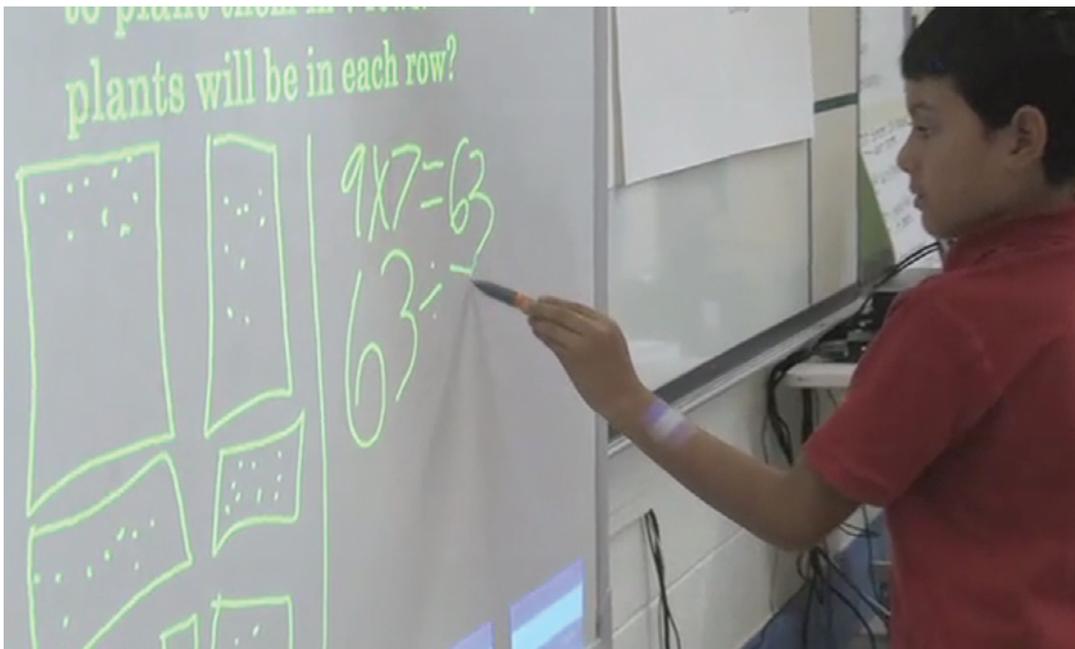


# A Parent's Guide To

# GRADE 4

# CURRICULUM



**Reading + Writing + Mathematics + Science + Social Studies**

## Introduction

Research shows that children are more likely to succeed in learning when families actively support them. When you and other family members read with your children, help them with homework, talk with their teachers, and participate in school or other learning activities, you give your children a tremendous advantage. Other than helping your children grow up healthy and happy, the most important thing that you can do for them is help them develop their reading skills. It is no exaggeration to say that how well children learn to read directly affects not only how successful they are in school but how well they will do throughout their lives. When children learn to read, they have the key that opens the door to all of the knowledge of the world.

As a parent, you are your child's first and most important teacher. Our goal in this guide is to give you greater visibility into the *Forward* instructional program. We believe that the gains your child experiences in this program will establish the building blocks for his or her love of learning in the months and years to come.

## Grade 4 Integrated Curriculum

The **Elementary Integrated Curriculum** blends reading, writing, and mathematics instruction with lessons in science and social studies in a way that spurs creativity and critical thinking skills. Students will receive robust instruction across all subjects in the early grades. The curriculum is built around developing students' critical and creative thinking skills as well as essential academic success skills, which lead to college and career readiness.

In the *Grade 4 Integrated Curriculum*, critical and creative thinking skills as well as academic success skills are identified and paced into four parts that are each nine weeks in duration. These skills are explicitly taught using concepts and topics identified by part in each content area and provide a focus for integration across content areas. This document provides an outline of these skills and the curriculum concepts and topics that are the focus of instruction for Grade 4 students.

## K–5 Instructional Program Goals

### Reading

Students will develop the knowledge and skills essential to becoming literate, thoughtful communicators, who are capable of controlling language effectively, in the following ways:

- ✓ Strategically reading literary and informational instructional-leveled texts with fluency, purpose, and comprehension
- ✓ Using skills and strategies widely as tools for learning and reflection
- ✓ Understanding and appreciating language and literature as catalysts for deep thought and emotion

### Writing

Students will develop the knowledge and skills essential to becoming literate, thoughtful communicators, who are capable of controlling language effectively, in the following ways:

- ✓ Composing narrative, informative/explanatory, and opinion texts as tools for learning and reflection
- ✓ Conducting research and writing projects for a range of discipline-specific tasks, purposes, and audiences
- ✓ Evaluating relevant information from print and digital sources and using a variety of digital tools to produce and publish writing

### Mathematics

Students will develop the knowledge and skills essential to achieving mathematical proficiency in the following ways:

- ✓ Developing both conceptual understanding and procedural fluency
- ✓ Thinking and reasoning mathematically
- ✓ Using mathematics to solve problems in authentic contexts

### Science

Students will develop the knowledge and skills essential to becoming literate in science, and technology in the following ways:

- ✓ Thinking critically, solving problems, and communicating effectively
- ✓ Tackling increasingly challenging issues
- ✓ Seeking understanding to support solutions

### Social Studies

Students will develop the knowledge and skills essential to developing a balanced and integrated understanding of systems of culture, economics, geography, and politics and the history of their development in the following ways:

- ✓ Applying concepts and knowledge of the past to problem solving real-world issues of the present
- ✓ Critically examining human interactions and evaluating their role as an effective citizen
- ✓ Communicating social studies concepts clearly in multiple formats and putting theory into practice as a citizen

CRITICAL THINKING SKILL	ACADEMIC SUCCESS SKILL
<b>SYNTHESIS</b>	<b>COLLABORATION</b>
<ul style="list-style-type: none"> <li>✓ Integrate ideas, information, and theories to invent or devise a solution.</li> <li>✓ Formulate generalizations by examining parts and putting them together.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Solicit and respect multiple and diverse perspectives to broaden and deepen understanding.</li> <li>✓ Identify and analyze options for sharing responsibility to reach a group goal.</li> <li>✓ Support group decisions with criteria.</li> </ul>

Reading	Writing	Mathematics	Science	Social Studies
<p>Comprehension of literary text: realistic fiction—identify point of view; character description; setting; compare stories</p> <p>Comprehension of informational/explanatory text: reasons and evidence; paraphrase key details; main idea and supporting details; compare texts; interpret visual and oral information</p> <p>Vocabulary: high-frequency words; academic and content-specific vocabulary; similes and metaphors; context clues; affixes and roots</p>	<p>Writing workshops: opinion; informative; narrative</p> <p>Ideas &amp; development: prewriting; gather evidence; research; drafting; organization; revision; peer editing; dialogue</p> <p>Word choice: prepositional phrases; transitional words; conjunctions; emphasis words; reference tools</p> <p>Conventions: sentence fluency; capitalization; punctuation; audio-visual display; digital publishing tools</p>	<p>Place value (to one million): relationships among places in the base-ten system</p> <p>Reading and writing numbers to one million</p> <p>Comparison: multi-digit numbers (&lt;, &gt;, =)</p> <p>Rounding (within one million)</p> <p>Addition and subtraction fluency within one million: standard algorithm</p> <p>Multistep word problems: addition and subtraction</p> <p>Multiplication as comparison</p> <p>Multiplication and division word problems</p>	<p>Scientific inquiry process</p> <p>Tools used by scientists</p> <p>Safety practices</p> <p>Diversity of plants and animals in an ecosystem</p> <p>Classification of plants and animals</p> <p>Needs of plants and animals</p> <p>Build a terrarium and an aquarium using the design process</p> <p>Symbiotic relationships between organisms</p> <p>Flow of energy from the sun to producers, consumers, and decomposers</p> <p>Food chains and webs</p>	<p>Map skills</p> <p>Characteristics of landforms and bodies of water</p> <p>Regions of the United States</p> <p>Effects of geography on human communities</p> <p>Human impact on their environment</p> <p>Natural, capital, and human resources</p> <p>Physical features and natural resources of your state and region</p> <p>Create a map of your state</p> <p>Conservation of natural resources in your state</p>

CRITICAL THINKING SKILL	ACADEMIC SUCCESS SKILL
<b>ELABORATION</b>	<b>EFFORT, MOTIVATION, AND PERSISTENCE</b>
<ul style="list-style-type: none"> <li>Combine or add to thoughts, ideas, processes, or products.</li> </ul>	<ul style="list-style-type: none"> <li>Identify an achievable, yet challenging goal.</li> <li>Identify and describe the outcome of a goal.</li> <li>Identify the components of goal-setting</li> <li>Develop and demonstrate a sequenced program of action to achieve a goal or solve a problem.</li> </ul>

Reading	Writing	Mathematics	Science	Social Studies
<p>Comprehension of literary text (fiction; plays; poetry; folktales): compare stories, poems, and plays; meanings of proverbs; description of characters, settings, or events; point of view; use key details to determine theme; comparison of theme in two texts</p> <p>Comprehension of informational/explanatory text: main idea and key details; text structure; interpretation of visual and oral information; comparison of texts; text structure; reasons and evidence to support speaker's points; procedural text; cause-and-effect relationships</p> <p>Vocabulary: context clues; figurative language; academic and content-specific vocabulary; high-frequency words; affixes and roots; reference materials; antonyms and synonyms</p>	<p>Writing workshops: narrative (short fiction; plays; poetry); opinion; informative</p> <p>Ideas &amp; development: narrator; identify characters, setting, events; dialogue; writing stage directions; sequence of events; develop opinion supported by facts; organization; narrow topic; drafting; concluding statements; revision; editing; presentation</p> <p>Word choice: prepositions; relative pronouns; transitional words; commonly confused words</p> <p>Conventions: capitalization; formal and informal language; sentence fluency; punctuation; capitalization; spelling; technology tools; audio and visual display; reference citations; digital reference sources</p>	<p>Multiplication (2-, 3-, 4-digit <math>\times</math> 1-digit)</p> <p>Division with and without remainders (2-, 3-, 4-digit <math>\div</math> 1-digit)</p> <p>Area and perimeter formulas (rectangles): word problems including missing side lengths</p> <p>Converting measurement units (larger to smaller): conversion table</p> <p>Word problems involving measurement (whole numbers): four operations involving distances, intervals of time, liquid volumes, masses of objects, money</p> <p>Four-operation word problems (whole numbers): multistep</p>	<p>Describe how organisms influence ecosystems and other organisms in an ecosystem</p> <p>Describe how human activity causes changes in the environment</p> <p>Describe how technology causes changes in the environment</p> <p>Natural resources and how humans use them</p> <p>Farming and how humans produce and use food</p> <p>Nutrition; healthful foods</p> <p>The parts of the Food Plate</p> <p>Food safety</p>	<p>Early Native American societies</p> <p>Explorers in North America</p> <p>European colonies in North America</p> <p>The American Revolution</p> <p>Key principles in the Declaration of Independence and U.S. Constitution</p> <p>Westward expansion and the Louisiana Purchase</p> <p>Manifest Destiny</p> <p>The Civil War</p> <p>Contributions of immigrants to American society</p> <p>World War I</p> <p>The Great Depression</p> <p>World War II</p> <p>The Cold War</p> <p>Key developments of science, industry, and technology</p> <p>Civil rights and women's rights movements</p> <p>Terrorism</p> <p>Key events in your state's history</p>

CRITICAL THINKING SKILL	ACADEMIC SUCCESS SKILL
<b>EVALUATION</b>	<b>METACOGNITION</b>
<ul style="list-style-type: none"> <li>✓ Select and test possible alternatives.</li> <li>✓ Justify a choice or solution based on criteria using evidence and reason.</li> <li>✓ Question facts and claims.</li> <li>✓ Determine the credibility of information and claims.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Self-monitor strategies to assess progress and apply new thinking.</li> <li>✓ Seek clarification and adapt strategies to attain learning task/outcome.</li> </ul>

Reading	Writing	Mathematics	Science	Social Studies
<p>Comprehension of informational/explanatory text: main idea and key details; draw inferences; text structure; procedural/technical text; comparison of texts; diverse media forms; reasons and evidence given by a speaker; reference sources; compare firsthand and secondhand accounts of the same event</p> <p>Comprehension of literary text (fantasy; traditional stories/myths); draw inferences; refer to details and examples; point of view; text features; compare stories; describe characters; determine theme; interpretation of visual information</p> <p>Vocabulary: affixes and roots; high-frequency words; multiple-meaning words; reference sources; similes and metaphors; print and online dictionaries</p>	<p>Writing workshops: informative text; newsletter; opinion; personal narrative</p> <p>Ideas &amp; development: develop topic; organization; research and analysis; formats (headings; sections; visuals; layouts); reflect on experiences; sequence of events; sensory details; drafting; introductions; concluding statements; revision; editing; peer editing; presentation</p> <p>Word choice: verb tense; transitional words and phrases; homophones; conventions of standard English; adjectives</p> <p>Conventions: spelling; grammar; punctuation; capitalization; newsletter format; digital tools; sentence fluency; audio script; audio and visual display; source citation</p>	<p>Factor pairs and multiples (1–100)</p> <p>Prime and composite numbers</p> <p>Fractions equivalent to <math>\frac{1}{2}</math> and beyond</p> <p>Compare and order fractions</p> <p>Addition and subtraction of fractions</p> <p>One-step word problems</p> <p>Measurement data: line plots (<math>\frac{1}{2}</math>, <math>\frac{1}{4}</math>, <math>\frac{1}{8}</math>) of a unit</p> <p>Multiplication of a unit fraction by a whole number</p> <p>Multiplication of a fraction by a whole number</p> <p>Additive and multiplicative comparison</p> <p>Word problems involving measurement (fractions)</p> <p>Lines; line segments; rays; angles (right; acute; obtuse); perpendicular and parallel lines</p>	<p>Temperature; wind speed and direction; precipitation</p> <p>Observe and describe seasonal weather conditions</p> <p>Observable qualitative properties of matter</p> <p>Basic states of matter</p> <p>Measurable properties of matter: mass; volume</p> <p>Use tools to measure matter</p> <p>Changes in states of matter</p> <p>Describe how engineering design is used to forecast the weather</p>	<p>Key principles in the Declaration of Independence and U.S. Constitution</p> <p>Structure of the federal government</p> <p>Federal, state, and local governments</p> <p>How a bill becomes a law</p> <p>Structure of your state government</p> <p>Structure of your local government</p> <p>Create a mock bill and follow your state or local government’s process for turning it into a law</p> <p>Rules and organization of elections; the Electoral College</p> <p>Rights and responsibilities of citizens in the United States</p> <p>Symbols of patriotism</p> <p>Official symbols for your state (flag; bird; tree; motto; nickname)</p>

CRITICAL THINKING SKILL	ACADEMIC SUCCESS SKILL
<p style="text-align: center;"><b>FLEXIBILITY</b></p>	<p style="text-align: center;"><b>INTELLECTUAL RISK TAKING</b></p>
<ul style="list-style-type: none"> <li>✓ Select and use multiple resources.</li> <li>✓ Adapt and use information and multiple strategies to seek clarity.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Adapt and make adjustments to meet challenges when seeking solutions.</li> <li>✓ Demonstrate willingness to accept uncertainty by sharing ideas, asking questions, or attempting novel tasks.</li> <li>✓ Challenge self to advance skill level.</li> <li>✓ Use feedback—both positive and negative—as an opportunity to learn and improve.</li> </ul>

Reading	Writing	Mathematics	Science	Social Studies
<p>Grade 4, Part 4 Concepts &amp; topics to come</p>	<p>Grade 4, Part 4 Concepts &amp; topics to come</p>	<p>Grade 4, Part 4 Concepts &amp; topics to come</p>	<p>Grade 4, Part 4 Concepts &amp; topics to come</p>	<p>Grade 4, Part 4 Concepts &amp; topics to come</p>