

# Typical Course of Study: Grade 5

# LANGUAGE ARTS

### Foundational Skills

- Apply grade-level phonics and word analysis skills in reading unfamiliar words
- Read grade-level texts with purpose and understanding
- Orally read grade-level texts with accuracy, expression, and appropriate rate
- Confirm and self-correct words during oral reading

### Reading Literature and Informational Text

- Identify main topics, ideas, or arguments in grade-level text
- Explain how details in the text support main ideas
- Identify evidence in the text to support the author's message or reader's responses
- Describe theme of a literary text
- Summarize literary and informational or explanatory texts
- Compare and contrast characters, settings, events, or ideas from a text
- Determine meanings and effects of words or phrases as used in a text
- Describe overall structure of a passage and its effect on the message
- Describe how chapters, sections, scenes, or stanzas fit together in a text
- Use features in the text and search tools to locate relevant information
- Explain connections between people, events, ideas, concepts, or steps in a text
- Describe how a narrator's or writer's point of view influences the text
- Explain how visual and multimedia elements contribute to the meaning and tone
- Compare, contrast, and analyze texts in the same genre or on the same topic
- Find and integrate information from multiple sources to answer a question or solve a problem
- By the end of the academic year, read and understand grade-level literary and informational texts at grade level independently and with proficiency

### Speaking and Listening

- Express ideas and feelings clearly
- Speak clearly and audibly in sensible sentences
- Describe people, places, things, and events with relevant details
- Give and follow directions
- Participate in conversations with diverse partners and groups
- Follow agreed-upon rules and preparation procedures for discussions
- Listen and respond to others with focus and care
- Summarize points made by a speaker
- Present a spoken report with supporting facts and details
- Add visual components to a speech to clarify ideas, feelings, and thoughts

### Writing

- Write opinion pieces supported with relevant facts and reasons, and a strong conclusion
- Write informative or explanatory pieces supported with relevant facts and reasons, and a strong conclusion
- Write narrations that include details, put events in order, and provide a conclusion
- Strengthen writing by getting feedback, revising, editing, and rewriting
- Add dialogue and descriptions to develop characters and events
- Use tools, including digital tools, to produce and publish writing
- Gather information from various sources to answer a question
- Create written and visual works to summarize and share information
- Conduct short research topics on a topic through investigation
- Regularly produce clear writing for a variety of tasks, purposes, and audiences

### **English Language Skills**

- Identify parts of speech and their functions in specific sentences
- Recognize and use conjunctions, prepositions, and interjections
- Form, recognize, and use various verb tenses and appropriate shifts in verb tense
- Expand, combine, and reduce sentences for meaning, style, and interest
- Use conventions of English correctly when writing (capitalization, punctuation, and spelling)
- Spell grade-level words correctly
- Consult reference materials to check spellings
- Correctly use the English language when speaking, reading, or 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 synonyms and antonyms to clarify and explain word meanings
- Use references (print and digital) to determine or clarify word meaning
- Understand and use figurative language (similes, metaphors, idioms, adages, proverbs, etc.)
- Distinguish literal and nonliteral meanings of words in context
- Distinguish shades of meaning among related words
- Learn and use grade-level general academic vocabulary

### **MATHEMATICS**

### Algebraic Thinking and Operations

- Write and interpret numerical expressions
- Evaluate simple expressions
- Analyze patterns and relationships
- Expand a whole number (2-50) as a product of its prime factors
- Analyze patterns and relationships given two rules

### Number and Operations

- Understand that each place in a number represents 10 times the place to right and one-tenth of the place to the left
- Know patterns of zeros when multiplying or dividing a number by powers of 10
- Use exponents to show powers of 10
- Read, write, and compare decimals to the thousandths place
- Perform operations with multi-digit whole numbers
- Perform operations with decimals to hundredths

### <u>Fractions and Operations</u>

- Use equivalent fractions as a strategy to add and subtract fractions with unlike denominators (2/5 + 7/3 = 6/15 + 35/15 = 41/15)
- Solve word problems with addition and subtraction of fractions or mixed numbers with like and unlike denominators
- Create models or equations to represent problems with fractions
- Understand a fraction as division of the numerator by the denominator
- Solve word problems dividing whole numbers leading to fraction or mixed number answers
- Multiply a fraction by a whole number or a whole number by a fraction
- Find areas of rectangles with fractional sides by modeling with unit squares
- Interpret multiplication as scaling (resizing)
- Explain results of multiplying a number by a fraction greater or less than 1
- Use all operations to solve world problems with fractions and mixed numbers
- Compute and explain division of a fraction by a whole number
- Compute and explain division of a whole number by unit fraction
- Divide unit fractions by non-zero whole numbers and whole numbers by unit fractions

### Geometry and Spatial Relationships

- Understand the coordinate system and the meanings of the origin, x-axis, x-coordinate, y-axis, and y-coordinate
- Graph points in the first quadrant of the coordinate plane to solve real-world and mathematical problems
- Classify two-dimensional figures into categories based on their properties
- Classify two-dimensional figures into a hierarchy

### Measurement and Data

- Convert like measurement units within a given measurement system
- Use measurement conversions in solving real world problems
- Use a line plot to display a data set of unit fraction measurements
- Use operations of fractions to solve problems from displayed data
- Understand concepts of volume and measuring of volume
- Relate volume to multiplication and to addition
- Define and describe a cubic unit
- Use standard or improvised unit cubes to measure volume
- Find volume of rectangular prisms by packing the prism with unit cubes
- Know and apply formulas for the volume of right rectangular prisms
- Solve real world problems involving volume
- Find volumes of solid figures that are composed of two non-overlapping right rectangular prisms

## **SCIENCE**

#### Life Science

- Interdependent energy relationships in ecosystems
- Matter and energy flow in organisms for maintenance, growth, and repair
- Life cycles and energy cycles in ecosystems
- Forest ecosystems
- Food chains and food webs
- Human impact on Earth and ecosystems

### Physical Science

- Observations and measurements that identify properties of materials
- Atoms and molecules in matter and their behavior in different states of matter
- Chemical reactions
- Law of Conservation of Matter
- Chemical processes in everyday life
- Gravitational force on planets

### Earth and Space Science

- The universe and its stars
- Patterns and movements in the solar system
- Earth's orbit and rotation and the resulting patterns
- Earth systems (geosphere, hydrosphere, atmosphere, biosphere) and their interactions
- The role of water in Earth surface processes
- Rocks and minerals and their classifications
- Earth's topography
- Human impact on Earth systems

### **HEALTH AND SAFETY**

- Health choices and consequences of choices
- Benefits of, practices for, and personal responsibility for health (including healthy
  eating, exercise, stress-management, personal hygiene, adequate sleep, social and
  emotional health, disease prevention, and avoidance of accidents and dangers)
- Components of a personal health plan
- Influences of peer, media, family, and cultural pressure on physical, emotional, and social health
- Structure, functions, and interdependence of major body systems
- Identification of foods that are sources of nutrient groups
- Understanding and tracking calorie intake
- Aerobic and angerobic exercise (contingent on any physical or other limitations)
- Myths and facts related to disease transmission and prevention
- Harmful viruses, such as the common cold, polio, measles, HPV, and HIV
- Ways body defends itself against germs
- Understanding of changes in anatomy during puberty
- Basic safety rules for daily and recreational activities
- Skills to identify, avoid, report, and cope with potentially dangerous situations
- Practices for responding to emergencies

- Identify safe behaviors around strangers
- Use, abuse, and effects of medications, tobacco, alcohol, and other substances
- Positive and negative characteristics of social groups gangs, clubs, cliques
- Reasons and ways to avoid violence, gangs, weapons, and drugs
- Development of self-confidence and self-esteem
- Respect and consideration for all individuals
- Healthy ways of getting attention
- Healthy ways of responding to disrespectful behavior
- Self-control and 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
- Skills for meeting people, making friends, and being a good friend
- Getting personal support from family
- How and where to get help in making health decisions

## SOCIAL SCIENCE

#### Community and Culture

- Understanding that members of a civilization share certain common characteristics, customs, beliefs, and values
- Development of unique cultures in the early Americas
- Description of Mayan, Aztec, Incan civilizations
- Appreciation of the complexity of ancient societies and civilizations
- Cultural diffusion, including the Columbian Exchange
- Cultural comparison between regions (now the United States, Canada, Caribbean, and South America) in the past and present
- Key cultural contributions to United States culture and the world from the other Western Hemisphere regions
- Current issues faced by two or more Western Hemisphere nations
- Examples of cultural cooperation among Western Hemisphere nations

### Geography

- Geographical features (physical and human) of each of the Western Hemisphere regions
- How first humans adapted to and modified their environment
- Patterns of settlement in the regions, past and present
- Adaptations of people to the physical geography and climate
- Resources and use of resources in the regions, past and present
- Locations of explorations in the Western Hemisphere
- How the geography of the regions affected transportation, communication, and interaction among the people of the regions
- Drawing maps of patterns of settlement, movement, physical features, products, trade relationships, explorations, plants and animals, etc. in the Western Hemisphere

#### History

- First humans in Western Hemisphere
- Migration routes and movement of people
- Early societies in the hemisphere
- European exploration and its effects

- Interactions of Europeans with Native Americans
- Colonization and comparison of colonies
- Transatlantic trade
- Slave trade from Africa (reasons, transport, conditions, effects)
- Close examination and comparison of the development of specific civilizations
- Political development and maps of countries in the Western Hemisphere
- Issues faced by specific countries and regions in the Western Hemisphere

### **Economics**

- Development of different types of economic systems
- Comparisons of past and present economies in the regions and nations
- Economic activities past and present
- Trade in the hemisphere, past and present
- Major resources, industries, products, and services of countries and regions
- How and why products are manufactured where they are
- Interdependence of economies of the regions

### Government and Citizenship

- Development and comparison of varied political systems and their development
- Foundation documents and basic structures of the United States, Canada, Mexico, and one country in the Caribbean region and one country in South America
- Ways groups have struggled for equality and civil rights in some of the countries of the hemisphere
- Ways groups have struggled for sovereignty in some of the countries
- Multinational cooperative organizations and their functions
- Some key ideas, symbols, and values of some of the countries

## **ARTS**

- Describe, create, and perform dance movements
- Create and perform dance movements, individually and with a partner
- Understand the physical processes and discipline associated with dance
- Identify melody, rhythm, harmony, and timbre in musical selections
- Respond to sounds and sound patterns with body movements
- Compose, improvise, and perform basic musical patterns
- Listen to, describe, and respond to a variety of music
- Read and write patterns with musical notes and rhythmic notation
- Read, write, and perform diatonic scales
- Identify some common musical instruments by sight and sound
- Identify and sing a variety of kinds of music and musical forms
- Improvise dramatizations of stories or ideas
- Take part in writing scripts, designing sets, and performing group dramas
- Create costumes and props for a performance
- Observe patterns in nature and works of art
- Identify and describe elements in works of visual art (line, color, texture, shapes/form, space, value [color], etc.)
- Create original works of visual art in various media and dimensions
- Express observations, ideas, or feelings through music, drama, or visual art
- Identify and discuss some well-known works of dance, drama, music, or visual arts and some artists, actors, writers, musicians, choreographers, or composers

- Describe and analyze a variety of works of art according to their elements
- Apply evaluative skills to movies and video
- Learn and use vocabulary of dance, music, drama, and visual arts
- Describe techniques for a given form of art
- Compare and contrast two works of art
- Identify purposes, effects, influences, and historical contributions of art
- Understand how culture affects art and how art reflects culture
- Demonstrate appropriate audience skills for live artistic performances
- Identify and describe careers in the arts

### TECHNOLOGY

- Concepts, characteristics, and real-life uses of technology
- Knowing parts of technology devices and systems devices
- Developing advanced keyboard skills
- Exploring virtual environments, simulations, programs, models, and applications
- Effective use of available grade-level technology
- Use of tools to produce creative original works
- Use of tools to collaborate locally and globally
- Use of tools and devices to develop cultural understanding
- Use of Internet to find, use, summarize, and evaluate information
- Planning and completing a research project to solve a problem or answer a question
- Understand negative uses of technology and ways to avoid them
- Participation in group collaborative interactive projects and activities
- Developing, printing, and publishing in print and digital formats
- Evaluating content, applications, and programs
- Digital citizenship and etiquette
- Legal use, fair use guidelines, and copyrights
- Procedures for safe online behavior, including use of social media
- Responsible care of digital equipment
- Positive attitudes toward technology for learning
- Demonstrating openness to learning and using new technologies