

# FOURTH GRADE

## Curriculum Guide for Parents

The Common Core State Standards (also known as the *North Carolina Standard Course of Study*) focus on English/Language Arts and Mathematics, and integrate literacy in all subject areas. The North Carolina Essential Standards provide standards for Social Studies, Science, Information and Technology, Arts Education, Healthful Living, and other subject areas. These standards describe what students are supposed to know from kindergarten through 12th grade. Each year builds on the next so that by high school graduation, young people are prepared to go to college or to enter the workplace.



The purpose of this brochure is to provide information to parents about what students will be expected to know and be able to do during their year in the fourth grade.

### Other Curriculum Areas:

#### INFORMATION AND TECHNOLOGY



Students will learn to work with sources of information and informational text. They will use technology as a tool and understand the research process. Students will understand safety and ethical issues.

#### HEALTHFUL LIVING



Students will learn about feelings, nutrition, and physical activity. They will understand safety and will work on motor skill development, movement concepts, health-related fitness, and personal/social responsibility.

#### MUSIC



Students will exemplify musical literacy. They will understand how to respond to music. Students will understand how music is relevant in many contexts.

#### VISUAL ARTS



Students will use the language of visual arts to communicate effectively. They will apply creative and critical thinking skills to artistic expression, and will understand the interdisciplinary connections and life applications of the visual arts.

## English/Language Arts

The Common Core State Standards set goals for student mastery in language arts. The study of language arts includes reading, writing, speaking and listening. The standards include examples of appropriate books for students to read at each grade level in literature and informational texts. Informational texts include literary nonfiction and historical, scientific and technical texts. Teachers will choose the reading assignments for their students



# English/Language Arts

## **Reading: Literature**

Students will be learning how to refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text. Using details from the text, students will determine the theme and describe in depth a character, setting, or event. They will be able to read, comprehend, compare and contrast literature, including stories, dramas, and poetry appropriate for fourth graders.

## **Reading: Informational Text**

Students will be learning to refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text. Using details from the text, students will determine the main idea and explain events, procedures, ideas, or concepts in a historical scientific, or technical text. They will learn to interpret information presented visually, orally, or quantitatively (e.g., in graphs, time lines, or animations). Students will read and comprehend informational texts, including history/social studies, science, and technical texts appropriate for fourth graders.



## **Reading: Foundational Skills**

Students will know and apply grade-level phonics and word analysis skills in decoding words. Using context, students will confirm or self-correct word recognition and understanding. They will use letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read unfamiliar words in context and out of context.



## **Writing**

Students will learn to write opinion pieces on topics or texts, supporting a point of view with reasons and information. Using linking words and phrases, students will provide reasons that are supported by facts and details and students will connect ideas. They will create an organizational structure and develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic. Students will also be learning how to write informative and explanatory texts and narratives. Using dialogue, transitional words, and description, students will organize an event sequence that unfolds naturally. With help from peers and adults, students will develop and strengthen writing as needed by planning, revising, and editing. They will use technology to produce and publish writing as well as to interact and collaborate with others. They will demonstrate sufficient command of keyboarding skills to type a minimum of one page in a single sitting. Students will learn to conduct short research projects that build knowledge through investigation of different aspects of a topic.

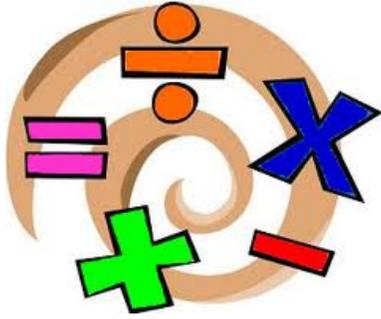
## **Language**

Students will learn how to demonstrate command of the conventions of standard English grammar and usage when writing or speaking (pronouns, adverbs, progressives, modal auxiliaries, adjectives, prepositional phrases). They will demonstrate command of the conventions of standard English, capitalization, punctuation, and spelling when writing. They will use knowledge of language and its conventions when writing, speaking, reading, or listening. Students will be able to determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade four reading and content. They will be able to demonstrate understanding of figurative language, word relationships, and nuances in word meanings.



## **Speaking and Listening**

Students will engage effectively in a range of collaborative discussions and come prepared to explore ideas under discussion. They will report on a topic or text in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes, speaking clearly at an understandable pace. They will add audio recordings and visual displays to presentations when appropriate.



# Mathematics

The Common Core Mathematics Standards place an emphasis on eight mathematical

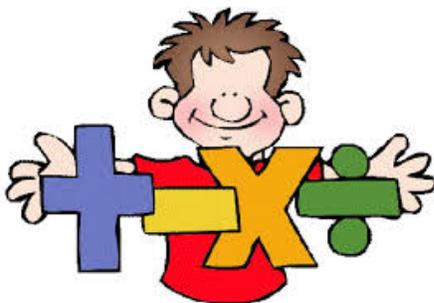
practices. These practices are strategies for thinking through and solving mathematical problems.

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Using these practices, fourth grade students will learn about:

## Operations and Algebraic Thinking

Students will learn how to use the four operations with whole numbers to solve problems. They will gain familiarity with factors and multiples. They will generate and analyze patterns. Students will use place value understanding and properties of operations to perform multi-digit arithmetic.

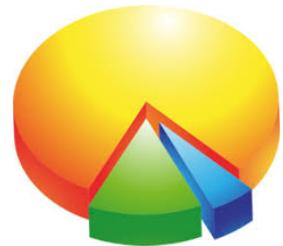


## Number and Operations in Base Ten

Students will learn how to generalize place value understanding for multi-digit whole numbers. They will use place value understanding and properties of operations to fluently perform multi-digit arithmetic. Students will find whole-number quotients and remainders.

## Measurement and Data

Students will learn to solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit. They will learn how to represent and interpret data (line plots), and will solve problems involving addition and subtraction of fractions by using information presented in line plots. Students will understand concepts of angles and measure angles.

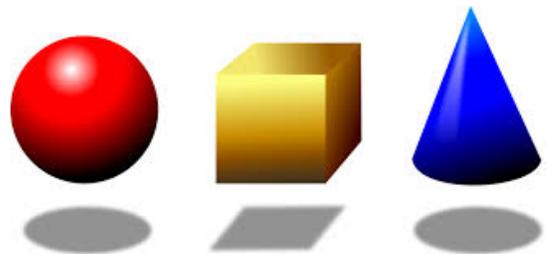


## Number and Operations - Fractions

Students will learn to extend their understanding of fraction equivalence and ordering. They will build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers. They will add and subtract mixed numbers with like denominators and solve word problems involving addition and subtraction of fractions. Students will apply and extend previous understandings of multiplication to multiply a fraction by a whole number and solve word problems involving multiplication of fractions. They will understand decimal notation for fractions, and compare decimal fractions.

## Geometry

Students will learn how to draw and identify lines (perpendicular, parallel) and angles (right, acute, obtuse), and classify shapes by properties of their lines and angles. They will also be able to recognize a line of symmetry for a two-dimensional figure and draw lines of symmetry.



# Science



The North Carolina Essential Standards organizes Science into the domains of Physical Science, Earth Science, and Life Sciences. By the end of the fourth grade, students should be

able to conduct investigations, gather evidence, and grow in their understanding in the following areas:

## **Forces and Motion**

Students will be able to explain how various forces affect the motion of an object including how magnets work. They will explain how electrically charged objects push or pull on other electrically charged objects and produce motion.

## **Matter: Properties and Change**

Students will understand the composition and properties of matter. They will compare the physical properties of samples of matter.

## **Energy: Conservation and Transfer**

Students will recognize the basic forms of energy (light, sound, heat, electrical, and magnetic).

## **Earth in the Universe**

Students will be able to explain the causes of day and night and phases of the moon based on the rotation of Earth on its axis.

## **Earth History**

Students will understand fossils and changes in the surface of the earth as evidence of the history of Earth and its changing life forms. They will compare fossils to one another and to living organisms.

## **Ecosystems**

Students will understand the effects of environmental changes, adaptations and behaviors that enable animals (including humans) to survive in changing habitats.

## **Molecular Biology**

Students will understand food and the benefits of vitamins, minerals, and exercise. They will classify substances as food or non-food items based on their ability to provide energy and materials for survival, growth, and repair of the body.

# Social Studies

Fourth grade students focus on a study of North Carolina. Students explore the geographic regions, landforms, climate, and resources of the state. They learn about the state's social, economic, and political institutions as well as build a base of knowledge about economic principles and technological developments affecting the past and present. Students study the diverse groups who have contributed to the development of the state. Teachers help students draw parallels between contemporary issues and their historical origins.

## **History**

Students will learn how to analyze the chronology of key historical events in North Carolina history. They will be able to understand how notable structures, symbols, and place names are significant to North Carolina.

## **Geography and Environmental Literacy**

Students will understand how human, environmental and technological factors affect the growth and development of North Carolina. They will be able to summarize changes that have occurred in North Carolina since statehood.

## **Economics and Financial Literacy**

Students will understand how a market economy impacts life in North Carolina. They will understand the economic factors when making personal choices. They will explain how personal financial decisions such as spending, saving, and paying taxes can positively and/or negatively impact everyday life.

## **Civics and Governance**

Students will understand the development, structure and function of North Carolina's government. Students will learn to analyze the North Carolina Constitution.

## **Culture**

Students will understand the impact of various cultural groups on North Carolina. They will explain how the artistic expression of various groups represents the cultural heritage of North Carolina.

