

# CURRICULUM GUIDE

## Fourth Grade

### FOURTH GRADE

#### LANGUAGE ARTS

**Students will read with understanding and fluency. (State Goal 1).**

**Students will apply word analysis and vocabulary skills to comprehend selections.**

Students will be able to:

- apply word and structural analysis strategies to decode unknown words (such as the use of common endings, compound words, spelling patterns, prefixes, suffixes, and root/base words).
- clarify word meaning through the use of context clues, resource glossaries, and dictionaries.
- acquire and use new words in reading, speaking, and writing.

**Students will apply reading strategies to improve understanding and fluency.**

**Students will be able to:**

- establish purposes for reading.
- preview text by skimming and scanning.
- identify nonfiction text structures to enhance meaning.
- make predictions.
- connect important ideas and link text to previous experiences and knowledge.
- identify and restate the main idea.
- make inferences, draw conclusions, and use specific examples from the text to support thoughts.
- distinguish fact from opinion.
- relate cause and effect.
- sequence events.
- summarize content.
- use context clues.
- continuously check and clarify for understanding, recognize when text fails to make sense, self-correct errors that interfere with meaning, and adjust reading rate to increase comprehension.
- read aloud accurately with ease and expression.



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### **Students will comprehend a broad range of fiction and nonfiction reading materials.**

Students will be able to:

- use specific information to form questions, verify predictions, and support thinking.
- differentiate among and identify the characteristics of a variety of genres.
- interpret supplemental information to enhance understanding of text (such as charts, pictures, captions, and other visual clues).

### **Read and understand literature representative of various societies, eras, and ideas. (State Goal 2).**

### **Students will understand how literary elements and techniques are used to convey meaning.**

Students will be able to:

- show relationships between and among events, characters, and texts.
- identify the use and effect of figurative language and imagery.

### **Students will read and interpret a variety of literary works.**

Students will be able to:

- connect events and situations in both fiction and nonfiction to personal experience, the world, and other texts.
- explain and relate to the ways in which characters deal with conflict, solve problems, and reach their goals.

### **Write to communicate for a variety of purposes. (State Goal 3).**

### **Students will use correct grammar, spelling, punctuation, capitalization, and structure.**

Students will be able to:

- identify and correctly use various types and forms of nouns, pronouns, adjectives, adverbs, and verbs.
- demonstrate correct spelling of high frequency words in written work.
- use appropriate resources to spell unfamiliar words.
- apply spelling patterns and reliable spelling strategies in written work.
- use periods, question marks, exclamation points, and capitalization correctly.
- express thoughts with complete sentences.

### **Students will compose well organized and coherent writing for specific purposes and audiences.**

Students will be able to:

- use the writing process to produce persuasive, narrative, and expository written pieces.
- correct errors in organization, capitalization, grammar, spelling, punctuation, and sentence structure.



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### **Students will communicate ideas in writing to accomplish a variety of purposes.**

Students will be able to:

- write multi-paragraph essays to inform, persuade, and describe.
- write a concise summary.
- respond to text using written language.

### **Listen and speak effectively in a variety of situations. (State Goal 4)**

#### **Students will listen effectively in formal and informal situations.**

Students will be able to:

- display attentive listening behaviors and listen for specific purposes.
- ask and respond to questions related to oral presentations.
- restate and carry out a variety of oral instructions.
- summarize or paraphrase information presented orally.



#### **Students will speak effectively using language appropriate to the situation and audience.**

Students will be able to:

- use spoken words correctly, fluently, and meaningfully for a variety of purposes and audiences.
- demonstrate appropriate volume, articulation, pronunciation, rate, expression, eye contact, and posture when speaking.
- participate appropriately in classroom discussions.

### **Use the language arts to acquire, assess, and communicate information. (State Goal 5).**

#### **Students will locate, organize, and use information from various sources to answer questions, solve problems, and communicate ideas.**

Students will be able to:

- formulate questions, construct a basic research plan, and collect information relevant to the topic.
- understand the purpose and use of various reference resources.
- use a variety of accurate, current, and reliable resources to gather information.

#### **Students will analyze and evaluate information acquired from various sources.**

Students will be able to:

- select and organize information from various sources for a specific purpose.
- cite sources used.

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**Students will apply acquired information, concepts, and ideas to communicate in a variety of formats.**

Students will be able to:

- write letters, reports, and stories using acquired information.
- use available technology as a publishing method for sharing information.



### **MATHEMATICS**

**Demonstrate and apply a knowledge and sense of numbers, including numeration and operations (addition, subtraction, multiplication, division). (State Goal 6)**

**Students will develop an understanding of mathematical thinking, language, and symbols.**

Students will be able to:

- develop a working knowledge of key vocabulary when speaking and writing about mathematics.
- identify and use mathematical symbols correctly when reading and writing number sentences.
- develop a sense of numbers in order to represent and use them in flexible ways.
- use estimation strategies to determine if answers are reasonable.
- develop mental computation skills.
- check accuracy of computation by using inverse operation or a calculator.
- use a variety of strategies to solve story problems.
- write an explanation and rationale for the steps and solution of various mathematical problems.
- explain mathematical reasoning verbally; recognize whether answers are reasonable.
- label answers and measurements with appropriate units.
- given a specific story problem, write a corresponding number sentence.
- know how and when to use a calculator.

**Students will develop an understanding of numeration and order.**

Students will be able to:

- recognize relationships and relative sizes among numbers (such as 4,505 is about 45 hundreds, and it is about 500 less than 5,000; 2,300 is large compared to 300, but small compared to a million).
- interpret and use standard and expanded notation up to millions.
- identify place value; use it to read, write, compare, and order numbers up to seven digits.
- read, write, and identify place value in decimals up to hundredths.
- round decimals to the nearest tenth and hundredth.
- round numbers to the nearest ten, hundred, thousand, ten thousand, hundred thousand, and million.
- identify and read fractions as equal parts of a whole and of a set.
- read, write, compare, and order proper fractions.
- identify equivalent fractions.
- name fractions, mixed numbers, and equivalent fractions using concrete models.

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### **Students will develop computational skills related to number operations.**

Students will be able to:

- know basic addition and subtraction facts.
- know multiplication and division facts from 0 to 10.
- add and subtract up to five-digit numbers with and without regrouping.
- multiply multi-digit numbers by one- and two-digit multipliers.
- divide up to three-digit dividends by one-digit divisors with and without remainders.
- add and subtract decimals up to hundredths.
- add and subtract fractions with like denominators.
- use various algorithms to solve addition, subtraction, multiplication, and division problems.



### **Estimate, make and use measurements of objects, quantities, and relationships and determine acceptable levels of accuracy. (State Goal 7).**

Students will be able to:

- know equivalencies related to measurement and convert among units within systems (such as 12 in=1 ft, 100 cm = 1 m).
- develop accuracy when measuring with a variety of tools (such as a ruler, meter stick, thermometer, or balance).
- measure length of objects to the nearest one-eighth of an inch and one-half of a centimeter.
- estimate, measure, and compare using appropriate customary and metric units of measurement for length, width, height, weight/mass, volume/capacity, and temperature.
- determine the perimeter and area of polygons.
- locate and plot points on a coordinate grid using ordered pairs.
- \* apply knowledge of clock and calendar time equivalencies to problem-solving situations (such as 60 sec. = 1 min.).
- record and represent the value of monetary amounts using correct symbols and notation.
- use the least amount of money to make purchases.
- calculate and count back change.

### **Use algebraic and analytical methods to identify and describe patterns and relationships in data, solve problems, and predict results. (State Goal 8).**

### **Students will develop an understanding of patterns, functions, and sequences.**

Students will be able to:

- describe, extend, and make generalizations about geometric and numeric patterns.
- use multiples and factors to find and identify patterns in multiplication and division.
- use patterning as a problem-solving strategy.
- determine the rule for a given pattern; create patterns to match a given rule.
- sort, classify, and order objects by common attributes.

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### **Students will develop an understanding of algebra and uses of variables.**

Students will be able to:

- determine the value of an unknown number in an equation or number sentence.
- create equations and solve for the unknown.
- understand the meaning and use of variables in simple equations.

### **Use geometric methods to analyze, categorize, and draw conclusions about points, lines, planes, and space. (State Goal 9).**

Students will be able to:

- identify, describe, compare, classify, and analyze attributes of two- and three-dimensional figures.
- name, describe, and classify various lines and angles.
- name various types of quadrilaterals and triangles.
- identify and draw all lines of symmetry in figures and designs.
- observe and describe the transformation of shapes in terms of direction and as they slide, flip, and turn.
- describe the results of folding, cutting, or combining given two-dimensional figures (such as a square can be folded into a rectangle or a triangle).
- distinguish between similar and congruent figures.



### **Collect, organize, and analyze data using statistical methods; predict results; and interpret uncertainty using concepts of probability. (State Goal 10),**

Students will be able to:

- collect and record data from real-life experiences.
- organize and display data in a variety of ways.
- Determine range, mean, median, and mode of a data set.
- read and interpret data from a variety of graphs.
- formulate predictions and draw conclusions from information represented on graphs, charts, and tables.
- identify possible outcomes for a chance event; predict the probability, and test the prediction.
- record the outcomes for simple experiments of chance.
- calculate the probability of an event and compare the likelihood in terms of certain, more or less likely, or impossible.

## SOCIAL SCIENCE

**Students will understand political systems, with an emphasis on the United States. (State Goal 14).**

Students will be able to:

- explain the democratic process of decision making and apply it to home, school, and community.
- describe what government does at local, state, and national levels.
- describe and evaluate why rights and responsibilities are important.
- understand the significance of words, images, political symbols and mottoes of the United States.



**Students will understand economic systems, with an emphasis on the United States. (State Goal 15).**

Students will be able to:

- explain how an economic system includes what goods and services are produced, how they are produced, and who consumes them.
- describe economic systems as they apply to different regions of the United States.
- list factors that affect consumer choices.
- explain the relationship between the quantity of goods/services purchased and their price.
- recognize that some goods and services are provided by the government.

**Students will understand events, trends, individuals and movements shaping the history of Illinois, the United States and other nations. (State Goal 16).**

Students will be able to:

- read historical stories and determine events that influenced their writing.
- recognize examples of point of view on a given historical event.
- interpret information from maps, graphs, and charts relevant to research questions.
- analyze historical figures who have advanced the rights of individuals and groups to promote the common good.
- describe how physical features and natural resources have affected the growth of rural and urban areas.

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**Students will develop an understanding of world geography and the effects of geography on society, with an emphasis on the United States. (State Goal 17).**

Students will be able to:

- use map skills to locate specific places and identify geographic features, such as waterways and landforms.
- locate and label major bodies of water and the fifty states.
- compare various cities, states, regions, and countries in relative and exact locations.
- explain what a region is and describe several types of regions.
- identify the features that may be shared within a region and explain why regions can overlap.
- distinguish between weather and climate.
- describe the relationships among location of resources, population distribution, and economic activities.
- explain how human activity affects the environment.



**Students will understand social systems, with an emphasis on the United States. (State Goal 18).**

Students will be able to:

- recognize that folklore and customs from other cultures have become part of our national culture.
- describe how the acquisition of basic needs has changed over time.

### SCIENCE

**Students will understand the processes of scientific inquiry and technological design to investigate questions, conduct experiments and solve problems. (State Goal 11)**

Students will be able to:

- brainstorm possible questions for investigation consideration.
- convert questions into hypothesis statements.
- choose procedural steps and organize into a logical sequence.
- collect accurate data, with appropriate measuring instruments, from multiple trials.
- organize data into charts or graphs for data analysis.
- draw reasonable and accurate conclusions based on data.
- Build a prototype of the design using available tools and materials.

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**Students will understand the fundamental concepts, principles and interconnections of the life, physical and earth/space sciences. (State Goal 12).**

Students will be able to:

- develop a working knowledge of key vocabulary related to units of study.
- classify plants and animals.
- describe relationships among various organisms in their environments.
- classify organisms by their niche in the food web: producer, consumer, decomposer, and scavenger.
- identify survival behaviors of animals and plants.
- describe the nature of electricity and how it works.
- classify the major rock families: sedimentary, igneous, and metamorphic.
- describe erosion/weathering in terms of impact on features of the earth.
- examine ways that people can preserve and conserve natural resources.
- Categorize features as either inherited or learned
- Demonstrate and explain ways that forces cause actions and reactions



**Students will understand the relationships among science, technology and society in historical and contemporary contexts. (State Goal 13).**

Students will be able to:

- use equipment and materials in a safe and proper manner when conducting inquiry or design investigations.
- explain the importance of keeping accurate and detailed records in scientific investigations.
- recognize the necessity of controlled variables in inquiry and design investigations.
- Recognize necessity to reuse, recycle, and reduce.

## HEALTH

**Understand human body systems and factors that influence growth and development. (State Goal 23).**

Students will be able to:

- identify the different stages and changes during the human life cycle.

**Promote and enhance health and well-being through the use of effective communication and decision-making skills. (State Goal 24).**

Students will be able to:

- identify and demonstrate positive listening behaviors and communication skills.
- differentiate between rights and responsibilities.