

# LOWER SCHOOL | K-5

## CURRICULUM OVERVIEW

The Lower School curriculum supports and expands children's natural love of learning and eagerness to be a part of a community. Creativity and collaboration are crucial qualities in educating the whole child. Classes are characterized by flexible groupings and individualized guidance, made possible by low student-to-teacher ratios. Having two lead teachers in every homeroom facilitates enhanced learning for all students. The rotating six-day schedule allows for optimum emphasis on multidisciplinary skill-building in the three homeroom subjects as well as in the seven specialist courses, while incorporating opportunities for open play which are so important for young children.

A child's academic day alternates between homeroom and specialist courses. Homeroom teams build skills in mathematics, language arts, and social studies. Specialists provide instruction in science, Spanish, computer science and technology, art, library, music, and physical education. Throughout the year, homeroom teachers and specialists make adjustments to instruction based on what they observe in each child. Differentiation is used carefully with the understanding that students' abilities are constantly evolving, developing, and changing.

## LANGUAGE ARTS

The language arts curriculum develops a love of reading and strength in comprehension and critical thinking skills. Small groups allow teachers to provide individualized guidance as students build fluency in their reading; teachers adapt differentiated student groupings throughout the year.

The curriculum is designed to meet the needs of every student at every level of reading fluency; it is flexible and appropriately challenging as teachers work with students on phonemic awareness, phonics, vocabulary acquisition, self-expression through writing and oral presentations, appreciation of a variety of literary genres, and the mechanics of spelling and grammar. Throughout the Lower School, the language arts are often integrated with other academic content areas such as social studies, where students incorporate research literary analysis, the give-and-take of discussion, and creative and expository writing.

**When students leave the Lower School, they are curious and engaged readers, confident writers, and have begun to develop the oral and written communication skills they will need in Middle School and beyond.**

## SPANISH

Spanish classes emphasize creative and interactive games, songs, stories, skits, puppet shows, movement, and conversation to help students develop their listening, speaking, reading, and writing skills. The curriculum develops interdisciplinary integration with homeroom thematic units, an understanding of Spanish-speaking cultures around the world, and multiple opportunities for exchanges with native Spanish speakers both in and outside of the classroom.

Students who join SPA in Grades 3-5 have additional support in Spanish through a mini course offered in addition to regular class times to help them build competence and confidence in the basics of Spanish language.

**By the end of Grade 5, students have completed the first half of a beginning high school Spanish course. This puts students on track to move more rapidly through the Middle School world language sequence, compared to students who begin a language in Grade 6, and to take Spanish VI by senior year.**

## SOCIAL STUDIES

Social studies units are interdisciplinary, deepening literacy, developing research and writing skills, and often integrating science, music, art and technology skills and concepts. Units foster skills in critical thinking, gathering and organizing information, analyzing cause and effect, and expository reading. Students are introduced to geography, basic economic principles, civics and government, history, and cultural studies. Kindergarten students explore community citizenship and the history, geography, environment, and stories of native peoples of the world, and the concept of needs versus wants. Units in Grades 1 and 2 rotate between a year on how individuals interact with communities and a year on the city. In Grades 3 and 4, students complete a grade-wide interdisciplinary research project which culminates in a simulation in which students showcase their understanding of the historical topic or period. Grade 5 students explore the cultures of Native American nations before contact with Europeans; colonial and revolutionary America; and the U.S. Constitution and basic structure of the U.S. government. Students take on more independent work through a range of simulations, projects, research, and presentations.

## SCIENCE

Hands-on science, engineering, and computer science take place in two dedicated science classrooms and a Makerspace with two full-time science specialists. Students investigate the world around them, become observers of natural phenomena, build and create solutions to engineering challenges, and are introduced to computational thinking and computer programming. The curriculum includes interdisciplinary content from the core sciences of life science, physical science, and earth science aligned with the content and practices in the Next Generation Science Standards. There is a strong focus on creative problem-solving and the engineering design process. Over the course of their Lower School experience, students will design, carry out, and present experiments ranging from investigating the variables that affect the germination of seeds to the behavior of a pendulum. They will learn about alternative energy and then design, build, and test wind turbines; they will learn the properties of matter and then create a process to improve play dough; they will learn about the Mississippi River watershed, go on the Big River Journey field trip, and design and build a drinking water filter. They will learn the basics of computational thinking and computer programming through block-based programs such as Kodable, Scratch, and Tickle, and program small robots including BeeBots and Dash and Dot.

## MATHEMATICS

The *Math in Focus* curriculum provides the foundation for mathematics instruction in the Lower School. Within the homeroom setting, students are placed in differentiated groupings based on ongoing assessments. In these small groups, teachers challenge and support each student according to the student's skill level and developmental readiness. Students who master basic concepts are encouraged to accept further challenge, enrichment, and acceleration when appropriate.

The *Math in Focus* curriculum emphasizes deep comprehension and the "why" behind quantitative concepts. An understanding of the meaning and significance of mathematical concepts is developed in addition to the fundamental applications of elementary mathematics.

**By the end of Grade 5, all students are well-prepared for the demands of Middle School mathematics. Students who have done accelerated work in Grades 3-5 are placed in an appropriate Middle School course after assessment by SPA math faculty members.**

## ART

In the Lower School, art is an essential part of day-to-day life. Students participate in art classes twice per six-day rotation and explore and express themselves through many media and styles. Formal art education begins in Kindergarten and continues throughout the Lower School. Student work is prominently exhibited throughout the school.

## MUSIC AND MOVEMENT

Students attend music classes twice per six-day rotation, and are taught by teachers trained in the Orff-Schulwerk approach. Instruction in singing, movement, instruments, and speech guides students through exploration, improvisation, and composition. Students performing on stage is an important part of the music experience in the Lower School.

*When students move to the Middle School, they continue their music coursework in choir, band, or orchestra.*

## PHYSICAL EDUCATION

Students take PE three times per six-day rotation; teachers engage, instruct, and encourage each student while students build strong bodies, athletic skills and teamwork. Team sports instruction begins in Grade 3. Students may participate in interscholastic sports beginning in Grade 5.

## COMPUTER SCIENCE AND ENGINEERING

Students in every grade have at least one unit each year in their science classes in which they explore computer science and/or robotics at a developmentally-appropriate level. This initiative involves three strands of skill development: computers and devices as learning tools; computer science and engineering skills; and Maker education where students utilize the Makerspace for design, construction, and special projects. Together, these three strands give students the opportunity to explore new ways of thinking that can also be applied to the academic subjects they study in their homeroom and with the specialists.

## TECHNOLOGY

Technology is integrated into academic subject areas and includes an emphasis on creativity and innovation. Students in Grades K-5 use iPads in most classes, with 1:1 iPad use in Grades 3-5. There is also a "mobile lab" of laptops which students may use as needed to achieve particular learning objectives or enhance specific projects. Students use technology to collaborate with peers, learn digital citizenship, and create subject-related content.

## BEFORE/AFTER-SCHOOL PROGRAM

**Before School Care:** Morning care is offered each weekday morning free of charge to all Lower School students. Every morning the Adventure Kids (AK) program runs from 7 a.m. to the start of school; on Wednesdays, when classes begin at 8:45 a.m., students may attend AK from 7 to 8:30 a.m. Before-school care is supervised by staff members who are committed to providing a fun, caring, and safe setting for students.

**After School Care:** The after-school AK program is held each school day from the end of classes until 6 p.m. and is staffed by the same caring, skilled staff as the morning AK program. Less structured than the regular school day, the after-school AK program offers a variety of mixed-age group activities, snack time, and quiet time for independent reading, games, and homework. Outdoor play is encouraged for all children throughout the seasons, including sledding and ice skating on the school's playground ice rink. There is a fee for the after-school AK program; please inquire about rates.

**Full-Day Activity Program:** On many days when Lower School classes are not in session, such as Parent Conference or Faculty Professional Days, SPA offers fee-based, full-day care open to all Lower School students. The full-day program features field trips, outdoor play, craft projects, and other activities. The program is not in session on holidays or during school vacations.

## MINIS AND ASSEMBLY

**Minis:** Students in Grades 3-5 take part in a series of eight-week electives known as "Minis," taught by Lower School teachers and specialists. Minis offer students an opportunity to learn new skills outside the classroom and collaborate with different students and adults in the community. Minis offered in recent years include "Mindfulness for Kids," origami, flag football, drums around the world, stop-motion animation, scrapbooking, video production, broomball, geocaching, cribbage, bridge building, and bird watching.

**Assembly:** All-school assemblies take place in the Sarah Converse Auditorium at the beginning and end of each week. Assemblies bring together all Lower School students, faculty, staff, and often parents to share memorable moments and showcase learning. Students sing, perform, and celebrate accomplishments as a group. Assemblies are led by students in Grade 5, who serve as ushers, stage and sound crew members, and emcees: as a culmination of the Lower School experience, each Grade 5 student leads an assembly as the emcee. Each student is mentored by a Grade 5 teacher to prepare for his or her "emcee day," and these are much-anticipated community events.