

Fourth Grade Curriculum

Fourth Grade at Springhurst Elementary School is filled with many rich learning experiences. Students gain greater independence and life-long study skills. Subjects are departmentalized so students will have the opportunity to switch teachers. Enrichment activities in the arts, math, ecology, and student government are offered for students to take part in.



Our Language Arts curriculum is aligned with the Next Generation Standards and offers students challenging reading and writing experiences. We use a variety of approaches to build the necessary skills and strategies for success in reading and writing.

Students engage in a variety of reading experiences each day. These include instruction in reading skills and strategies, as well as opportunities to discuss and write about their reading. We use a variety of texts including whole class novels, short informational articles, and individual books. The goal is to offer instruction that meets the specific needs of all of the children in the classroom while giving them the time they need to practice using the strategies and skills they are learning. Students are expected to read at home for at least 20 minutes each evening. They will also periodically be asked to respond to their reading.

The writing process includes planning, drafting, revising, editing, and publishing. Students will confer with teachers and peers throughout the process. Each student will be expected to complete several writing pieces from a variety of genres, including narrative, persuasive and informational.

Students continue to develop and build upon vocabulary and conventional language skills during a separate Word Work time. They are instructed in vocabulary, word analysis, grammar, and spelling rules, and other writing mechanics through daily activities. Students will be using the Wordly Wise 3000 Program as the basis for vocabulary instruction and the Sadlier Grammar Workshop text as the foundation for grammar instruction.

Cursive handwriting is reviewed, which includes both upper and lower case letters.



The math curriculum in fourth grade is called Primary Mathematics, based on a program developed by the Ministry of Singapore. The program features a balance of problem solving, mental math, and computational skill development. Primary Mathematics features a Concrete-Pictorial-Abstract approach. When learning a new concept, students will often work with concrete materials. Students will then use drawings and pictures to help them understand the concept, and then move toward abstract symbols and algorithms. Students are given ample opportunities both for practice and application of new ideas learned. The program is closely aligned to the Next Generation Standards.

Mathematical ideas are developed through problem solving, and students will use a variety of strategies and models, which includes the bar model drawing approach to help them make sense of word problems. Reasoning and communication skills are fostered throughout the program, as students are expected to explain their thinking to others. Assessments will be given both during and at the end of units.

The topics that will be addressed this year include:

- Place Value
- Operations with Whole Numbers
- Fractions and Operations with Fractions
- Geometry/Area and Perimeter
- Decimals and Operations with Decimals
- Measurement

Students are expected to have a quick recall of their multiplication facts (0-10) in 4th grade.



The fourth grade science program includes units of study in various disciplines of science that are also connected to many reading, writing, and math experiences. Students will continue to work with the Science 21 program when learning science this year. The Science 21 units are as follows:

Unit 1 – Structure, Function, and Information Processing

This unit continues student investigations from 1st Grade into how animals can only see when light is present and reflects off objects. This reflected light is information that is processed by the brain to perceive an image. Students will also investigate plant and animal structures (both internal and external) that serve the species for growth, survival, behavior, and reproduction functions.

Unit 2 – Energy

Students will investigate how an object possesses more energy of motion when moving faster and predict the changes in energy when objects collide with one another. Students will be collecting evidence that energy is conserved as it is transferred and/or converted from one form to another. Students investigate these concepts by testing devices that convert energy from one form to another. Finally, students will use information to describe that energy and fuels are derived from natural resources that can be renewable or nonrenewable, and their uses can affect the environment.

Unit 3 – Waves: Waves and Information

Students will continue the investigations from 1st Grade of waves to describe patterns they observe using the terms amplitude and wavelength. Students will begin their understanding of information technologies by investigating how information can be transmitted over long distances without degrading.

Unit 4 – Earth's System: Processes that Shape the Earth

Students will continue their investigations from Grade 2 and Grade 3, about how Earth systems are affected by weathering and erosion due to water, ice, wind, or vegetation. In addition, they will use patterns of rock formations and fossils in rock layers to explain changes to the Earth's surface over time. Students will interpret information from maps to describe patterns of earthquakes and volcanoes to aid in their understanding of Earth changes over time. Finally, students will investigate various natural hazards, generate solutions to reduce the impact of natural hazards on humans, and compare solutions with other students.



The Springhurst Social Studies curriculum follows the New York State Social Studies Framework. In fourth grade we focus on the study of New York State, including its geography, regions, and its history. We study New York State's early inhabitants (Native Americans, Dutch, English, French) and their influences. Students will also learn about NYS during colonial times, and the American Revolution. We explore New York's role in the women's rights and slavery reform movements, as well as industrialization and expansion periods. Map skills are integrated as we look at a variety of maps with regard to New York State's history. Projects may be assigned periodically.

Springhurst FLES Program

The Spanish FLES curriculum for fourth grade is a sequential model in which all students receive 15-minute sessions 5 times per week. FLES instruction is proficiency-oriented with a greater focus on meaningful communication than on grammatical structure. Students are encouraged first to understand and then to produce in the language. Using an immersion approach, similar to the way children learn their first language, students participate in language training activities that are geared to the child's interest level and include experiences

with cultural practices and integration of thematic content. These experiences emphasize listening, speaking, reading and comprehension in meaningful, communicative contents: social/cultural situations, games, songs, and rhymes in addition to experiences with arts, crafts, movement and total physical response.

Each lesson lays the foundation for the next, and children gain confidence in listening and speaking. As they follow the sequential FLES curriculum each year, they eventually progress toward reading and writing in the target language.

It is at the fourth grade level that students begin to experience some writing in the target language based on prompts and modeling from their teacher. As they have seen the written form of the language in previous years and lessons, they have begun to make connections between sound/symbol relationships and are, at this point, ready to begin practicing the language through writing.



Homework

Reading for a minimum of 20 minutes each night is expected. You may read with your child, to your child or have your child read alone. It is important that you encourage your child to talk about what was read. You can discuss the content and share your responses and reactions. Please make reading a priority in your home.

Various combinations of reading, math, vocabulary, grammar, and writing homework will be given Monday through Thursday. The purpose of these assignments is simply the practice of concepts that the child is working on. Please set aside a quiet time and place for homework. Allow your child to work independently as much as possible. Your interest in your child's work is a very important component in the beginning development of good work habits and a positive attitude.



Communications

Throughout the year, we will be observing your child's growth and development so that we can support their individual needs. We are always available to discuss any thoughts, questions, or concerns you may have. You can reach out to us by telephone, via email, or handwritten note.

Please note that all dismissal information is handled through the School Dismissal Manager. Please be sure to update as necessary.

We look forward to a wonderful year with your child!