

Grade 4 Pedagogical Overview

An important transition occurs following the completion of the fourth grade year. While the primary emphasis in earlier grades is on forming healthy work habits and encouraging a positive relationship to the learning process, the coming years challenge students to test the strength of their budding individualities as they move out to explore the world in more depth. The children emerge from Grade Four with greater awareness, expressed in new confidence and vigor. They want to experience the world from an individual standpoint, to find their particular place in the world. They develop a sense of where they are in relation to their environment, in both a social and geographical sense. One of the primary aims of the fourth grade year is to foster in each student a commitment to the learning process, the ability to follow-through with tasks, the development of solid work habits, and a sense of belonging within the group. During this year, students complete several independent projects and give their first formal presentations to the class.

Themes from Norse Mythology permeate the fourth grade Language Arts curriculum. These tales of intrigue and mischief provide the children with images of diverse, strong-willed personalities all contributing to the social whole. During two four-week blocks, students are presented with numerous tales, including stories from Viking folklore and the Finnish Epic, *The Kalevala*. The stories of Odin – (the spirit of Wisdom), Thor – (the power of strength), and Loki – (the incarnation of trickery) provide a framework for discussing loyalty, deception, friendship, and chaos. In addition to listening to numerous tales throughout the year, students participate in weekly reading groups. They are also encouraged to read books for pleasure throughout the year. The study of grammar and punctuation continues, and students are introduced to formal letter writing. Speech work includes the recitation of numerous poems, tongue twisters, and alliterative verses related to topics explored in Main Lesson. New vocabulary is introduced throughout the year, and spelling words are assigned with weekly quizzes.

By fourth grade, most students have advanced in abstract reasoning ability to the point that new concepts can be understood with growing ease. During the course of the year numerous mathematical concepts are covered, including a review and strengthening of long-division and long-multiplication skills; fractions, including new terminology and work with the four basic operations (addition, multiplication, subtraction, and division), expanding and reducing fractions, improper fractions, mixed numbers, cross-cancelling, and working with visual depictions of fractional amounts; creating and solving word problems; and mental arithmetic.

In fourth grade, as students begin to look more critically at their surroundings, the study of geography begins. Through geography, students are given the opportunity to view the world in a new way. They develop objectivity and are encouraged to widen their perception through careful observation. Beginning by drawing maps of the classroom and the school campus, the curriculum eventually expands to study the entire state of Georgia. During the course of this block, students are introduced to basic mapmaking and orienteering skills, and are asked to create a topographical map depicting the regions of Georgia. A block of local history provides an opportunity to discuss some of the most important figures from Georgia's history.

The study of animals introduces the cycles of life, the relationship between predator and prey, and the qualities of various animal groups, including mammals, marsupials, nocturnal animals, and carnivores. The unique nature of each creature is discussed, which often transposes into discussions on the unique qualities of the human being. As part of this block, students are

asked to complete their first written report. This project provides an opportunity for the students to develop basic research skills and provides the class with an opportunity to learn about many fascinating creatures.

As in earlier years, artistic work continues to be woven into every Main Lesson block. Beginning in fourth grade, form drawing lessons challenge the students to create complicated weaving forms. Although many of these artistic renderings may appear simple, acquiring the ability to weave over-and-under on the page requires a great deal of concentration and skill. Painting and clay work reflect the content of the Main Lesson. Themes in these mediums include Norse Mythology, animals, and Cherokee coil pots. Cross-hatching is introduced as a technique to use when drawing with colored pencils. This method encourages the development of form from color and shape rather than focusing on outlines.

Language Arts:

- Norse Mythology
- Native American Legends
- Grammar, punctuation, and spelling
- Reading groups
- Poetry writing
- Book reports
- Letter writing
- Speech work
- Spelling quizzes

Mathematics:

- Fractions
- Long division
- Double-digit multiplication
- Mastery of multiplication tables
- Word problems
- Mental arithmetic

Social Studies:

- Local Geography
- Georgia History (Including biographies of famous individuals)

- Map-making
- Orienteering

Science:

- Human and Animal Studies
- Life cycles, predator/prey, habitats
- Research project

Artistic Work:

- Form Drawing
- Watercolor painting
- Clay modeling
- Calligraphy

Specialty Subjects:

- Eurythmy
- Games
- Handwork
- Music
- Spanish
- Strings

English and Language Arts

In Grade 4, stories from Norse Mythology are the main emphasis in the language arts curriculum. These stories of gods and giants highlight a variety of human virtues and foibles and provide a backdrop of humor and drama during a time when the students are experiencing a transformative period in their own physical and emotional development.

Writing lessons continue to be a blend of copying, taking dictation, and composing original pieces. When a composition is written, it is corrected by the teacher before it is copied into the Main Lesson book. Colorful drawings are included with each written assignment. Assignments

are taken from the stories told and recalled by the students the following day, with emphasis on an accurate retelling of the events of the story. Personal and business letter writing is introduced. Punctuation and parts of speech continue to be studied while verb tenses are introduced. Speech work throughout the year includes the recitation of numerous poems, tongue twisters, and alliterative verses related to topics in the Main Lesson. New vocabulary is introduced throughout the year, and spelling words are assigned with weekly quizzes. Weekly reading groups continue. The class performs a play based on a story from the curriculum.

Writing

During this year, a greater majority of student writing will be done independently. Students will be asked to complete rough drafts which will be edited for content, grammar, and correct punctuation before going into main lesson books. Students will also be introduced to basic letter writing conventions and will deepen their understanding of grammar concepts.

At the completion of Grade Four, students should be able to:

- Demonstrate editing and revision skills
- Write legibly
- Write complete sentences
- Use a variety of sentence structures
- Use correct punctuation, including quotation marks, commas, and periods
- Use details to develop characters, setting, plot
- Maintain focus throughout writing
- Demonstrate understanding of basic letter writing conventions
- Transcribe a one-paragraph dictation

Reading

In addition to reading books assigned in school, students will be expected to continue reading independently at home throughout the school year. Weekly reading groups may continue, and independent book projects will be assigned for the first time. Students may continue to enjoy reading aloud with parents and friends, and simple non-fiction reading may be encouraged.

At the completion of Grade Four, students should be able to:

- Summarize details about books read independently
- Present a book report project to the class
- Read a variety of texts and answer questions regarding content
- Select books and read independently, with some teacher guidance
- Read aloud with fluency and expression

Speaking and Listening

Students continue to develop and expand their speaking skills through daily recitation of poems, tongue twisters, and songs. They learn numerous verses as a class and develop greater ease speaking independently in front of the group. All students are expected to participate fully in class activities and discussions.

At the completion of Grade Four, students should be able to:

- Speak clearly and audibly
- Use descriptive oral vocabulary
- Use appropriate grammar and word choice when speaking
- Ask questions in relation to context
- Respond to the questions of others
- Summarize information shared orally by others
- Contribute to group conversations
- Listen responsively and respectfully
- Follow oral directions with three or four steps

Mathematics

Number Sense

As the fourth-grade student advances in abstract reasoning ability, the experience of the fracturing of the whole into parts can be explored. However, before fractions are introduced, students must have a good facility for working with whole numbers, using all four processes in long form.

During this year, students continue to refine their understanding of multiplication, division, and number relationship and link these to the real world. The memorization of the times tables to 12 are completed this year, and all third-grade math skills are reviewed and mastered. Number facts should be solidly in place by this point.

Fractions are introduced and brought to life through story problems, manipulatives, illustrations, and group projects. They are taught carefully, and methodically, first by breaking the whole into parts, moving from analysis to synthesis, and then introducing the concept of numerator and denominator, and methods for expanding and contracting fractions.

Computation

During this year, students continue to develop speed and flexibility in their computations. Measurement skills from previous years are reviewed and strengthened as students continue to develop ease working with time, money, and linear measure. By the completion of fourth grade, students should have a solid grasp of all concepts from earlier grades, and they should be able to successfully complete all written assignments with very little individual guidance. Students should be encouraged to strengthen their skills in these areas through ongoing practice and repetition at home.

Measurement

Measurement skills from previous years are reviewed and strengthened as students continue to develop ease in working with time, money, and linear measure. Students are encouraged to strengthen their skills in these areas through ongoing practice and repetition at home.

Form Drawing, Patterns, and Spatial Orientation

In fourth grade, students begin to explore the dimensionality of form, and they are formally introduced to complex braided patterns and Celtic knot formations. Students also continue their work with patterns and number puzzles.

At the end of fourth grade, students should be able to:

- Copy multi-digit numbers from the board and place them in the appropriate visual-spatial format for problem solving. Written math work is neat and organized on the paper.
- Demonstrate understanding of place value of numbers up to and including the ten thousands column. Student can write and read these numbers from verbal dictations.
- Confidently complete written mathematical calculations using multi-digit numbers. Student understands how to use regrouping to solve more complex problems
- Solve multi-digit long division problems containing remainders
- Solve word problems involving measurement of length, perimeter, weight, time, and money
- Demonstrate a working understanding of the four math processes when using fractions and mixed numbers
- Understand the concept of a fraction and can identify the numerator and denominator of a number.
- Reduce and expand fractions and find the “lowest common denominator” when solving problems.
- Understand and recognize more complex number patterns and is able to work with prime numbers.
- Extrapolate pertinent data in word problems and use the correct process to solve the problem.
- Check the accuracy of an answer by using the inverse operation.
- Listen to a complex word problem and mentally calculate the response.

Social Studies and Science

In the early grades, the social studies and science curriculum lays a rich foundation for the more explicit history and science instruction provided in the middle and upper grades. By Grade Four, instruction is becoming more explicit, and topics such as zoology, Norse mythology, and local history and geography provide opportunities for rich exploration and observation.

Local Geography and History

In Grade 4, the student is developing a greater sense of individuality, which marks the time for the formal study of geography and history. A typical fourth grade year will have two three-week blocks on the history and geography of Georgia. The fourth grade Local Geography block begins with a study of the immediate surroundings of the school and town. Children’s drawings of the school grounds or their route to school become their first maps, and picture symbols gradually develop into conventional map symbols. As they steadily orient themselves in space, their horizons can expand to include the whole of Georgia.

During the fourth grade Georgia History block, emphasis is laid on how people have lived on this land that was once in the care of Native American tribes such as the Cherokee, Creek, and Choctaw. They also learn about the lives of the early settlers in Georgia and their impact on these native communities. Narratives of Native Americans and the history of settlers help the children to see how the landscape has influenced the kind of work and way of life of their locality. Specific areas of study may include the biographies of James Oglethorpe, Sequoyia, and an introduction to the Gullah people who lived on islands off the Georgian coast. Along with non-fictional biographical materials, the students hear folk tales and myths from Georgia history, as they learn about the native people of the Southeastern United States.

Zoology

In Grade 4, students begin a more formal study of science with a block called, “The Human and Animal” block. The class examines animals whose forms are like some part of the human form, specifically, the head, torso or limbs. All animals are studied in relationship to the human being, with the human presented as the harmonization of all specialized qualities of animals. This block provides an introduction to animal physiology and the relationship between animals and their environment. A focus is placed on animals that best represent the respiratory system, the circulatory system, the nervous system, and the metabolic system. As part of this block, students also learn about habitats and develop an appreciation for how animals adapt to their environment. This block marks the important transition fourth graders make from the nature stories and fables of earlier years to the experimental science they encounter in later grades. Observations and descriptions of animals combine accurate detail with a sense of the character of an animal and its environment. This block culminates in a research project that includes a written, verbal, and artistic component.

At the completion of Grade Four, students should be able to:

- Draw, paint, and model the form of an animal.
- Describe an animal’s habitat and way of life.
- Write compositions and poems about an animal’s specialized quality.
- Describe animal adaptations to various climates.
- Compare and contrast various animal forms with each other and with the human form.
- Explain the uniqueness of the human hand and stature.
- Group diverse types of animals according to form (classification)
- Complete a research project on a favorite animal, with drawings, and describe its habitat, way of life and special capacities.