

THE PARK SCHOOL

2019-2020

CURRICULUM GUIDE



GRADE 4

GRADE 4

OVERVIEW

In Grade 4, students exercise their newly acquired academic and social skills while assuming greater responsibilities both at home and at school.

Students in Grade 4 continue progressing from concrete to more complex understandings of the world. Throughout the curriculum, students are asked to compare, synthesize, analyze, and draw conclusions about texts, data, and information, and to support their ideas with evidence. Using scaffolds to help them, fourth graders work on developing and growing their own bold ideas. Students practice these skills through increasingly complex assignments including realistic fiction story writing, essay writing, data analysis, and close reading. In the Grade 4 social studies program, students complete much of their work in small groups, helping them to learn essential collaboration skills, while they delve into rich topics. Strong citizenship and respect for others and the environment underlie every component of the program. Students are each assigned a Park School Google Account and a Chromebook for use at school, giving students and teachers the ability to access age-appropriate and collaborative tools whenever they are needed.

Students complete up to 45 minutes of homework and 30 additional minutes of independent reading four nights per week. Fourth graders begin their mornings with community-building meetings in their homerooms, and participate in Morning Meeting every Tuesday. Students in Grade 4 may also begin to participate in organized intramural sports. Each season, students may join a team and practice after school twice per week.

Major highlights of the Grade 4 social studies curriculum include running the paper recycling program for the entire School, taking on the role of a Greek god, goddess, hero, or heroine, and writing a cumulative cross-curricular research paper about everyday life in ancient Greece. Students also participate in an Olympic Day celebration at the end of the year.

LITERACY

Students entering Grade 4 are ready to lean into their rapidly developing language arts skills. The curriculum strives to give children the skills they need to make meaning through reading and to express themselves through writing and speaking.

Reading

To develop their reading comprehension and critical thinking skills, fourth graders read extensively in school in a reading workshop model. They practice reading strategies with independent, small group, and whole class texts. Students read from several genres, including fiction, nonfiction, and historical fiction. They gain a deeper understanding of the elements of fiction by focusing on character, setting, and conflict. They learn to negotiate nonfiction texts and to appreciate how the structure contributes to greater comprehension. Students apply comprehension strategies such as questioning, visualizing, inferring, determining importance, and close reading techniques to both fiction and nonfiction reading.

Writing

Fourth graders explore different genres of writing throughout the year. Within each genre they learn to develop literary techniques that enhance the clarity and power of their writing. They use the writing process to plan, draft, revise, and edit personal narratives, pieces of realistic fiction, essays, and research reports. In conjunction with the reading program, they learn how to write in response to the books they read, analyzing texts for evidence and drawing conclusions.

Grammar, Mechanics, and Handwriting

Students in Grade 4 continue their study of the basic elements of grammar, including subjects, predicates, pronouns, and the phrases and modifiers that describe them. They strive to use their knowledge of grammar as another tool for looking at writing and understanding sentence construction. They learn to analyze sentences for these elements and to employ them in their own writing. They strive to use commas correctly as they begin to write in longer, more complex sentences. Students start to type many of their important writing projects.

Spelling

Students focus on word patterns by looking at syllables and affixes, high-frequency words, and basic spelling generalizations. Students continue to use word sorts as one tool and may also make personal word lists to master misspelled words in their everyday work. Vocabulary study includes both words from their year-long study of Greece and increasingly complex words from their nonfiction reading.

MATHEMATICS

The goal of our math program is to promote deep understanding of mathematics and to develop mathematically proficient students who can think, reason, model and solve problems. All students in Kindergarten – Grade 5 use the *Investigations 3rd Edition* program. Park provides opportunities for all students to build a strong foundation of mathematical knowledge while engaging in rich, meaningful, and cognitively demanding activities. Students use mathematical tools and representations to model and solve problems and are asked to communicate their thinking clearly. Students are expected to do more than memorize steps and procedures; they are asked to develop a rigorous understanding of mathematical ideas, compute with fluency, and appreciate the breadth and depth of mathematics.

Number and Operations

Whole Numbers: Students extend their knowledge of the base-ten number system to 100,000. They use models, representations, and story contexts to help them understand and solve multiplication and division problems. Students refine and compare strategies for solving 3-4 digit addition and subtraction problems and 2- to 4-digit multiplication and division problems.

Fractions and Decimals: Teachers work to build students' understanding of the meaning, order, and equivalencies of fractions and decimals. Children work with fractions in the context of an area model and on a number line. Students are introduced to decimals and fractions as an extension of the place value system. They reason about fraction comparisons and use representations and reasoning to add and subtract fractions and decimals.

Geometry

Fourth graders consider the attributes of 2-D shapes, such as the number of sides, the length of sides, parallel sides,

and the size of angles with and without a protractor. They categorize shapes by singular and overlapping attributes and identify lines of symmetry in polygons.

Measurement

Measurement work includes linear measurement (with both US standard and metric units), area, and angle measurement.

Patterns and Algebraic Thinking

Students solve problems by using patterns and generalizations to create equivalent expressions. They utilize their knowledge of the commutative and distributive properties to create strategies for multiplication and division. Students represent and solve multi-step problems involving more than one operation. They are encouraged to provide arguments, explaining how they know a given statement is true.

Data Analysis

Students collect, represent, describe, and interpret data. They also learn to summarize and compare data, develop conclusions, and make arguments based on collected evidence.

SCIENCE

The science curriculum in Grade 4 is organized around a series of real-world investigations that encourage students to explore and understand ecological processes in their local environment. Students begin the year with setting up outdoor study stations to collect ecological data which will inform their creation of a food web from species found in the schoolyard. In the late fall, students learn about microbes as decomposers and conduct controlled experiments that will yield compost rich in the nutrients necessary for experimenting with plant growth in the spring. The year concludes with a study of the health of the local watershed in which students become citizen scientists by raising Blanding's turtles, a species in decline in Massachusetts, in the classroom throughout the spring term and return them to their natal pond to boost their populations in the wild.

Throughout the year, students are at the center of their learning, working together to solve problems, make decisions, and organize their work. As students ask each other questions such as, "How can we figure that out?" "What does the evidence say?", they not only build scientific understanding, but also an

awareness of their own growth as inquirers. An emphasis is placed on students becoming creative, self-confident thinkers with the ability to put scientific knowledge and skills into action.

In the spring, fourth graders are introduced to the Growth Education curriculum with a unit on puberty. The unit, which covers nutrition, stress, body changes, and emotional and social issues, helps prepare nine-and ten-year old students for the processes and changes that their bodies are about to experience.

Grade 4 science classes meet twice per week in one 40-minute session and one 75-minute session.

SOCIAL STUDIES

Fourth graders extend their understanding of history, geography, and civics by studying ancient Greece for the majority of the year. Areas of study include geography, mythology, art, archaeology, history, government, and culture, with emphasis on fifth-century Athens. Major projects include researching and role-playing Greek gods and goddesses, studying Greek vases and archaeology, and reenacting the Olympic games. A field trip to the Museum of Fine Arts provides opportunities to explore the richness of Greek art and culture.

Students continue developing the skills of questioning, making connections and inferences, synthesizing, comparing and contrasting, and developing a historical perspective through the study of ancient Greece. Fourth graders extend their research skills by doing more sophisticated outlining and note-taking, as well as writing an informational book about a chosen topic. In addition, Greek studies time is rich with opportunities for collaboration. For example, teams of students spend several classes in the makerspace designing solutions to age old problems such as transporting goods and building monumental structures. The year culminates in an interactive “living museum” where students teach visitors about their research topic through the perspective of a person from ancient Greece.

ART

Students in Grade 4 develop their ability to imagine, to be creative, and to express ideas with different art materials. Using paint, clay, and wood, students delve into an exploration of color, detail, and shape. Integrating art experiences with social studies curricular content, students create a clay sculpture of a Greek god or goddess. Teachers encourage each student to take pride in his or her artwork.

Over the course of the year, students rotate through three distinct art studios. Each meets for 40-minute classes twice per week.

Studio I

Fourth graders examine montage through the creation of large-scale multimedia mythological creatures. Drawing on their classroom study of Greek mythology, students experiment with deconstructing mythological creatures as the inspiration for developing their own unique creature. They break their creature into three distinct parts, juxtaposing different mediums to create each section.

Studio II

Inspired by their study of ancient Greece, students create and embellish a large vase of their own design.

Studio III

Students use wood to create projects with a sense of whimsy. They begin their time in the wood shop crafting oversized wooden nuts and bolts, and they finish the term constructing ridiculously oversized clothespins that measure 11 inches in length. Students learn the importance of careful measuring and marking, and they gain hands-on experience using various hand tools, including miter saws, Japanese-style pull saws, a brace and bit, block planes, a tap and die, and sanding blocks. Fourth graders explore techniques and practice how to choose the right tool for each task while broadening their woodworking skills.

MUSIC

In Grade 4, the music program provides an opportunity for all students to become actively involved in four basic areas of musical experience: creating, performing, listening, and history. Music is taught through singing, instrument playing and movement activities. Students are introduced to a wide range of songs covering various genres and conversational solfege is used to support musical literacy instruction. These activities emphasize an awareness of melody, harmony, rhythm, timbre, and form. Attention is given to the historical, cultural, and social context of the music. General music instruction at Park is aligned with the National Association for Music Education standards.

Park's music program helps to foster creativity and self-expression, while developing the student's music skills. Performances and informances are used as learning tools and are opportunities for students to demonstrate what they are learning in music class.

Classes meet two times per week in 40-minute sessions.

PHYSICAL EDUCATION

In Grade 4 the Physical Education program aims to provide an opportunity for each student to explore the world of movement. Students practice basic sports skills, work toward proficiency in a variety of team and individual sports, experience a variety of dance styles, and develop an appreciation for the importance of physical fitness.

The fourth grade program introduces team games with an emphasis on the development and extension of fundamental and specialized skills, the application of those skills, decision-making, and sport activities. Students begin to focus more on rules, strategy, decision-making, team play, sportsmanship, and the enjoyment of working with others toward a common goal.

A highlight of the year is the Olympic Day track & field meet, which enhances and brings to life the study of ancient Greece.

Classes meet three times per week in 40-minute sessions.

LIBRARY

Students visit the library once each week on a regular schedule and are encouraged to use the library more frequently to explore individual interests and borrow books. In library classes, students continue to develop their individual reading tastes and share reading recommendations, while being encouraged to explore a variety of literary genres. They enjoy book talks and participate in reading incentives, such as the Massachusetts Children's Book Award. Author/illustrator visits remain an important component of the library curriculum.

Grade 5 students continue to practice selecting and curating print and digital materials. They expand their information seeking and critical thinking skills as they undertake research projects in collaboration with grade-level curriculum. Games and activities further reinforce their understanding of how information is organized. The grade's one-to-one Chromebook program extends into the library curriculum. Through the study of citation and copyright, students learn to evaluate and appropriately engage with online resources, including databases, curated websites, and ebooks. Students are encouraged to create and share their ideas and understanding through a variety of multimedia formats.