

WARDLAW + HARTRIDGE

**LOWER SCHOOL
CURRICULUM GUIDE**



The Wardlaw+Hartridge School

Mission Statement

The Wardlaw+Hartridge School prepares students to lead and succeed in a world of global interconnection. We provide an educational atmosphere characterized by academic challenge, rigorous inquiry, support for individual excellence, diversity, and a familial sense of community.

Core Values

The core values of the Wardlaw-Hartridge school community are:

- Integrity – our bedrock value, sine qua non.
- Opportunity – Wardlaw+Hartridge develops academic and intellectual excellence in its students through programs that stretch their creative imaginations, develop their athletic and artistic skills, engage their sense of discovery, and develop a social conscience. In the process, students take on leadership roles and learn how to work effectively in teams.
- Support – Every member of the Wardlaw+Hartridge faculty believes in a personal approach to educating and developing the whole child. Wardlaw+Hartridge educators take the time, care, and interest in each student to call forth his or her best work.
- Diversity – The diversity of thought, background, and culture at Wardlaw+Hartridge distinguishes us among independent schools, strengthens the global orientation of our curriculum, and enriches the daily experience of every member of the school community, inside and outside the classroom.
- Community – When faculty members, students, parents, or graduates walk through the doors of Wardlaw+Hartridge, they have entered a home. Our community is distinguished by an ethos of care and mutual respect, and a strong partnership with families.
- Sustainability – Wardlaw+Hartridge prepares students to become citizens whose beliefs and actions will create a more humane and sustainable global society.

Academic Overview

In the Wardlaw+Hartridge Lower School the primary aim is to provide a nurturing environment in which children develop an awareness of themselves as responsible, capable learners; a respect for others and themselves; and an appreciation for their own and their classmates' talents. As they progress through our Lower School, the children retain their natural excitement about learning and are stimulated to discover and develop their strengths.

Learning in Prekindergarten through fifth grade takes place in small, self-contained classes. The classroom teachers provide a challenging academic program that includes language arts, math, social studies, science, and skill development. Textbooks, trade books, cooperative hands-on activities, manipulatives, appropriate and technologies including internet research, videos, and reinforcement of skills, help children investigate various types of learning. The faculty, at each grade level, work with each other to develop units of instruction, special projects, activities, and trips to stimulate intellectual curiosity and critical thinking. iPads, BenQ Boards and Promethium Boards are used in the classroom to support the curriculum.

Children attend special subject area classes taught by faculty who are professionally trained for that specific discipline. These special subject areas include music, art, physical education, library, STEM and Spanish. Instrumental music begins in fourth grade. Children in all grades are given the opportunity to participate in a wide variety of sports and activities throughout the year. Each special subject teacher has designed a curriculum developmentally appropriate to each grade level. This curriculum often complements the classroom curriculum.

All children, Prekindergarten through fifth grade, perform in the two yearly music concerts and several less formal music presentations, as well as participating in assemblies, Field Day, and presenting a spring art show. Beginning in third grade, students take part in our speech curriculum to encourage verbal skills and instill self-confidence and poise while providing a focus for a research project. Students move up to Middle School with a solid knowledge and skill base, are confident in their abilities, value learning, and respect one another.

Early Childhood Program Overview

The Early Childhood, Prekindergarten, Junior Kindergarten and Kindergarten curricula provide a variety of multi-sensory experiences and activities to enhance each child's ability to learn. The curricula contain a wide range of experiences that enable children to develop gross and fine motor skills and expand verbal skills in order to communicate thoughts and feelings effectively and appropriately to both adults and peers. The programs follow thematic, interactive approaches to learning through hands-on activities.

The classrooms are built around learning centers to enhance academic and social growth, exploration, and creativity. The centers are changed and supplemented throughout the year to reflect current units of study. The centers include sand and water tables, library, listening centers, blocks, science, Lego table, writing center, math, dramatic play, and art. Worktables provide a place for each child to do individual/group activities and to eat lunch and a daily snack. Class trips also make learning more meaningful.

Social/Emotional Experience

A warm, nurturing, and supportive environment provides the security each child needs to help form a positive attitude toward school and learning. Self-esteem and self-worth are viewed as being as essential as academic growth. Everyday opportunities are available for each child to make responsible choices, work and play independently and cooperatively, develop social problem solving skills, and build positive relationships with both peers and adults. Respect for the classroom and one another are emphasized! Morning meeting is an integral part of our program and sets the tone for the school day.

Teachers assist the very young children in discovering their inner landscape of feelings. Children are encouraged to identify feelings and are taught how to appropriately express them. In support of their emotional development, children learn how to separate from parents, follow routines and procedures, to take turns, develop independent self care skills, and listen to others to gain and share information. As this development evolves, children are better able to cope with disappointments and mistakes in an appropriate manner, as well as demonstrate pride, self-confidence, and independence.

Pre-Kindergarten

Physical Development

Fine motor coordination is encouraged through a variety of activities including scribbling, drawing, coloring, cutting and gluing, lacing, building with blocks, and puzzles. To support gross motor coordination children are encouraged to participate in running, jumping, climbing, balancing, throwing and catching, and dancing experiences. Children attend physical education sessions daily with specialist teachers.

Language Arts

Children are encouraged to develop a secure foundation in letter and sound recognition through multisensory activities and experiences including books, rhymes, and songs. Daily “read alouds” help to foster an early appreciation for literature and a love of reading. Ipads and BenQboard tools are used to enhance our integrated curriculum. Props are sometimes used to support storytelling, and the children learn to recall the basic sequence of stories. Different ability levels are nurtured through small groups, and individual instruction always aims to meet the needs of each child. Children are encouraged to be creative through a variety of media including drawing, painting, dramatic play, building blocks, and exploration of other materials. Class books are often created and shared both in the classroom and at home.

Mathematics

Children encounter and participate in mathematics every day in Prekindergarten as it is incorporated into Circle Time, as well as many other daily activities. The children are taught about counting, including one-to-one correspondence and number recognition. They also learn about shapes, sets, more/less, sequence sizing, patterning, simple charts and early addition and subtraction. A variety of different hands-on materials are used including small manipulatives such as blocks and counters. Many games are played that involve mathematics and these provide excellent learning opportunities that are fun and developmentally appropriate.

Science

Children learn responsibility for nature while studying their environment, learning to classify similarities and identify differences through developmentally appropriate experiences. Children are encouraged to observe, ask questions and learn to make connections. They also learn some basic scientific principles such as prediction. The children participate in a variety of hands-on experiments and projects throughout the year including growing plants and raising ladybugs. STEM activities are integrated into the curriculum.

Social Studies

Children learn about their school, families, homes and community helpers, and the importance of supporting and encouraging one another. Children also learn about different cultures by celebrating their holidays.

Junior Kindergarten

Physical Development

Our Early Childhood Program encourages age-appropriate motor development. Fine motor coordination occurs when coloring, cutting, scribbling, drawing pictures, painting, pasting, lacing, building with blocks, working puzzles, folding paper, and making vertical, horizontal and circular lines. Large motor coordination is developed through running, jumping, climbing, balancing, throwing and catching, and dancing experiences.

Language Arts

Reading and writing are presented in integrated and meaningful activities that center on themes, and the skills are reinforced in play areas. Children develop a rich background in letter and sound recognition through multisensory experiences, literary centers and daily “read alouds.” Different levels of ability are nurtured through small group or individual instruction. Children are often involved in retelling stories with the BenQboards, Smart Boards, puppetry or dramatics.

Children are encouraged to express themselves creatively through drawings and/or invented spelling. They are involved in creating many original class books that are circulated at home. Use of “Big Books” as well as authentic literature helps ensure a love of reading.

Mathematics

Children are exposed to mathematics every day in the classroom. During circle time activities, they learn the days of the week and months of the year. Counting, identifying numbers, patterning, graphing, ten frames, beginning addition and subtraction and recognizing sets of more/less are also incorporated into circle time. Math concepts are also taught through small and large group instruction. Centers are used to help reinforce one-to one correspondence and shapes. Manipulative materials are used to help students internalize concepts of sorting, counting, patterning, addition, and subtraction.

Science

In Junior Kindergarten, children are exposed to science through related themes with age appropriate experiences. Scientific themes such as plants, insects, and the five senses are integrated with the Language Arts and Math curricula. Children learn responsibility for nature while studying their environment and learning to classify similarities and differences. Children are encouraged to make observations and learn various scientific methods. STEM activities are integrated into the curriculum.

Social Studies

Throughout the year students are taught to respect their peers and to appreciate the world around them. Children learn about their school, families, homes, and community helpers. They are encouraged to share ideas and to listen to others. This investigation fosters self-awareness, similarities and difference of cultures and peers, positive self-image, and socialization skills.

Kindergarten

Language Arts

Language arts are integrated into all themes and disciplines within the Kindergarten curriculum. The program builds upon phonics and language skills introduced in Prekindergarten and Junior Kindergarten. Children are exposed to daily stories based on classroom themes. Poetry and rhymes are used for practice and instruction in decoding skills. Letter sounds are reinforced through journal writing, reading books, and our phonics program, as well as writing centers, which give students the opportunity to write independently. In their writing, students use illustrations, inventive spelling, sight words, and high frequency words from their reading program. The Kindergarten language arts curriculum lays the foundation necessary to develop confident readers and writers.

Mathematics

The mathematics curriculum for Kindergarten this school year includes Singapore Math and is an extension of those concepts that have already been introduced in Prekindergarten and Junior Kindergarten. Students are exposed to mathematics every day as a building block for those more advanced concepts taught in first grade. Students count, write and recognize numbers to 100, as well as counting to 100 by 5's and 10's. Sorting/Classifying, patterning, estimation, simple addition and subtraction, geometry, 2D and 3D shapes, fractions, measurement, addition and subtraction stories, are introduced and developed. Each new concept is taught with an active hands-on approach, using a variety of manipulatives. Students work as a whole class, as well as individually, in pairs, and in small inventive groups.

Social Studies

Throughout the year, children are taught to appreciate their peers and the world around them. They begin to develop an awareness and appreciation of the many similarities and differences in and among people, cultures, and perspectives. They learn to listen to the ideas and thoughts of others and are encouraged to verbalize their own feelings, thoughts, and emotions. Children are encouraged to ask questions and make comparisons between what they know and feel comfortable with, and what is new and may be foreign to them. Social studies is often integrated with the language arts, math, and science curricula.

Science

Many themes in the Kindergarten curriculum are scientific in nature. Themes such as harvesting and weather are seasonal and draw upon the child's natural environment. Other themes include bats/nocturnal animals, the rainforest, planting, flowers, bugs, dinosaurs, Arctic animals, pumpkins, seasons, nutrition,

hibernation and Earth Day. Building upon the skills introduced in Prekindergarten and Junior Kindergarten, science centers, experiments, field trips, and nature walks provide students with hands-on opportunities for discovery, curiosity, hypothesizing, and making educated conclusions based upon personal experiences. STEM activities are integrated into the curriculum.

First Grade Overview

The first grade program continues the varied interactive experiences offered in Kindergarten. At the same time, it serves as a transitional time as children become more responsible and independent.

The literature-based curriculum extends to include an array of specific reading strategies. Children are involved in flexible grouping during formal reading instruction and literacy centers. Students have daily opportunities to interact with phonetically controlled text as well as authentic literature. Phonics is taught through both direct instruction and reading experiences. The day offers many opportunities to write in a variety of ways, whether through journals or assigned topics. Inventive spelling continues to be valued as a natural process toward standard spelling. Both formal and informal assessments are used throughout the year to assess students in language arts.

Students are able to explore math and science concepts through partner and small group activities where they further develop their capacity to work cooperatively in a classroom setting. Discussion and feedback about topics being taught occur on a daily basis. Children are also able to interact socially through daily recess.

First Grade

Language Arts

The first grade language arts curriculum is diverse and challenging, centering on the developmental level of the child. The acquisition of reading skills is focused on leading the child to be a lifelong reader. Reading, writing, and the tools necessary for the interpretation and analysis of literature are developed in a manner that is affirming as well as ambitious.

A combination of trade books, phonetically controlled readers, and authentic literature at the child's reading level are at the core of reading instruction. Children develop a love of literature and reading while learning, using, and mastering the basic skills for reading. In addition, spelling, phonics, vocabulary growth, and handwriting are woven into the general context of the language arts curriculum. Writing activities are an integral part of classroom activities. Students keep journals to record important happenings, to retell classic stories, and to create stories of their own while embracing all the tools of the language arts areas presented to them. Each child produces at least two pieces of his/her writing to develop, edit, and publish. Children learn to proofread alone and with partners.

Mathematics

The mathematics curriculum for first grade emphasizes understanding concepts and building basic computational skills. Math in focus and the Singapore Math program is used in first grade. Extensive use of manipulatives and modeling eases the transition from the concrete to the abstract. The students write and solve problems throughout the year, focusing on the gradual process of concept development. Children work individually, in groups, or as an entire class depending on the scope of the materials and the depth of difficulty.

Basic math facts of addition and subtraction with and without regrouping are taught and reinforced. Time and money, measurement, patterning, symmetry, word problems, place value, mental math strategies, part whole relationships/number and ordering numbers, number bonds and geometry, are introduced and developed.

Social Studies

Social Studies is integrated into blocks of language arts time. The year begins by building upon social study skills learned in Kindergarten as well as exploring the topics of family and community. Throughout the year, literature is chosen to represent cultural diversity. Families are often invited to share their special traditions or heritage in some way. Opportunities exist to learn about geography and the world through the use of literature, maps, iPads, BenQboards and Smart Boards.

Holidays, famous people, and events are studied as they naturally occur within the context of the school year. Gaining a basic knowledge of the United States is also integrated throughout the program. An overall emphasis on kindness, not only in the classroom but also in the world around us, is stressed through daily discussions and community service.

Science

The science curriculum explores topics such as weather, animals and the habitats in which they live, magnets, healthy living, gardening and environmental sustainability as well as differences between living things and the non-living. Students study animals by looking at their body coverings, the way they move, their means of protection, the food they eat, and their young. Students keep an ongoing journal throughout the year where they make observations, record data, and draw conclusions. STEM activities are integrated into the curriculum.

Second Grade Overview

The second grade curriculum begins by refining the basic skills taught in first grade. A strong emphasis is placed on integrating math, science, social studies, and language arts as new skills are introduced.

Students learn to present information which helps foster self-confidence in speaking before an audience. Cursive writing is introduced and is incorporated in all aspects of written language.

Students respond best by being engaged in their learning. Therefore, field trips and other types of hands-on activities are encouraged. These trips vary from year to year as they are chosen to relate directly to the curriculum.

Second Grade

Language Arts

The language arts curriculum further develops skills in reading, comprehension, vocabulary, writing, phonics, spelling, and listening. Public speaking is also introduced. Chapter books and series books ground children in phonics and the foundations of reading. Literary genres including folk tales, fables, biographies, mysteries, fiction, non-fiction and poetry are explored. Once a month, children are expected to read, write, and orally present a literary activity based on a literary genre.

The phonics program includes sound-symbol association, decoding, sound blending, and dictation. Syllabication rules are introduced. Spelling is developed through individual writing, free writing, dictation, and selected word lists. Various types of writing are explored, emphasizing creative writing in stories, poetry, and reports. Formal instruction in the use of the dictionary and thesaurus as tools for writing is presented.

Mathematics

Addition and subtraction facts to 20 are reviewed and mastered. Addition and subtraction with regrouping is refined, using the number line, fractions, money, telling time, geometry, graphing, and measurement skills are reviewed and expanded. The concept of multiplication is introduced.

Critical thinking skills are developed through the use of mental math and deductive problem solving. Developing and sharing strategies for problem solving is an extremely important component of the curriculum. Students use math journals to write out math problems and how they arrive at solutions. Manipulative materials

and calculators as tools for problem solving are used extensively to help children internalize concepts.

Social Studies

In second grade, students compare and contrast their own communities with other communities in the United States, and in other parts of the world. Children learn to interpret maps and globes and use atlases. Students are taught the relationships between geographical location and the life of the people in that location and are introduced to the ways people meet the basic needs of food, clothing, and shelter that we all share.

Scholastic News is used to develop an understanding of events in the global society as they relate to and affect our own communities.

Science

The science curriculum encourages collaborative, student-centered learning. The students study germs, both good and bad. Many hands-on activities are included in this unit. A unit on solids, liquids and gases in which students learn the changing nature of matter completes the year. STEM activities are integrated into the curriculum.

Third Grade Overview

The third grade is a transitional year academically, socially, and emotionally. The children start as primary students and finish the year capable of thinking and functioning independently as they prepare to enter the intermediate level. Emphasis is placed on developing conceptual thinking, organizational skills, and personal responsibility.

The curriculum integrates language arts, math, science, and social studies so that children learn easily, making connections through experiential and exploratory methods. Technology is used in all subject areas to extend and illuminate concepts. Trips are planned to enhance classroom learning. Skills that were taught in previous years are expanded upon and new skills are introduced and developed. Throughout the year, children grow in their ability to express themselves in both oral and written form. The culminating experience is a researched, written, and memorized speech that is formally presented to the class and parents.

Third Grade

Language Arts

Third grade continues to develop reading skills through a variety of materials including anthologies, trade books, and nonfiction resources. Both assigned texts and student choice are equally important options. Reading is seamlessly integrated into every area of the curriculum. The reading program integrates a variety of experiences including being read to daily, reading independently, with a partner, and collectively aloud as a community. Being a confident, fluent, and enthusiastic reader of a variety of texts is paramount.

Emphasis is on reading for main idea and details. A number of reading strategies are practiced throughout the year to increase comprehension. Students continue to expand their vocabulary. Phonic skills further develop through formal spelling and writing exercises. Cursive writing is reviewed and practiced. Basic rules of grammar, punctuation, capitalization, and spelling are systematically taught. Both creative and expository writing is offered as a valuable way to integrate and practice skills taught in isolation. Journal writing records important events in a student's home and school life.

In the last trimester, students are introduced to the speech program. This writing process further develops research, writing, and oral presentation skills. It is a true culmination of their year's efforts. Each student's memorized speech is ultimately presented to an audience of classmates and parents.

Mathematics

Critical thinking and problem solving are essential components of the third grade math program. Students are encouraged to find relevant facts and use a variety of strategies to solve for the unknown. Manipulatives, drawings, and bar models are just a few of the techniques employed. Students are challenged to solve multiple-step problems and effectively explain their solutions both orally and in writing.

Students are expected to have mastered addition and subtraction facts upon entering third grade, so as to be able to move on to more complex problems requiring regrouping. Multiplication and division facts are emphasized and expanded into two- and three-digit examples. Basic strategies for mental math computation are emphasized and students develop speed and accuracy with all operations. Third graders add to their knowledge of time, money, and place value. They explore the relationship between whole numbers and fractions.

Recognition of possible outcomes and their expression as fractions is studied in a unit on probability. Knowledge of customary measurement is expanded. In geometry, students identify and analyze properties of two and three-dimensional figures. Throughout the year students read, construct, and interpret data in a variety of graphic displays.

Social Studies

Throughout the year, the students learn to interpret and apply knowledge of maps and globes. They focus in detail on the geography of the United States. Reference skills are developed and used in a comparative study of Native Americans, an in-depth state report, and an oral presentation on a famous American. Children discover how the nation has evolved into the United States of today. Literature, film, and field trips provide additional enrichment.

Science

Third grade science encompasses both earth science and physical science, often with integrated curricular units. Earth science is taught with an in-depth study of the earth, its resources, forces, and composition. Physical science is taught through STEM. Students develop the ability to think critically using science process skills. They develop science vocabulary and the confidence to make astute observations and record them carefully. They regularly interpret tables and graphs, distinguish between fact and opinion, and determine cause and effect. Continuing to develop a respect and interest for science and its ever-changing impact on our world continues to be cultivated.

Fourth Grade Overview

Fourth grade, the second level of the intermediate grades, is a year of significant growth for students as they emerge from the primary grades. During the year, students are encouraged to develop more responsibility for themselves both academically and socially. Developing organizational and study skills is an integral part of the fourth grade. Trips and guest speakers are an essential part of the fourth grade program. Topics related to global environmental issues are presented through a variety of current sources. Technology is used throughout the curriculum to extend and illuminate concepts.

Fourth Grade

Language Arts

Developing both written and oral language expression is emphasized. Skills in writing are reinforced through expository and creative assignments. Interesting, complete sentences with correct grammar, spelling, and punctuation are expected in all subject areas.

Students are expected to participate in class discussions and make oral presentations throughout the year. This serves to develop both listening and speaking skills and promote confidence in expressing personal viewpoints.

The speech program builds upon skills introduced in third grade. Teachers guide students through the stages of research of a particular topic related to the study of New Jersey: using a variety of sources, organizing the information, creating a works cited listing, and writing a formal report on their chosen topic. Students then focus on public speaking skills as they memorize this report and present it as a formal speech to an audience of classmates and parents.

In the area of reading, skills introduced in previous grades are reinforced as needed and further developed. While students still learn to read, the fourth grade concentrates on reading to learn. Both non-fiction and fiction books serve to develop vocabulary and understanding of new concepts. Using a variety of genres helps to develop an appreciation of literature. Reading, especially in the content areas, focuses on comprehension and developing skills in finding the main idea, sequencing, recognizing fact and opinion, making inferences, and determining cause and effect.

Mathematics

The fourth grade mathematics program reinforces and expands upon the four computation processes. The study of place value, expanded notation, and other number systems enhances students' understanding of our number system. Students

learn to round numbers and to facilitate the use of mental math. In geometry, students study plane and solid shapes; how to measure angles; and how to find perimeter, area, and volume. Students also study symmetry and congruence.

Some of the other topics covered are using money, fractions, decimal fractions, graphs, charts (collecting and using data), probability, and measurement. Learning to use a calculator in appropriate situations is encouraged. Math manipulatives, projects, and group activities are an integral part of the program. Students are expected to be able to explain how they arrive at their solutions both orally and in writing. Essential to the entire math program is the ability to use math in everyday life and to become a creative problem solver.

Social Studies

The fourth grade social studies curriculum focuses on the study of the state of New Jersey to provide a factual basis for developing skills in geography and history. Students learn to interpret and apply knowledge of maps, globes, and other graphic materials, as well as create their own visual aids. They also learn to use reference materials, Internet sources, and apply study skills. As a culminating project, students write a research paper on a New Jersey topic, which they then present as a formal, memorized speech.

Science

One goal of the fourth grade science program is to stimulate students' awareness of how science is an integral part of their lives. Though the curriculum covers certain set topics, current science happenings are incorporated into the daily program. Another goal is for students to develop an awareness of the importance of preserving the environment. STEM activities are integrated into the curriculum.

Topics regularly presented are intended to emphasize the inter-relationship between plants and animals. One topic of study is seed plants, concentrating on their structure, their natural environment, and their place in the food chain. Photosynthesis is also discussed. Other topics include vertebrates and invertebrates, both cold-blooded and warm-blooded species. Students discuss their physical traits, habitats, and life cycles.

In conjunction with the study of New Jersey, weather phenomena and climatic regions throughout the world are incorporated into our studies.

Fifth Grade Overview

As fifth graders assume their roles as leaders of the Lower School, they are expected to set a good example for the younger students. Whether organizing community service activities, or working as buddies with younger students, they learn the importance of service to the school, the community, and the world.

Organization, time management, and study skills are emphasized in preparing the students to become more independent learners. There is increased accountability for demonstrating knowledge through a wide variety of authentic and traditional assessments. Technology is incorporated into activities as fifth graders are each provided with an iPad and a school secure Google account for daily use. Fifth graders are expected to further develop self-discipline and self-reliance to facilitate the transition to the Middle School.

The culmination of the fifth grade experience are the Capstone research presentations. Capstone is a year-long research endeavor that includes exploring, researching, writing a thesis and creating a presentation to answer a question about a global topic.

Fifth Grade

Language Arts

The fifth grade language arts program incorporates reading, grammar, vocabulary development, and study skills. These skills are applied across the curriculum on a daily basis.

Students read a variety of literary selections, which may include fantasy, realistic fiction, Greek mythology, historical fiction, and non-fiction selections. Critical thinking skills such as finding main ideas, making inferences, drawing conclusions, and analyzing characters are emphasized.

As students develop an understanding and appreciation of grammatical structure, they become competent, fluent users of language. Rules for correct grammar usage are incorporated into writing activities. The steps of the writing process are applied to pieces such as personal narratives, fictional stories, and a wide variety of expository and persuasive compositions.

Research, writing, and presentation skills are honed as the students work collaboratively and independently on their 5th Grade Capstone presentations.

Mathematics

The fifth grade mathematics curriculum builds on the foundation learned in earlier grades. It is designed to develop critical thinking skills, computational competence, and cooperative learning. Estimation techniques and real life applications are emphasized. By linking reading and writing to math, students become more adept at understanding word problems. Through exposure to a variety of problem-solving techniques, students learn what will work in everyday life.

Both fundamentals and operations of fractions will be reinforced in greater depth, which will allow students to transition to uses of percents and probability. Basics of geometry and pre-algebra will also be introduced.

Social Studies

The fifth grade social studies program offers students an abundance of information in geography, history, culture, government, and economics to stimulate young minds. It encompasses an in-depth study of three ancient civilizations: Egypt, Greece, and Rome.

The fundamental components of a civilization are presented, followed by an introduction to the regions of the world where the ancient civilizations of Egypt, Greece, and Rome were first developed. The environmental influence on the growth of these civilizations is examined, and the need for a system of government is emphasized. Students are encouraged to compare and contrast the traditions and customs of these ancient communities with their modern way of life.

Whenever possible, social studies is integrated into other academic disciplines, such as creative and expository writing, literature, art, and math. Technology is incorporated into activities, when appropriate, on a regular basis.

Study and research skills are taught throughout the year. Note taking, outlining, and essay writing are incorporated throughout the program. A textbook is used to introduce basic concepts. Projects, digital materials, technology, and field trips enhance the program. Daily discussions and cooperative hands-on activities reinforce concepts and skills.

Science

The fifth grade science program is designed to foster curiosity, wonder, and excitement about our world, while at the same time building on previously learned concepts and linking new knowledge to students' experiences. Units of study are based on topics selected from earth science and environmental issues. Skills such as observing, gathering data, classifying, predicting outcomes, interpreting data, and

drawing conclusions are developed through inquiry-based hands-on cooperative learning activities.

Field trips, magazines, and technology are used to supplement and emphasize the relationships between science content and real life. Students are encouraged to apply concepts to current events and relevant world issues. Science is integrated with other subject areas through the use of literature, art activities, and expository and creative writing. Fifth grade topics include ecosystems, biomes, plate tectonics, rocks and minerals, Earth's surfaces and resources. STEM activities are integrated into the curriculum.

Special Programs

Visual Arts

Creating art is a natural occurrence in childhood, an activity that children discover and pursue quite independently. At Wardlaw+Hartridge, this creative impulse is encouraged and guided by providing an inviting, challenging, and stimulating environment.

From Pre-Kindergarten through fifth grade, the art curriculum builds continuously upon previously learned skills. As children grow, they become more adept at handling a variety of media, such as tempera paints, watercolor, pastels, oil pastels, printmaking supplies, textiles, colored pencils, collage materials, ceramics, and other three-dimensional materials. The art program encourages individuality and expression of ideas at each grade level while exploring the art materials.

Given the opportunity to express their ideas and explore the work of famous artists, students learn to understand and appreciate the artwork created by themselves, their peers, and a global array of artists. Children's literature, music and movement provide additional inspiration and reinforce new art concepts.

Technology has become an integral teaching tool in the art room along with an extensive collection of books. Video clips and slide presentations are used to show the works of famous artists, and to demonstrate a variety of techniques in a most efficient manner. Occasionally, iPads are used for learning digital drawing techniques, as well as photographing artworks.

Through a variety of activities, the children are encouraged to make decisions about their work and set high standards for themselves. They are taught the principles of design, perspective, proportion, and the aesthetics of art. By the time a child reaches the fifth grade, he or she has the tools necessary to set goals, select a strategy, determine how to apply it, and continually make assessments and revisions in order to create a personal statement in art. In the early grades the learning experience or process is often more important than the visual product. Hopefully, each child will feel a sense of accomplishment and enthusiasm when they are creating art. Student artwork is continuously displayed throughout the school, and each child is represented in the annual Lower School Art Show.

Technology

Wardlaw+Hartridge graduates students who are proficient in using technology in all its forms as a tool for life-long learning. In the Lower School, technology is integrated across the curriculum in all grades.

All classrooms, Pre-K through Grade Five, are equipped with Smart Boards BenQboards. All Lower School teachers receive extensive training on the use of the Smart Board BenQboards as well as in class support from the Technology Integrator. In addition, the Lower School has two mobile iPad carts, which each house a class set of iPads, and also two mobile laptop carts, which also each house a class set of laptop computers. The Lower School also has a computer lab, home to 18 desktop computers.

Students in grades Pre-Kindergarten through first grade participate primarily in the iPad program. Apps have been researched and matched to particular units of study. In Pre-Kindergarten and Junior Kindergarten, the students use apps to support developing letter, number, color, and shape recognition skills as well as beginning letter/number formation skills. Puzzle apps are used to facilitate emerging problem-solving skills. In addition, these students use apps to support units of study, including, but not limited to, the study of plants, insects, transportation, food, and the five senses.

Kindergarten and first grade students also use the iPads to support handwriting, math/problem solving skills, phonics, and our thematic units of study. The Kindergarteners enjoy apps that support the study of space, the rainforest, dinosaurs, and insects. The first grade classes incorporate the iPads into the creative writing curriculum; creating digital stories to share with home as well as digital postcards. First graders use apps to support math skills such as time, fractions, money, addition, and subtraction. The Google Earth app is an important part of the map skills unit.

Beginning in second grade, Wardlaw+Hartridge students begin using technology as a presentation tool. Using a multi-media organizer such as Glogster, the second graders learn to import graphics, backgrounds, video, images, and text. Second graders are also introduced to PowerPoint and, using a template, create a postcard about a virtual visit to China. Zooburst, a 3-D digital storytelling program, is used by the students to create an African folktale. The second graders also use iPads to support many areas of the curriculum such as science, geography and math skills, including, money, time, addition, subtraction, and fractions.

Formal Keyboarding instruction begins in third grade with the use of Type to Learn 4 and various internet keyboarding sites. While learning keyboarding, the third graders simultaneously learn how to open and format a Word document. Spacing, margins, font type and size, centering, numbering, and saving documents are just a few of the skills third graders master. The students continue with presentation tools such as Glogster and PowerPoint, which were introduced in second grade. They expand their knowledge of these programs by adding more content. Internet safety and learning about how to find reliable Internet research sources is also introduced in third grade.

Fourth grade students continue with formal keyboarding instruction with emphasis placed on increasing speed and accuracy. Fourth graders produce sophisticated PowerPoint presentations using sound, voice recording, color and text variety, as well as the import and manipulation of both images and video. Students are introduced to Excel in fourth grade as an organization tool. Students organize a list of famous New Jerseyans and also sort and organize a group of objects. Formulas and graphs are introduced. To continue the study of reliable online sources, fourth graders create a “pseudo” webpage about an animal. Students will then investigate ways to determine the reliability of a source and how to trace sources.

Fifth grade students integrate technology into all areas of study. Fifth graders produce multi-media presentations about ancient civilizations, use Excel to graph lab results in science, create web pages as a final activity on the study of Ancient Greece, and use Moodle to support and enrich classroom activities. Students in fifth grade advance their understanding of Excel through the use of the Microsoft Lemonade Stand project. Fifth graders are also introduced to programming using the MIT program, Scratch. Creating and changing characters that move, speak (in speech bubbles), changing backgrounds, and making characters appear/disappear in the desired order are some of the programming skills learned through Scratch. Students also work with photo editing and green screen photography/video.

Spanish

The Lower School Spanish program is geared toward children in Pre-Kindergarten through fifth grade. Students receive 30-80 minutes a week of exposure to the Spanish language and culture. Students are immersed in the language as they hear and speak Spanish for the majority of the class. By listening to the teacher speak the language and watching the teacher’s expressive movements, the students are able to understand conversations, directions and introductions to new concepts in Spanish. They are then encouraged and guided to respond in Spanish, which allows for an immersion experience.

Children in Pre-Kindergarten through second grade start their language acquisition in much the same way that they acquire their native tongue. Students learn Spanish through song, games, art, and movement in a way that is stimulating and enjoyable. In addition, students perform tasks and use their bodies to express what they hear. The use of Total Physical Response (TPR) strategies allows for a more natural acquisition of the Spanish language and helps young students to build and reinforce skills they are learning in English.

Third through fifth grade students have a greater degree of exposure to the Spanish language. During these years they learn commands, language structure, and they develop oral competencies through interactive and cooperative activities. Students are introduced to Spanish cultures through the study of thematic units where they compare and contrast their lives with those from different cultures. Meaningful

communication is emphasized through the vocabulary, grammar and conversations learned to discover the weather, typical foods and sights of Spanish speaking countries. As students enter the sixth grade, they are well prepared for the formal academic study of foreign languages to begin.

Health Education

The Lower School health education curriculum provides all students with the skills and knowledge that promote the importance of leading a healthy lifestyle and how responsible lifetime decision-making can contribute positively to their overall wellness. The program highlights key factors within the context of their physical, mental, emotional and social well-being. With a variety of health-related issues explored and discussed, the overall objective is to encourage each student's active participation in personal and community health, promote each individual's self-esteem, learn about and discuss responsible decision-making as it pertains to the individual student and provide current information on health issues. Students are encouraged to assess their attitudes and behavior patterns while understanding the impact their life choices have on the community and personal well-being.

From Pre-kindergarten through first grade, the individual classroom teacher teaches health and nutrition information. The formal education program begins in the second grade and is delivered by the health and physical education department through fifth grade. Classes focus on four specific curriculum units including wellness, alcohol, tobacco and other drugs, family life and community health skills. Specifically, fifth grade health education in the Lower School culminates with the pre-transitions program taught by the school counselor. It is a program focused on healthy behaviors and lifestyle choices. Additionally, fifth grade students participate in the "Growing Up" sessions from the "Always Changing" education program. This is conducted by the school nurse.

Physical Education

The Lower School physical education program provides an extensive curriculum in which sports, games, dance and creative movement are explored in developmentally appropriate activities. Students gain a well-rounded physical education experience, and through daily participation, understand the importance of exercise as a healthy and regular routine. In physical education class, students are given the opportunity to learn appropriate social behaviors as they work individually and in small and large co-educational groups. They learn to encourage one another, allowing them to become more comfortable with their abilities and to appreciate the abilities of others through sportsmanship.

At the youngest ages, the development of fine and gross motor skills tasks is emphasized along with a specific focus on overall health and wellness skills. By the end of fifth grade, teamwork and game rules have been introduced. Exposure to a

wide variety of global sports such as cricket, specialized dance, water polo, aquatic, (second through fifth grades) and global pastimes, complement our more traditional sports of basketball, soccer, tennis, baseball, softball, and volleyball. Specialized units for fourth and fifth grade include archery and 21st century approaches to fitness training and conditioning. Students in fifth grade have daily physical education and are also eligible to participate in specific seasonal sports in the Middle School Athletics program. It is the goal of the program to provide students with the tools necessary to make healthy decisions about exercise and future athletic and recreational activities.

Library

The Lee Hill Snowden Information Center is physically and academically at the center of The Wardlaw+Hartridge School. The library operates to inspire all students to explore new ideas, utilizing a vast array of print, audio-visual, and computer materials. The library houses over 23,000 print volumes, more than 250 audio-visual materials, and more than 35 periodical titles.

The library serves students every day of the school year. Students in Pre-Kindergarten through fifth grade visit the library once a week for scheduled library classes and/or book exchanges. Students develop an appreciation of and love for reading through exposure to a variety of literature during shared story time readings, book talks, and book-related activities. Pre-Kindergarten through second grade students learn about the parts of a book, the proper care of books, and basic library organization. Third and in a limited extent in fourth and fifth grade students receive additional instruction in utilizing our online public access catalog and reference sources, including encyclopedias, dictionaries, almanacs, atlases, and indexes in both print and computer format.

Research and investigative skills are strengthened as the students progress through the Middle and Upper Schools. Assignments that incorporate library resources are assigned by teachers in both the middle and upper divisions to coincide with specific curricular needs. Access to online periodical indexes and specialized Internet resources are stressed as students prepare required research papers.

Music Education

The nurturing of the child's enjoyment, responsiveness, and sensitivity to music is always at the core of the music curriculum.

The Pre-Kindergarten and Junior Kindergarten children discover a wide variety of musical styles and media through an activity-centered approach. Through the implementation of the First Steps in Music curriculum, students participate in vocal exploration, singing, expressive movement, beat keeping, and active listening

activities during every class. Lower School students develop a foundation for music literacy.

Students in Grades 2-5 begin to build music literacy through the use of the Conversational Solfege curriculum. Students internalize rhythmic and melodic elements before moving on to improvisation, reading, and composition. Students continue to internalize a steady beat and develop expressive music vocabulary through listening, performing and movement activities. Third graders participate in a unit of study on the recorder to help develop music reading skills. Fourth and fifth graders utilize the ukulele to deepen their melodic and rhythmic knowledge, focusing on proper technique. In the Spring, fifth grade students attend a trip to New York to see a Broadway show, which is connected to a unit of study on American Music Theater.

Music participation in its variety of forms (performer, listener, consumer) is important to each student's development and provides a unique way of knowing oneself and appreciating the world. The music curriculum is designed to give the student knowledge and skills as a basis for lifelong enjoyment.

In addition to vocal and general music instruction, students in fourth grade begin to take lessons on band instruments. In fourth grade, students are taught in like instrument groupings and perform unison and two-part melodies in the Spring Concert. In fifth grade, students meet in mixed instrument classes once a week to learn playing technique and strengthen music reading. Children in the Lower School experience music as vocalists, instrumentalists and listeners. The rich and diverse music curriculum provides the children with many opportunities to gain exposure to a unique and essential way of knowing themselves and appreciating and understanding different cultures from around the world skills. They also rehearse as a band once a week to build ensemble skills through learning beginner-level band literature.

Performance is an important part of the Lower School music experience. All students in Lower School participate in Chorus as well as in the Holiday and Spring Concerts. Additionally, the fourth grade band performs in the Spring Concert and the fifth grade band performs in both the Holiday and Spring Concerts. Other opportunities for performance include the Lower School Cabarets and other special themed music programs.

Athletics

At Wardlaw+Hartridge, we consider athletics an extension of the classroom and believe it is integral to the educational experience of our students. We strive to provide an environment that promotes achievement, fair play, integrity, sportsmanship, and overall health and fitness.

In the Lower School, students in the fifth grade are allowed to choose from a few select team sports in addition to the Physical Education requirement. The primary goal of the fifth grade athletics experience is development. It ensures ample opportunity for each individual to develop his or her skills. Each child may choose from the following sports: in the fall, coed cross country; in the winter, girls cheerleading or coed swimming; in the spring, coed track and field.

Other Lower School Programs

Extended Care Program

Wardlaw+Hartridge offers two extended care programs:

The before school program begins at 7:30 a.m. and is available to any child who needs to be dropped off at school early.

Encore, the after-school program for Grades 1-8, provides indoor and outdoor play, time to work on homework assignments, along with additional exciting club offerings. Encore operates from 3:00 p.m. - 6:30 p.m.

Explorers, the after-school program for Pre- Kindergarten through Kindergarten is a program designed especially for the younger children which includes crafts, story time, as well as indoor and outdoor play. Explorers operates from 2:45 p.m. – 5:00 p.m.

Both Encore and Explorers offer children a safe, comfortable, and engaging experience following school dismissal.