WORLD BOOK

Typical Course of Study: Grade 7

LANGUAGE ARTS

Reading Literature and Informational Text and Literacy in History/Social Studies, Science, and Technical Subjects

- Cite evidence from text to support analysis of both explicit and implicit messages within the text
- Find and explain one or more central ideas in a text and analyze their development
- Analyze how a theme or central idea develops throughout the text
- Summarize literary and informational or explanatory texts
- Analyze how elements of a story interact
- Analyze interactions between/among individuals, events, and ideas in a text
- Identify key steps in a text's description of a process related to history or social studies
- Describe how a text presents information
- Follow a multistep written procedure when performing science or technical tasks
- Determine meanings and effects of words, phrases, or symbols as used in a text
- Analyze the effect of specific word choices on a text's meaning and tone
- Analyze how a particular part of a text fits into the overall structure
- Analyze how the form or structure of a text contributes to its meaning
- Analyze how an author develops and contrasts points of view of different characters
- Analyze the relationship between a primary and secondary source on the same topic
- Compare and contrast a text to its audio, video, or multimedia version
- Integrate quantitative or technical information presented in text form with information expressed visually
- Trace and evaluate the argument and supporting reasons in a text
- Analyze whether an author supports a claim with sound reasoning and sufficient evidence
- Analyze and compare two or more authors' presentations of the same information
- Compare and contrast a fictional portrayal and a historical account of the same period
- By the end of the academic year, read and understand grade-level literary and informational texts (including history/social studies, science, and technical subjects) independently and with proficiency

Speaking and Listening

- Participate in collaborative discussions on a variety of grade-level topics
- Express ideas clearly and respectfully ingroup discussions
- Follow agreed-upon rules and preparation procedures for discussions
- Listen and respond to others, building on others' ideas
- Analyze ideas and details presented in many media and formats
- Identify an argument, claims; evaluate the soundness of reasoning and evidence
- Present claims or information in logical sequence supported with relevant facts and details

- Use clear pronunciation and appropriate eye contact and volume when speaking
- Add multimedia and visual components to clarify ideas in presentations
- Show command of formal English language when speaking for a variety of tasks

Writing

- Write arguments supported with clear reasons and relevant evidence, including arguments in history, social studies, science, and technical topics
- Write informative or explanatory pieces developed with relevant details, including arguments in history, social studies, science, and technical topics
- Write narrations that include details, put events in order, and provide a conclusion
- Produce effective writing appropriate to the task, purpose, and audience
- Strengthen writing by getting feedback, revising, editing, and rewriting
- Add dialogue and descriptions to develop characters and events
- Use tools, including the Internet, to produce and publish writing
- Cite sources for information used in writing
- Contribute to collaborative group writing projects
- Conduct short research tasks on a topic through investigation
- Gather information from various sources to answer a question
- Assess the credibility and accuracy of sources
- Quote or paraphrase data and conclusions while avoiding plagiarism
- Include evidence from literary or informational texts
- Regularly produce clear writing for a variety of tasks, purposes, and audiences (including writing in history/social studies, science, and technical subjects)

English Language Skills

- Explain the function of phrases and clauses and their use in specific sentences
- Use phrases and clauses correctly in a sentence
- Recognize and correct dangling and misplaced modifiers
- Identify and use simple, compound, complex, and compound-complex sentences
- Use conventions of English correctly when writing *(capitalization, punctuation,* and *spelling)*
- Spell grade-level words correctly
- Choose precise and concise words when writing or speaking
- Vary sentence patterns for meaning, interest, and style when writing; avoid passive construction
- Maintain consistency in style and tone when writing
- Know the difference between formal and informal English and when to use each

Vocabulary

- Use context clues to determine word and phrase meanings
- Use word structure clues to determine meanings of unknown words
- Use relationships between words to better understand each word
- Use references (print and digital) to determine or verify a word's meanings, find its pronunciation or its part of speech
- Interpret and use figurative language in context
- Distinguish literal and nonliteral meanings of words in context
- Distinguish shades of meaning among related words
- Distinguish among connotations of words with similar denotations
- Learn and use grade-level general academic vocabulary

MATHEMATICS

The Number System

- Understand and explain addition and subtraction of rational numbers
- Understand and explain multiplication and division of rational numbers
- Apply properties of operations with rational numbers
- Convert rational numbers to decimals
- Know that the decimal form of a rational number terminates in zero or repeats
- Compute fluently with rational numbers
- Solve real world problems involving operations with rational numbers

Ratios and Proportional Relationships

- Recognize and represent proportional relationships between quantities
- Decide whether two quantities are in a proportional relationship
- Identify the constant of proportionality (unit rate) in proportional relationships
- Use equations to represent proportional relationships
- Solve multistep ratio and percent problems
- Analyze proportional relationships to solve real world and mathematical problems

Algebra and Functions

- Apply properties of operations to generate equivalent linear expressions
- Add, subtract, factor, and expand linear expressions with rational coefficients
- Use variables to represent unknown quantities
- Rewrite expressions in different forms in the context of a problem
- Construct equations to solve real world and mathematical problems
- Construct inequalities to solve real world and mathematical problems
- Graph and interpret the solutions sets of inequalities
- Identify the sequence of operations used in solving an equation
- Define slope as vertical change for each unit of horizontal change
- Identify the slope of a line from its graph

Geometry

- Construct triangles from three measures of angles or sides
- Identify and describe similarity relationships of polygons
- Interpret and create scale drawings of geometric figures
- Solve real world and mathematical problems involving scale drawings of geometric figures
- Solve real world and mathematical problems that involve vertical, adjacent, complementary, and supplementary angles
- Solve real world and mathematical problems involving angle measure
- Understand and apply formulas for area and circumference of a circle
- Understand and apply formulas for area, volume, and surface area
- Solve real world and mathematical problems involving area, volume, and surface area of quadrilaterals, polygons, cubes, right prisms, and cylinders
- Describe two-dimensional figures that result from slicing three-dimensional figures

Statistics and Probability

- Understand the concept and uses of statistics
- Find, use, and interpret measures of center and spread for a data set

- Understand and use random sampling to draw inferences about a population
- Informally assess the degree of visual overlap of two numerical distributions
- Understand the concept of probability of a chance event
- Express the likelihood of an event occurring with a number between 0 and 1
- Approximate the probability of a chance event by collecting data
- Draw probability models and use them to find probabilities
- Predict approximate relative frequencies of events
- Find probabilities of compound events using diagrams, tables, lists, or simulation
- Solve real world and mathematical problems involving statistics and probability

SCIENCE

Life Science

- Plant processes (photosynthesis, transpiration, respiration) and their byproducts
- Chemical reactions in organisms to use food
- Biodiversity
- Interdependent relationships among organisms in ecosystems
- Energy transfer in ecosystems
- Cycle of matter in ecosystems
- Disruptions and changes in ecosystems over time
- Cell structure and function
- Human body tissues, organs, and systems
- Health and nutrition
- Homeostasis in the human body

Physical Science

- Structure of atoms and molecules
- Behavior of atoms and molecules in solids, liquids, and gases
- Elements and compounds
- Periodic Table
- Physical and chemical changes in matter
- Chemical reactions; new substances from chemical reactions
- Energy released or stored from chemical reactions
- Thermal energy
- Sound and light
- Wave behavior
- Changes in state of matter with variations in temperature or pressure
- Thermal energy and the transfer of thermal energy

Earth and Space Science

- Features and interrelationships of Earth's hydrosphere, atmosphere, and biosphere
- Fossils and Earth's history
- Interactions that shape Earth's history and future
- History and elements of plate tectonics
- Earth composition and energy flow
- Earth systems interactions
- Rocks and minerals
- Weathering and erosion from wind, water, and ice
- Natural resources
- Natural hazards

- Water movements and changes in land surface and under ground
- Renewable and nonrenewable resources
- Uneven distribution of Earth's resources
- History of natural hazards
- Geological forces that forecast natural hazards

HEALTH AND SAFETY

- Health choices and long-term consequences of choices
- Benefits of, practices for, and personal responsibility for health *(including healthy eating, personal hygiene, exercise, stress-management, adequate sleep, social and emotional health, disease prevention,* and *avoidance of accidents and dangers)*
- Interrelationships of physical, mental, and social health
- Impacts of social pressures on physical, emotional, and social health
- Structure, functions, and interdependence of major body systems
- Causes and effects of poor body image
- Eating disorders and their prevention and treatment
- Changes in anatomy during puberty
- Role of hormones in growth, development, and personal health
- Possible physical, social, and emotional impacts of decisions regarding sexual behavior
- Strategies to resist pressures to become sexually active
- Characteristics of healthy relationships and dating behaviors
- Lifelong strategies for identifying and preventing depression and anxiety
- Importance of regular medical assessment
- Myths and facts related to disease transmission and prevention
- Ways the body defends itself against germs
- Communicable, non-communicable, and hereditary diseases
- Evaluation of health products
- Basic safety rules for daily and recreational activities
- Understanding of first-aid procedures and emergency response
- Use, abuse, and effects of medications, tobacco, alcohol, and other substances
- Relationship between tobacco, alcohol, and drugs and unsafe situations
- Preventing the use of tobacco, alcohol, and illegal drugs
- Prevention of and response to deliberate and accidental injuries
- Reasons and ways to avoid violence, gangs, weapons, and illegal drugs
- Skills to identify, avoid, report, and cope with potentially dangerous situations
- Positive and negative characteristics of social groups, gangs, clubs, cliques
- Development of self-confidence, self-esteem, and self-control
- Understand appropriate ways to express emotions
- Positive social interactions with peers, in home, and in the community
- Bullying, alternative behaviors to bullying, and appropriate responses to bullying
- Strategies for resolving conflicts with peers and others
- Getting personal support from family
- How and where to get help in making health decisions

SOCIAL SCIENCE

World History, Medieval, and Early Modern Times

- Disintegration of the Roman Empire
- Byzantine Empire
- Islamic civilizations and trade
- African states in sub-Saharan Africa
- Medieval Chinese and Japanese civilizations
- Feudal system
- Growth and spread of Christianity
- Growth of civilizations in sub-Saharan Africa
- Causes, course, and effects of religious crusades
- Spread of bubonic plague
- Ottoman Empire
- European voyages to and conquests in the Americas
- Rise of the Atlantic slave trade
- Origins, features, and spread of the Renaissance
- Growth of new ways of spreading information
- Reformation and Counterreformation
- Age of Discovery
- Ideas of the Enlightenment
- French Revolution
- Other Revolutions in Europe and the Americas (1775-1848)
- Rise of Imperialism
- Industrial Revolution
- Scientific Revolution
- Rise of democratic thought and institutions
- Physical geography of regions and countries during the medieval period
- Geographic influences on major events in this span of history

ARTS

Note about middle school arts curriculum: *Middle-level curriculum often includes and offers experiences and study in a variety of areas in the arts. Some examples are:*

- Animation
- Architecture
- Casting
- Ceramics
- Choral music
- Computer graphics and applications
- Construction
- Dance or other creative movement
- Digital arts
- Drama (including mime, storytelling, and technical aspects of theater)
- Drawing
- Film
- Graphic design
- Improvisational music
- Instrumental music

- Metal Sculpture
- Mosaics
- Sculpture
- Textiles and fiber art

In the study and practice of any of the performance or visual arts, students encounter such topics as:

- Skills of watching, listening, and responding to works of art
- Background and elements of particular art form
- Understanding of the processes and techniques of particular forms
- Principles of design
- Vocabulary of particular art forms
- Interpretation, analysis, and evaluation of works of art
- Reflecting on own experiences and creations or performances
- Art history
- Well-known artists and works of visual or performing art form
- Cultural contexts and expressions of art
- Style, materials, and techniques used in a work of art
- Generating questions about a work of art
- Considering messages and purposes of a particular work of art
- Responding orally, in writing, or some other way to works of art
- Contributions of artists to society
- Careers in art
- Discipline and mindset for improving and developing skills in art
- Fostering of creativity and self-expression
- Development of artistic awareness, imagination, perception, skill
- Experimenting with a variety of media, forms, and techniques
- Solving design problems
- Use of digital media and tools for producing, viewing, or responding to art
- Polishing and furthering personal skills in a chosen area of art
- Participation in collaborative discussions about works of art
- Participation in collaborative creation of works of art
- Proper safety procedures for activities in the specific arts

TECHNOLOGY

General goal for middle-level students: *Use technology* ***within all content areas*** *to collaborate, communicate, generate innovative ideas, create original works, and investigate and solve problems.*

- Demonstrating proficient keyboarding skills
- Use of a variety of common applications and productivity tools
- Creation of products combining text, images, sound, music, and video
- Use of spreadsheet and concept-mapping software
- Use of interactive tools to design polls or surveys to gather data
- Making contributions to blogs, wikis, and other collaborative forums
- Gathering weather information and predictions
- Use of online databases or simulation software to interpret and predict trends
- Use of digital collaboration tools
- Increasing knowledge about many cultures through digital content
- Use of online interactive tools to communicate with learners from other cultures

- Communicating with multiple audiences through a variety of formats and media
- Increasing understanding of a local or global issue
- Choosing appropriate digital resources to plan a project or solve a problem
- Choosing appropriate search engines or directories
- Selecting and using appropriate online applications for various purposes
- Selecting appropriate, relevant sources for a purpose or audience
- Analysis and synthesis of information to make decisions or develop solutions
- Assessing the credibility and validity of online sources
- Following fair use rules
- Use of bibliography tools to cite sources from digital sources
- Reporting and sharing of results or solutions
- Exploring ways to receive feedback from multiple, appropriate audiences
- Recognition and avoidance of potential online dangers
- Safe and legal use of online sites and information
- Understanding of privacy issues
- Understanding how data are kept and available publicly
- Understanding safety issues related to sharing personal information online
- Practicing ethical and respectful behavior
- Careful, responsible use and maintenance of digital equipment
- Demonstrating openness to learning new technologies and procedures