowledge, or other stories
- Identify whether a given passage is narrative, persuasive, or expository
- Identify and interpret figurative language (e.g., metaphor, alliteration, personification)
- Identify examples of poetic devices using sound, such as alliteration, onomatopoeia, rhyme scheme, and unrhymed verse
- Identify the following subcategories of genres: science fiction, historical fiction, myth or legend, drama, biography/autobiography, story, poem, fairytale. Folktale, fable, nonfiction, and essay

Social Science

Current Events

- Students will examine and discuss the significance of current issues at the local, state, national, and international levels through the use of magazines, newspapers, etc.

Geography

- Use basic map reading skills and tools such as the Atlas, compass rose, symbols, landforms, and scales to identify continents, oceans, bodies of water, mountain ranges, latitude, longitude, the prime meridian, and equator
- Identify the role of geographical features and barriers in the development of settlements, agricultural, and industrial regions
- Evaluate the effects of industry and growth on the environment

Government

- Commemorate the signing of the U. S. Constitution on or around September 17 each year

- Summarize the main idea of the Declaration of Independence, Northwest Ordinance, and Preamble to the U. S. Constitution
- Identify symbolism of images and icons
- Identify struggles for equality, civil rights, and conflicts of the bill of rights among various groups
- Explain the distribution of powers to local, state, and federal government and the roles of the leaders at each level and branch of government
- Describe the system of a two-house legislature
- Explain the importance and details of checks and balances
- Identify the role of significant individuals, political parties, and interest groups in political systems
- Identify the significance of the election process as well as the responsibilities of citizens
- Identify the contributions of significant political figures
- Identifies significant U.S. foreign policy issues and the role of international organizations, treaties, and the president
- Define “consent of the governed”, significance of a constitution, and similarities in the Illinois and U.S. Constitutions
- Identify characteristics of limited and unlimited government
- Compare our government to that of early Greeks and Romans

Historical Context

- Create a timeline of events
- Create timelines identifying the difference between political, economic, environmental, and social events
- Identify two different interpretations of a historical event
- Compare primary and secondary sources
- Evaluate and analyze historical sources (primary, secondary, online, novels, movies, and songs)
- Interpret significant events and people from different perspectives
- Identify the causes of major events as well as significant individuals and their actions
- Identify the role of significant individuals and events in changing society
- Describe how various groups work together toward achieving common goals and interests
- Compare and contrast various cultures, their traits, language, art, and contributions to society
- Distinguish between norms and laws

Economics

- Identify the following significant periods: Manorial, Medieval Times, Renaissance, Age of Exploration, Columbian Exchange, Industrial Revolution, and the Great Depression
- Define imports and exports
- Identify exchange through money and bartering
- Identify the role of government in our economy
- Understand the role of taxes in our government

- Identify significant economic events in our history
- Evaluate significant inventions and their contributions
- Identify the role of technology and education in productivity
- Identify and explain the role of producers and consumers and supply and demand in a market economy
- Explain the role of scarcity in producing and consuming
- Identify division of labor
- Compare and contrast hunter-gatherer, agricultural, industrializing, and industrialized civilizations
- Define capitalism, socialism, and communism

Social Skills/Health

- Recognize and use appropriate communication skills in different social situations
- Use of attentive listening skills to foster better communication and relationships with peers
- Identify healthy lifestyle choices including healthy foods, exercise, good nutrition, and the importance avoiding or misusing drugs and alcohol
- Develop and understanding of major body systems, their functions, and how they interact
- Identify how the environment can affect one's health
- Identify effective strategies for dealing with bullying
- Able to resolve conflicts in an effective and appropriate manner
- Know common causes of stress for children and can utilize strategies to successfully deal with it

Music

- Actively participates in singing
- Listen, observe, and participate in performances
- Evaluating music and musical performances
- Listening, analyzing, and describing music
- Reading and noting music
- Performing on a variety of instruments
- Improvising melodies
- Composing and arranging

Physical Education

- Participate in establishing procedures for physical fitness activities
- Work cooperatively with others to set common goals in various competitive and noncompetitive activities
- Follow directions and make appropriate decisions
- Remain on task independent of distraction
- Set short and long term fitness and health goals
- Monitor intensive exercise
- Compare and contrast efficient from inefficient movement patterns
- Evaluate personal fitness profile and BMI
- Demonstrate control of movement
- Apply rules and safety procedures for physical activity
- Apply offensive and defensive strategy in games
- Identify the principles of training: frequency, intensity, time, and type

<ul style="list-style-type: none"> ○ Describe the relationships among physical, mental, and social health factors during adolescence
<p>Arts</p> <ul style="list-style-type: none"> ○ Use knowledge of art elements and principles of design ○ Understand how arts shape and reflect history, society, and everyday life ○ Make connections between arts and other disciplines ○ Reflect on and assess student work ○ Choose and evaluate ideas, subject forms, and symbols ○ Understand and apply media, techniques, and processes ○ Compare and contrast visual arts in relation to history and cultures
<p>Technology</p> <ul style="list-style-type: none"> ○ Independently use grade appropriate programs ○ Experience technology in the regular classroom as a tool for enhancing the regular curriculum ○ Exhibits keyboarding skills efficiently and effectively ○ Utilize technology as a productivity tool for problem solving, research and inquiry, self-directed learning and extended learning activities ○ Identifies issues related to responsible use of technology and consequences of inappropriate use ○ Increase student knowledge of internet safety practices ○ Identify dangerous situations as well as strategies for keeping safe when using the internet ○ Identify ways technology impacts people’s lives ○ Use basic input and output devices, access network programs and use common peripherals (cameras, projectors, etc.) ○ Identify needs for upgrading various applications for protecting the technology system ○ Demonstrate ability to use menu options in a wide range of applications ○ Use technology as a means for gathering reliable resources and information ○ Utilize technology as a means for communicating and sharing information with peers, teachers, experts, and other audiences ○ Utilize technology resources for solving problems and making informed decisions ○ Create projects and presentations with a variety of tools and programs
<p>Bilingual</p> <ul style="list-style-type: none"> ○ Produce language with proper pronunciation ○ Respond to and ask simple questions ○ Present information using proper grammar, punctuation, and capitalization ○ Decode new vocabulary using a variety of clues ○ Follow simple direction in target language ○ Comprehend simple stories form a variety of media ○ Use the language to identify and describe ○ Identify significant geographical features in societies using the targeted language ○ Explore significant historical events in regions where the targeted language is spoken

- Identify products from countries where the targeted language is spoken
- Explore manners, customs, music, dance, art, drama, literature, and architecture
- Identify ways in which knowledge of a second language will expand career opportunities

SIXTH GRADE CURRICULUM

Mathematics

Decimals

- Understand whole numbers
- Read and write decimals
- Compare and order decimals
- Estimate with decimals
- Add and subtract decimals
- Use a problem solving plan
- Multiply and divide decimals
- Multiplying and dividing by 10, 100, and 1,000
- Order of operations

Patterns and Variables

- Describe a pattern
- Variables and expressions
- Writing algebraic expressions
- Make a table and look for a pattern
- Use number sense to solve one-step equations
- Solve addition and subtraction equations
- Solve multiplication and division equations
- Exponents
- Distributive property

Number Theory and Fractions

- Divisibility and mental math
- Prime numbers and prime factorization
- Greatest common factor
- Equivalent fractions
- Mixed numbers and improper fractions
- Least common multiple
- Comparing and ordering fractions
- Fractions and decimals
- Try, check, and revise

Adding and Subtracting Fractions

- Estimate sums and differences
- Fractions with like denominators
- Fractions with unlike denominators
- Adding and subtracting mixed numbers
- Equations with fractions
- Measuring elapsed time
- Draw a diagram

Multiplying and Dividing Fractions

- Multiplying fractions and mixed numbers
- Dividing fractions and mixed numbers
- Solving fraction equations by multiplying
- Solve a simpler problem
- The Customary System
- Changing units in the Customary System

Ratios, Proportions, and Percents

- Ratios
- Unit rates
- Understand proportions
- Use cross products
- Scale drawings
- Percents, fractions, and decimals
- Find a percent of a number
- Estimate with percents
- Write an equation

Data and Graphs

- Mean, median, and mode
- Organize and display data
- Make an organized list
- Bar, line, and circle graphs
- Use spreadsheets to organize data
- Stem-and-Leaf Plots
- Misleading graphs and statistics

Tools of Geometry

- Points, lines, segments, and rays
- Angles
- Special pairs of angles
- Classify triangles
- Explore and classify polygons
- Use logical reasoning
- Congruent and similar figures
- Line symmetry
- Transformations

Geometry and Measurement

- Metric units of length, mass, and capacity
- Converting units in the metric system
- Perimeters and areas of rectangles
- Areas of parallelograms and triangles
- Circles and circumference
- Area of a circle
- 3D figures and spatial reasoning
- Surface areas of prisms and cylinders
- Volumes of rectangular prisms and cylinders
- Work backward

Integers

- Using a number line
- Adding and Subtracting integers
- Multiplying and Dividing integers
- Graphing in the coordinate plane
- Applications of integers
- Graphing functions
- Make a graph

Exploring Probability

- Probability
- Experimental probability
- Making predictions from data
- Simulate a problem
- Tree Diagrams and the Counting Principle
- Exploring Permutations
- Independent events

Equations and Inequalities

- Solving two-step equations
- Inequalities
- Solving one-step inequalities
- Comparing strategies
- Exploring square roots and rational numbers
- Introducing the Pythagorean Theorem

Science (Earth and Space)

IL State Standards – 12E & 12 F

- 12E – Know and apply concepts that describe the feature and processes of Earth and its resources
- 12F – Know and apply concepts that explain the composition and structure of the universe and Earth’s place on it

- Introduced to Metric System measurements and conversions
- Introduced to the Scientific Process and participate in laboratory activities following the steps of the scientific process (11A & 11B)
- Solar System, Earth in Space, Earth’s moon, Formation Hypotheses
- Rocks and Minerals
- Forces shaping the Earth (Plate Movement, Earthquakes, Pangea)
- Weathering and Erosion
- Oceans
- Ecology
- Earth’s atmosphere, weather, and climate
- Recycling, pollution, global warming, protecting Earth’s resources

Language Arts

- Currently being completed

Social Science

Geography

- 5 themes of geography
- Land, water, and climate
- Natural resources
- Legends

Pre-History – 2500 BC

- Archaeology
- Learn what tools are used to understand history
- Find out about the connections between history and geography
- Paleolithic Age
- Neolithic Age
- How hunters and gatherers lived in the Stone Age
- Beginning of farming
- Growth of early cities
- How the first civilizations were formed

Ancient Egypt and Nubia/The Fertile Crescent

- The geography of the Nile
- The rulers of Egypt
- Egyptian religion
- Ancient Egyptian culture
- The cultures of Nubia
- Mesopotamia
- Eastern river valley
- Land between two rivers
- Mediterranean civilizations

Ancient India

- The Indus and Ganges River Valley
- Hinduism
- The beginnings of Buddhism
- Empires of ancient India

Ancient China

- The geography of China's River Valley
- Confucius
- Achievements of China

Ancient Greece

- The rise of Greek civilization
- Religion and philosophy and the arts
- The Minoans and the Mycenaeans
- The Polis, Sparta, Athens, and the decline of city-states
- Greek gods

- Greek scientists
- Philip of Macedonia
- Alexander the Great

Ancient Rome

- The founding of Rome
- The Roman Republic
- The Roman Empire
- The Etruscans and their contribution to Roman life
- Roman government
- Roman expansion
- The Punic Wars
- Roman leadership
- The rule of Augustus
- Pax Romana
- Fall of the Roman Empire
- Christianity

The Early Middle Ages

- The Germans
- The Franks
- The Irish and the Anglo-Saxons
- The Vikings

Physical and Political Maps

- Asia
- Africa
- Europe

SEVENTH GRADE CURRICULUM

Mathematics

Decimals and Integers

- Using estimation strategies
- Adding and subtracting decimals
- Multiplying and dividing decimals
- Measuring in Metric Units
- Problem-Solving
- Comparing and ordering integers
- Adding and subtracting integers
- Multiplying and dividing integers
- Order of Operations and the Distributive Property
- Mean, median, and mode

Equations and Inequalities

- Evaluating and writing algebraic expressions
- Using number sense to solve equations
- Solving equations by adding or subtracting
- Solving equations by multiplying or dividing
- Exploring two-step problems
- Solving two-step equations
- Write an equation
- Graphing and writing inequalities
- Solving inequalities by adding or subtracting
- Solving inequalities by multiplying or dividing

Exponents, Factors, and Fractions

- Exponents and Order of Operations
- Scientific Notation
- Divisibility tests
- Prime factorization
- Simplifying fractions
- Comparing and ordering fractions
- Look for a pattern
- Mixed numbers and improper fractions
- Fractions and decimals
- Rational numbers

Operations With Fractions

- Estimating with fractions and mixed numbers
- Adding and subtracting fractions and mixed numbers
- Multiplying and dividing fractions and mixed numbers
- Solving equations with fractions
- Guess and Test and Working Backwards
- Measurement: Changing Units in the Customary System
- Precision

Ratios, Rates, and Proportions

- Ratios
- Unit Rates and Proportional Reasoning
- Draw a diagram and solve
- Proportions
- Solving proportions
- Using similar figures
- Maps and scale drawings

Percents

- Understanding percents
- Percents, fractions, and decimals
- Percents greater than 100 or less than 1
- Finding a percent of a number
- Solving percent problems using proportions

- Solving percent problems using equations
- Applications of percent
- Finding percent of change
- Write an equation

Geometry

- Lines and planes
- Measuring and classifying angles
- Constructing bisectors
- Triangles
- Quadrilaterals and other polygons
- Draw a diagram and look for a pattern
- Congruent figures
- Circles
- Circle graphs

Geometry and Measurement

- Estimating length and area
- Areas of parallelograms and triangles
- Areas of other figures
- Circumferences and areas of circles
- Square roots and irrational numbers
- The Pythagorean Theorem
- Three-Dimensional figures
- Surface areas of prisms and cylinders
- Volumes of rectangular prisms and cylinders
- Guess and Test and write an equation

Patterns and Rules

- Patterns and graphs
- Number sequences
- Patterns and tables
- Function rules
- Using tables, rules, and graphs
- Interpreting graphs
- Simple and compound interest
- Write an equation
- Transforming formulas

Graphing in the Coordinate Plane

- Graphing points in four quadrants
- Graphing linear equations
- Finding the slope of a line
- Exploring nonlinear relationships
- Make a table and graph
- Translations
- Symmetry and reflections
- Rotations

Displaying and Analyzing Data

- Reporting frequency
- Spreadsheets and data displays
- Other displays
- Make a table using logical reasoning
- Random samples and surveys
- Estimating population size
- Using data to persuade
- Exploring scatter plots

Using Probability

- Probability
- Experimental probability
- Make an organized list and simulate a problem
- Sample spaces
- Compound events
- Permutations
- Combinations

Science (Life)

IL State Standards – 12A & 12B

- 12A – Know and apply concepts that explain how living things function, adapt, and change
- 12B – Know and apply concepts that describe how living things interact with each other and their environment

- Demonstrate the Metric System measurements and conversions
- Demonstrate the Scientific Process by doing laboratory experiments (11A & 11B)
- Plant cells, plant processes, plant reproduction, plant adaptations
- Energy of ecosystems (food chains)
- Animal cells, classification, invertebrate, and vertebrate animals
- Life and structure of living organisms (cell theory classification)
- Cell processes and cell reproduction
- Heredity, genetics, DNA
- Adaptations over time (models of evolution, natural selection)
- Human body systems, health, nutrition
- Interactions between living organisms and their environments
- Population dynamics and ecosystems
- Global biomes

Language Arts

Social Science

Roots of American History

- The United States is a nation of diverse landforms and climates
- Explain how people arrived in the Americas
- Describe the cultural contributions of the Native Americans
- Classify the explorers and their areas of exploration
- Evaluate the impact of European exploration on Native American culture

Before the First Global Age

- In several parts of the Americas, the development of farming enabled some groups of people to build complex civilizations
- Native American cultures in North America varied greatly due in part to differences in climate and resources
- Busy trade networks linked peoples across large areas of Africa and Asia long before the Europeans
- European civilization emerged from a long period of isolation during the 1400s

Exploration and Colonization

- Europeans began to explore the Americas fully only after Columbus reached the West Indies in 1492
- Spain's conquest, exploration, and colonization of the Americas brought wealth to some and tragedy to others
- England, France, and the Netherlands set out to establish colonies in North America
- Describe the founding of the New England, Middle, and Southern Colonies and the other European colonies in America
- The English colony at Jamestown, Virginia survived hard times and went on to set up a representative government
- Discuss economic and cultural aspects of colonial life and explain the causes of the French and Indian War

The Thirteen English Colonies

- The New England Colonies were founded by political and religious reformers and were developed around tightly knit towns
- The Middle Colonies attracted a wide variety of immigrants who settled on farms and in the cities of Philadelphia and New York
- The large tobacco and rice plantations contrasted with the settlement of hunters and farmers
- The English regulated colonial trade

Crisis in the Colonies

- Britain's victory in the French and Indian War marked the end of the French empire in North America
- Many colonists opposed Parliament's attempts to tighten control over Britain's empire
- Crises led to the outbreak of fighting between Britain and the colonies

The American Revolution

- Even while Congress tried to make peace with Britain, fighting began in New England
- In July 1776, the colonies declared independence from Britain. An American victory at Saratoga marked a major turning point in the Revolution
- Americans fought for liberty on many fronts
- Britain recognized the United States as an independent country

Creating a Nation

- Explain how changes in British policies in North America caused dissatisfaction among colonists
- Identify key events that united Patriots
- Describe the outbreak of hostilities between Patriots and British forces
- Describe the preparation of and key points in the Declaration of Independence and Constitution

The New Republic

- List highlights of the new government, including economic, political, and foreign affairs
- Identify and discuss the importance of various aspects of the Jefferson era, including strengthening the Supreme Court, acquisition of the Louisiana Territory, and conflicts with Native Americans, Barbary pirates, and Great Britain
- The Articles of Confederation created a weak central government and loose alliance of independent states
- Delegates to the Constitutional Convention of 1787 had to compromise on key issues in order to complete the new Constitution
- Discuss the Industrial Revolution and its effects; explain how sectionalism developed; summarize the Monroe Doctrine and the independence movement in Latin America
- Americans drew on ancient traditions, enlightenment ideas, and their own experience
- The 13 states voted one by one to approve the Constitution

The Constitution

- Illinois Constitution
- United States Constitution

The Jacksonian Era

- As president, Andrew Jackson became the symbol for the new democratic spirit that brought political and social changes to the nation
- Jackson showed the strength of his will in his fight with the Bank of the United States
- Jackson defied federal law by removing Native Americans from their homes

Westward Expansion

- By the 1840s thousands of pioneers were following in the footsteps of fur traders and the missionaries to settle in Oregon Country
- In 1835, American settlers in Texas revolted against Mexican rule
- As a result of the Mexican War, the United States expanded its borders
- Thousands of Americans headed west, including Mormons

North and South

- New inventions and faster transportation changed the way goods were manufactured and shipped
- Industry in the North changed with the arrival of new immigrants and the efforts of factory working conditions
- Cotton was the leading crop in the agricultural economy of the South
- The plantation system and slavery were at the center of southern life

Reform and New Culture

- Between 1820 and 1860, a wide variety of reform movements sprang up to improve conditions in the United States
- In the 1830s and 1840s reformers became more active in calling for an end to slavery in the United States
- The abolitionist movement helped spark a new reform movement that sought equality for women
- American writers and artists begin to create a new vision

EIGHTH GRADE CURRICULUM

Mathematics

Drawing Conclusions from Statistical Data

- Organizing and displaying data
- Reading graphs critically
- Displaying frequency
- Measures of Central Tendency
- Stem-and-Leaf Plots
- Box-and-Whisker Plots
- Making predictions from scatter plots
- Choosing and appropriate graph
- Conducting a survey
- Problem solving strategy: too much or too little information
- Probability

Integers and Variable Expressions

- Integers and absolute value
- Writing and evaluating variable expressions
- Adding and subtracting integers
- Multiplying and dividing integers
- Exponents and multiplication
- Evaluating expressions with exponents
- Mental math and properties of numbers
- Problem solving strategy: guess and test
- Exponents and division
- Scientific Notation

Equations and Inequalities

- Simplifying variable expressions
- Solving equations by adding or subtracting
- Solving equations by multiplying or dividing
- Solving two-step equations
- Problem solving strategy: write an equation
- Simplifying and solving equations
- Formulas

- Inequalities
- Solving inequalities by adding or subtracting
- Solving inequalities by multiplying or dividing

Graphing in the Coordinate Plane

- Graphing points
- Equations with two variables
- Understanding slope
- Using the y-intercept
- Problem Solving Strategy: use logical reasoning
- Using graphs of equations
- Working with two equations
- Translations
- Reflections and symmetry
- Exploring rotations

Rational Numbers and Irrational Numbers

- Factors
- Rational numbers
- Equivalent fractions and decimals
- Comparing and ordering rational numbers
- Adding and subtracting like fractions
- Adding and subtracting rational numbers
- Multiplying and dividing rational numbers
- Problem Solving Strategy: work backwards
- Exploring square roots and irrational numbers
- The Pythagorean Theorem

Applications of Proportions

- Exploring ratios and rates
- Units of measurement
- Solving proportions
- Similar figures and proportions
- Similarity transformations
- Using proportions to solve problems
- Problem Solving Strategy: draw a diagram
- Similarity and indirect measurement
- The tangent ratio
- The sine and cosine ratios

Applications of percent

- Fractions, decimals, and percents
- Estimating with percents
- Percents and proportions
- Percents and equations
- Creating circle graphs
- Percent of change
- Markup and discount
- Simple and compound interest
- Problem Solving Strategy: make a table

Patterns in Geometry

- Problem Solving Strategy: look for a pattern
- Pairs of angles
- Constructing segments and angles
- Angles and parallel lines
- Parallel lines and similar triangles
- Exploring congruent triangles
- Quadrilaterals and triangles
- Angles of polygons
- Polygons and tessellations
- Area of parallelograms and triangles
- Areas and circumferences of circles

Geometry and Measurement

- Three-Dimensional figures
- Drawing 3-D figures
- Unfolding 3-D figures
- Precision and significant digits
- Surface areas and volumes of prisms and cylinders
- Surface areas and volumes of pyramids and cones
- Proportions and changing dimensions
- Problem Solving Strategy: use multiple strategies

Functions and Polynomials

- Patterns and sequences
- Functions
- Graphing linear functions
- Problem Solving Strategy: solve a simpler problem
- Relating graphs to events
- Quadratic functions
- Other nonlinear functions
- Exploring polynomials
- Adding and subtracting polynomials
- Multiplying polynomials

Probability

- Counting outcomes
- Permutations
- Combinations
- Theoretical and Experimental Probability
- Independent and dependent events
- Problem Solving Strategy: simulate the problem
- Analyzing games and making predictions
- Making decisions with probability

Science (Physical)

IL State Standards – 12C & 12D

- 12C – Know and apply concepts that describe properties of matter and energy and the interactions between them
- 12D – Know and apply concepts that describe force and motion and the principles that explain them

- o Master the Metric System measurements and conversions
- o Master the Scientific Process by performing laboratory experience (11A & 11B)
- o Energy (different types, radiation, conduction, convection, electromagnetic spectrum)
- o Waves
- o Properties of light and sound
- o Electricity and magnetism
- o Matter (elements, compounds, mixtures)
- o Matter in motion
- o Simple machines
- o Atoms and the Periodic Table of Elements
- o Chemical bonding
- o Physical and chemical reactions (balancing and identifying)
- o Chemical compounds (acids, bases, salts, organic compounds)

Language Arts

- o

Social Science

Slavery Divides the Union

- o The Missouri Compromise attempted to settle the issue of whether slavery should be allowed in the Western Territories
- o The Compromise of 1850 only inflamed tensions
- o Violence in Kansas and the Dred Scott decision inflamed tensions over slavery
- o Lincoln emerged as a leader of the new Republican party, which was dedicated to halting the spread of slavery

The Civil War

- o Explain how differences between the North and South led to the secession of most slave states from the United States
- o Detail the major campaigns and strategies of the Civil War
- o The North had important advantages at the start of the war
- o Despite hopes for a quick victory, both northerners and southerners soon learned that they were in for a long, difficult struggle
- o The hardships of the war were in the confederate states
- o The war ended

Reconstruction of the Civil War

- o After the Civil War, the country had to repair the damage done by the fighting and a way to rebuild
- o Describe reconstruction policies and their effects on the former Confederacy

- Republicans in Congress put in place a historic plan
- Reconstruction governments tried to rebuild the south despite sometimes-fierce opposition
- When the North lost interest in protecting the goals of Reconstruction, the era came to an end

The New West

- Discuss the role of mining booms, railroads, ranching, and farming in the development of the West; the final conflicts between Native Americans and whites; and the plight of farmers in the late 1800s
- Different Indians lived on the Great Plains
- Indians found their way of life threatened as white settlers invaded their territory
- The Homestead Act opened the West to farmers

Industrial Growth

- Explain the role of railroad barons, inventions, corporations, and labor in America in the late 1800s and early 1900s
- American businesses grow and developed new ways of organizing and limiting competition
- New technologies transformed American industry and life in the late 1800s
- Describe the social history of the late 1800s and the early 1900s, including the impact of immigration, city growth, and developments in education, literature, and leisure activities
- Workers began to organize into unions

A New Urban Cultures

- In the late 1800s, millions of “new immigrants” came to the U.S. in search of economic opportunity and freedom
- Vast numbers of people migrated to cities, changing urban landscapes and creating new problems
- A building boom, new technology, and new leisure activities changed the way city dwellers lived

The Progressive Era

- Discuss the need for and attempts at governmental and social reform during the late 1800s and the early 1900s
- Reformers worked to end political corruption and limit power of big business
- Progressive reformers worked to end political corruption and voters greater power
- Three Presidents worked for progressive: T. Roosevelt, Taft, and Wilson
- Many women fought for reforms and campaigned to win the right to vote
- Examine educational and social reforms, as well as the early women’s movement

Becoming a World Power

- Explain how and why the United States expanded its economic and political influence in the Pacific, Latin America, and Caribbean
- The Spanish-American War launched an age of American imperialism
- Increasing economic ties led the U.S. to intervene Latin American affairs

World War I

- Describe the causes, course, and outcome of World War I
- When World War I erupted in 1914, the U.S. remained neutral
- The U.S. tried to remain neutral, but the German summarizing warfare finally brought the country into the war
- The U.S. did not enter the war until 1917
- President Wilson went to the Paris Peace Conference with high hopes but failed to achieve the goal of peace