



## Grade 4 Language Arts

### **Course Description**

Students in fourth grade apply reading strategies and skills automatically, flexibly, and strategically to comprehend fiction, nonfiction, poetry, and drama. They read for literary experience, to gain information and to perform a task. They use a variety of strategies and writing process elements to compose fiction, nonfiction, poetry, and drama. They become increasingly proficient in active listening, speaking, and using media and technology. They deepen and extend their understanding and use of the English language conventions in oral presentations and written products.

### **Objectives**

Students will be able to

- Explore a wide range of texts and their distinguishing features.
- Expand vocabulary through wide reading, word study, exposure to content area words, and discussion.
- Routinely spell high frequency words and use resources to check spelling.
- Write for a variety of purposes and audiences and use writing as a tool for learning.
- Communicate effectively with different audiences through spoken, written, and visual formats.
- Use media and technological resources for research and as tools for learning.
- Use increasingly sophisticated knowledge of grammar and language conventions in oral and written products and presentations.
- Apply comprehension strategies critically, creatively, and strategically.

### **Instructional Material and Resources/ Required Texts**

**Text:** Harcourt Trophies Lead the Way  
Harcourt Trophies Lead the Way: Practice Book

**Material:** Teacher generated materials, Harcourt Leveled readers, Harcourt Trophies Lead the Way: Extra Support Copying Masters, Grade 4 library books, and games



## Grade 4 Mathematics

### **Course Description**

In grade 4 math, the standard course of study is organized into four goals: Number Sense, Patterns, Relations and Functions; Statistics and Probability; and finally, Geometry and Measurement. The objectives listed for each goal progress in complexity the following academic year. By the end of grade four, students develop quick recall of the basic multiplication facts and related division facts. They develop fluency with efficient procedures for multiplying multi-digit whole numbers, understand why the procedures work, and use them to solve problems. Students recognize decimal notation as an extension of the base-ten system. They relate their understanding of fractions to decimals. Students will be able to generate equivalent fractions, simplify fractions, and identify equivalent fractions and decimals. They will compare and order whole numbers, simple fractions, and decimals to hundredths and estimate decimal or fractional amounts in problem solving.

### **Objectives**

Students will be able to

- Understand and use numbers up to 1,000,000 (including place value, comparing and ordering, rounding).
- Estimate and judge reasonableness of results (multiplication and division).
- Multiply up to 4-Digit numbers
- Multiply by 2-Digit numbers
- Divide with remainders.
- Divide 3-Digit numbers.
- Number Theory (Divisibility rules, factors, multiples, prime and composite numbers, and square numbers).
- Understand time and elapsed time.
- Analyze, collect, organize and display data using the correct graph.
- Understand lines, rays, and angles (measuring and classifying).
- Identify plane figures (polygons, quadrilaterals, triangles and circles)
- Understand Fractions (read and write fractions/equivalent fractions, compare and order fraction and mixed numbers)
- Understand and use decimals to ten thousandths (including place value, comparing and ordering, rounding)
- Addition and subtraction of like fractions.
- Understand basic concepts of probability.
- Understand decimal up to the thousandths.
- Relate fractions, mixed numbers and decimals
- Multiply and divide decimals by whole numbers.
- Compare, order, add and subtract decimals.
- Understand perimeter and area of plane figures

### **Instructional Material and Resources/ Required Texts**

**Text**               Harcourt Math Grade 4

                          Harcourt Math Practice Book Grade 4

**Materials**       Teacher generated materials, games, and puzzles.



## Fourth Grade Science

### **Course Description**

The fourth grade curriculum focuses on six components including: Earth and Space Sciences; Life Sciences; Physical Sciences; Science and Technology; Scientific Inquiry; and Scientific Ways of Knowing. Each of these components has subtopics that are relevant to the fourth grade course of study. Fourth-graders continue to safely conduct investigations, choose appropriate tools, measure, collect, formulate conclusions and communicate findings. They draw inferences from simple experiments and study the physical and chemical changes of matter. Properties of materials and the discovery of new materials formed by combining two or more materials are explored. Students expand the study of life cycles of plants by examining characteristics, growth and functions. Students gather information on the weather and its patterns and how weather impacts the Earth's surface, land, air and water. They explore how utilizing technology affects human lives and how technology and inventions change to meet people's needs.

### **Objectives**

Students will be able to

- Summarize the processes that shape Earth's surface and describe evidence of those processes.
- Analyze weather and changes that occur over a period of time.
- Analyze plant and animal structures and functions needed for survival and describe the flow of energy through a system that all organisms use to survive.
- Compare the characteristics of simple physical and chemical changes.
- Identify and describe the physical properties of matter in its various states.
- Describe how technology affects human life.
- Describe and illustrate the design process.
- Use appropriate instruments safely to observe measure and collect data when conducting a scientific investigation.
- Organize and evaluate observations, measurements and other data to formulate inferences and conclusions.
- Develop, design and safely conduct scientific investigations and communicate the results.
- Distinguish between fact and opinion and explain how ideas and conclusions change as new knowledge is gained.
- Describe different types of investigations and use results and data from investigations to provide the evidence to support explanations and conclusions.
- Explain the importance of keeping records of observations and investigations that are accurate and understandable.
- Explain that men and women of diverse countries and cultures participate in careers in all fields of science.

### **Instructional Material and Resources/ Required Texts**

**Text:** Science: Ohio Edition (Harcourt School Publishers)

Ohio Edition Reading Support and Homework (Harcourt)

**Materials:** Instructional materials used will include, but are not limited to, teacher generated materials, videotapes, CD ROMs, documents, periodicals, magazines and the Internet.



## Grade 4 Social Studies

### **Course Description**

The fourth grade social studies curriculum explores the Ancient World by looking at history from the very beginnings until A.D. 1500. The emphasis of fourth grade social studies curriculum is based on the following topics: Early societies (beginnings to 600 B.C.) of Egypt, The Fertile Crescent and Indus Valley; Persian Empire and Ancient Greece and the Early Romans; and finally, we take a look at the Early American Empires. Fourth graders begin their exploration prehistorically and conclude with American empires. The ancient world is a prerequisite to the modern world taught in the fifth grade. Students in fourth grade will extend their map reading skills by interpreting, constructing and using various types of maps. Students will also work with information by collecting regional data. They will organize, interpret and present this information orally, graphically and in writing. In addition, they will use a variety of technologies to assist in accessing and managing information.

### **Objectives**

Students will be able to

- Understand the life of early people.
- Understand that early humans got food, tools, and shelter from the earth and adjusted to the climate and geography of the area which they lived.
- Understand the Rise and power of the Egyptian Old, Middle and New Kingdom.
- Identify the major characteristics of civilization and how civilizations emerged in Mesopotamia, Egypt, and the Indus Valley.
- Understand how agrarian societies spread and new states emerged in the third and second millennia B.C.
- Understands the rise of the Persian Empire.
- Gain knowledge about the rise of centers of civilization in the Americas in the first millennium A. D.
- Understand the political, social and economic life in Ancient Greece.
- Understand the political and social development of the Roman empire
- Have knowledge of periods in history, as well as the idea of sequential events, chronology, and the significance of important individuals or groups.
- Identify different geographical features of Earth and use appropriate geographical tools (i.e. maps, timelines, charts, etc.)
- Independently research, summarize, and present information.
- Integrate technology as a tool in social studies.

### **Instructional Material and Resources/ Required Texts**

**Text:** Steck-Vaughn History of Our World: People, Places, and Things. The Ancient World Volume 1

**Materials:** Instructional materials used will include, but are not limited to, teacher generated materials, games, puzzles, videotapes, CD ROMs, documents, periodicals, magazines, library books, and the Internet.