



GREENE HILL SCHOOL CURRICULUM GUIDE

LOWER SCHOOL + MIDDLE SCHOOL



Greene
Hill
School



CONTENTS

| | |
|--|----|
| PROGRESSIVE EDUCATION | 4 |
| CONSTRUCTIVISM | 8 |
| ASSESSMENT | 9 |
| WHAT MAKES US GHS? | 10 |
| SCHOOL WIDE PROGRAMS | 22 |
| Visual Arts | 23 |
| Drama | 23 |
| Music | 24 |
| Movement and Physical Education | 26 |
| Technology | 27 |
| LEARNING BEYOND THE CLASSROOM WALLS | 28 |
| LOWER SCHOOL ACADEMIC OVERVIEW | 31 |
| 4s – 7s | 32 |
| <i>Open Work</i> | 33 |
| Community Work (Social Studies and Science) | 35 |
| Essential Questions + Key Skills | 39 |
| Literacy | 41 |
| Essential Concepts | 45 |
| Math | 47 |
| Essential Concepts | 49 |

| | |
|---|----|
| 8s – 10S | |
| Academic Overview | 50 |
| <i>Open Work</i> | 51 |
| Social Studies | 53 |
| Essential Questions | 55 |
| Literacy | 57 |
| Essential Concepts | 59 |
| <i>Handwriting and Keyboarding Skills in the Lower School</i> | 60 |
| <i>Spelling and Grammar Skills in the Lower School</i> | 61 |
| Math | 63 |
| Essential Questions + Key Skills | 65 |
| Science | 67 |
| Essential Questions | 69 |
| Spanish | 70 |
| Health + Wellness | 71 |
| Transition from Lower School to Middle School | 71 |

| | |
|--|----|
| MIDDLE SCHOOL ACADEMIC OVERVIEW | 73 |
| Humanities | 75 |
| Essential Questions | 77 |
| Literacy | 79 |
| Essential Questions | 81 |
| Math | 83 |
| Essential Questions | 85 |
| Science | 87 |
| Essential Questions + Key Skills | 89 |
| Spanish | 90 |
| Essential Questions | 91 |
| Advisory | 92 |
| Independent Work | 92 |
| Health + Wellness | 92 |
| High School Preparation | 93 |

PROGRESSIVE EDUCATION



EDUCATION IS A PROCESS OF LIVING, NOT A PREPARATION FOR LIVING.

Progressive education is a movement dedicated to educating the whole child, with an emphasis on social justice. At Greene Hill School (GHS) we are guided by these meaningful principles every day. GHS works continually towards being an anti-racist institution and designs our curriculum and program to uphold the rich variety of lived experiences within our community and world.

In the 1900s, during the Progressive Era of reform, socially-minded activists and educational theorists aligned their theories of progressivism with those of earlier philosophers. Their beliefs about child development, such as the importance of active engagement and educating the whole person, have influenced the core principles of progressive education to this day.

For over 60 years, John Dewey (1859–1952) shaped progressive educational theory and practice. The Laboratory School in Chicago became a place for his research and observations and led to the writing of numerous articles and books. Dewey codified the way we think of progressive education today in books like “The School and Society” and “Democracy in Education.”

A GENERAL SUMMARY OF DEWEY’S PHILOSOPHY INCLUDES THE FOLLOWING TENETS:

Education is a process of living, not a preparation for living.

Curriculum should be based on children’s interests with some structure provided by adults.

The most meaningful experiences for children are ones rooted in their current stage of development and the scientific method.

School should prepare children to be fully participatory members of a democratic society.

School should be equally concerned with the intellectual, social, emotional, and physical needs of the child.

Progressive education has gone in and out of favor over the years, depending on the current cultural landscape. Educators throughout the world, and from many traditions, have practiced pedagogy in ways that we consider progressive; supporting students in building their intrinsic motivation, engaging in real world or active problem solving, caring for children’s emotional well being and complex identities, and connecting deeply with their families.

AT GREENE HILL, OUR INTERDISCIPLINARY CURRICULUM IS ORGANIZED AROUND YEARLONG THEMES THAT ARE DEVELOPMENTALLY APPROPRIATE AND INSPIRING.

| | | | |
|----------|---------------|-----------|-------------------------|
| 4S CLASS | SELF + OTHERS | 9S CLASS | LAW |
| 5S CLASS | GROWTH | 10S CLASS | CULTURE |
| 6S CLASS | COMMUNITY | 6TH GRADE | PERSPECTIVE |
| 7S CLASS | SYSTEMS | 7TH GRADE | POWER |
| 8S CLASS | MOVEMENT | 8TH GRADE | CITIZENSHIP + DEMOCRACY |



Saint 764



Riley 761



Kend 761



CONSTRUCTIVISM

Constructivism is at the heart of Greene Hill School's approach to teaching. It is the theory that all people construct their own knowledge, developing meaning and understanding through experience and reflection.

Based on the research of developmental psychologists and educational theorists like Jean Piaget, Lev Vygotsky, and Eleanor Duckworth, constructivist theory provides a strong framework through which teachers at Greene Hill understand how children learn and what their role is in supporting student learning. We see learning as an active, life-long process, through which people continuously build upon what they already know to refine ideas and create a more complex worldview. The constructivist classroom provides ample opportunities for posing questions, formulating and testing ideas through hands-on experience, and examining theories through rich discussion.

HERE ARE JUST A FEW EXAMPLES OF CONSTRUCTIVIST THEORY IN ACTION AT GREENE HILL SCHOOL:

At the onset of an immigration study, children interview relatives, family friends, and community members about their experiences coming to America. Through discussion and readings, they identify common themes in the immigration experience, and wonder together about the stories that stand outside those themes.

Students designing and testing catapults to gather data to help determine the algebraic equation of an arc.



ASSESSMENT

At Greene Hill School, the approach to assessment is consistent with our overall philosophy of teaching and learning. We consider the whole child, and we value the deep and ongoing relationship between teacher and student. Instead of using standardized testing, we consider assessment part of the authentic work that teachers and students do together every day. Through careful observation and dialog, analysis of children's work, and deep familiarity with nationally considered standards and benchmarks, teachers are closely attuned to their students' development. They use that knowledge to drive their teaching decisions, and to ensure that children are acquiring appropriate skills and understandings. In addition, regularly applied formal benchmark assessment tools for reading and math skills lend consistency and clarity to our understanding of students' academic development.

Parents participate in regular parent-teacher conferences and receive detailed narrative reports to provide clear communication about a child's academic progress. As part of GHS's commitment to assessing the whole child, students do not receive class grades until middle school. In seventh grade, students receive grades and participate in standardized testing as part of the high school admissions process.

WHAT MAKES US GREENE HILL?



AT GREENE HILL SCHOOL, WE VALUE:

- Open-ended exploration and collaboration with peers
- Both the academic and social emotional aspects of children's experience in school
- Each individual's identity

AT GREENE HILL SCHOOL, WE ARE COMMITTED TO:

- Inspiring children to love learning and to know themselves as learners
- Actively engaging in social justice and racial equity
- Cultivating a strong community where members learn from and give back to each other

THESE VALUES ARE LIVED EACH DAY AT GREENE HILL
THROUGH THE CORE PRACTICES DESCRIBED BELOW.

Open Work

WE VALUE OPEN-ENDED EXPLORATION

Open Work is a regular opportunity for children to engage in self-initiated work with a range of materials. Open Work is an important part of our academic program enabling students to exercise choice and take ownership over their work. As children make choices and decisions fueled by their most pressing interests it is easier for them to work through the challenges that come up during their explorations. Motivated by their passions or curiosity, children are eager to try and try again. This experience persevering through unfamiliar tasks helps them in other times throughout their school day as they tackle new problems.

Through extended experience with open-ended materials, children's work develops in complex and often surprising ways. They move fluidly between materials and activities, finding opportunities to work independently or with peers. Most importantly, children experience the satisfaction of making their own choices and following their own ideas. The explorations and creations of Open Work in the early childhood classrooms set the stage for continued self-initiated work throughout the Lower School, as children acquire the ability to manage more complicated projects.

Encouraged to share their ideas with classmates, they become increasingly comfortable giving and receiving feedback and reflecting on their own work.

Labs, mixed-age mini-courses focused on topics and interests like fashion design, insects, sculpture, and newspaper are available at various times of the year to children ages 5-10. These are teacher-led sessions that serve as models for children as they bring ideas and skills that they have learned in Labs back to their classrooms. Middle School students have the opportunity to select from a range of elective courses that are based on student and teacher interest such as: fiber arts, Running Club, and creative writing.

WOWs (Wide Open Work) are student-led mini-courses that give students the opportunity to develop an idea, decide how to teach it, and invite other students to participate. Students are responsible for planning their process and listing the materials they will need, as well as facilitating the sessions with other students. WOWs can focus on any topic or activity and younger or older students can be the leaders of the group. In recent years, WOWs have included DIY crafts, role-playing games, Earth Club, and basketball.



All-School Studies

Every year students and faculty at GHS embark on several All-School Studies that provide opportunities for mixed-age work and deep exploration of a topic that offers entry points for students of all ages. Students collaborate with cross-class peers and teachers to learn about and create work to share with the school community. An All-School Study often culminates in a week where the regular schedule is put aside to allow extended focus and time spent on this innovative and immersive learning, and ends with a share during which students perform or present their work to other students and GHS families.

Social and Emotional Learning

WE VALUE BOTH THE ACADEMIC AND SOCIAL EMOTIONAL ASPECTS OF CHILDREN'S EXPERIENCE IN SCHOOL

As part of our commitment to the whole child, at Greene Hill School teachers dedicate time to addressing the social and emotional needs of the children. In the younger grades, lessons are taught about friendship, fairness, and self-confidence. Teachers encourage and model sharing feelings and expressing one's needs in a productive way, and take into consideration the developmental needs and characteristics of all students. Read alouds, role play, and specific conflict resolution techniques are used to teach and practice these skills. Additionally, teachers are trained in the Responsive Classroom approach to classroom management, which includes empowering students to help create the expectations and norms in the classroom and set a positive tone for learning. Our Student Support Counselor works with parents, teachers, and students to navigate relationships, emotions, and family dynamics. Administrators and faculty run regular Community Forums and provide resources on issues impacting each developmental stage, such as transitions back to school, friendships, "twens," safe use of technology, and talking with children about difficult topics.

Social and Emotional Learning

Students' days in both Lower and Middle School are anchored by a Morning Meeting that begins their day with community building activities and an overview of the daily schedule in order to set them up for success. Middle School also includes a weekly Advisory time when students meet with faculty members in small groups to discuss adolescent issues and communication strategies.

Health education focuses on providing students with accurate information and clear communication skills around issues of human development, friendships and relationships, and other concerns. Greene Hill's Health and Wellness class gives students an opportunity to explore topics related to social, emotional, and physical health through activities, discussions, and shared readings. Students discuss issues of emotional wellness, relationships, their changing bodies, and issues of self-identity in a supportive and safe environment. They also explore problem-solving connected to their growing independence and maturity in the society and world we are living in.

Identity

WE VALUE EACH INDIVIDUAL'S IDENTITY

Connected to its mission, Greene Hill values the experience and individuality of each member of the school community, and teachers work to instill in students both a strong sense of themselves and empathy and understanding of others and their perspectives. We value and reserve space during the school day for these conversations and consider the work an important part of our commitment to creating children who will grow into adults who participate in a diverse and democratic society.

In order to promote community in the classroom and school as well as to set the expectations for shared norms and procedures, classes begin the school year with an Identity Study. Through this study, teachers build community through the exploration of various individual and group identities. This study seeks to address the following guiding questions:

- 1) Who am I?
 - 2) Who am I with others?
 - 3) Who are we as a school?
 - 4) What makes us Greene Hill?
 - 5) How can understanding myself help me understand others?
-

By investigating these questions at the beginning of the school year, teachers and students seek to co-create a progressive and responsive classroom and school community. This in turn establishes a foundation based on reflection and inclusivity that will support learning throughout the school year.

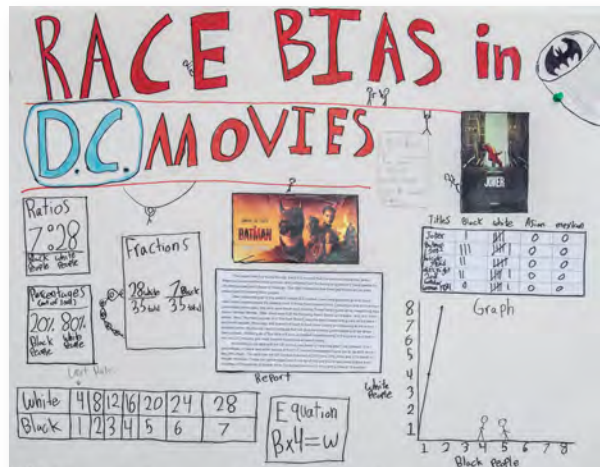
Our All-School Identity Study curriculum is designed to be developmentally appropriate, emergent, and responsive to the academic and social-emotional needs of the students in their classroom community. Lower School students may do regular self-portraits throughout the year as they learn about what makes them unique as well as similar to others, or observe themselves closely in a mirror and use these observations to create a sketch of themselves. Older Lower School students may look at their own family artifacts as a precursor to learning about how researchers have learned about ancient civilizations, or create personal maps that represent the various places that are significant to them and their family. Students in Middle School create physical representations of themselves, including identity masks and boxes, to display both their external, obvious characteristics as well as those that are more internal and lesser known. In all areas of learning about the world, students begin by first learning about themselves.

An identity study allows students of all ages to build core understandings and skills that help them contribute to their classrooms, the school, and ultimately their various communities of membership outside of school as confident individuals. The main developmental outcomes created by teachers working to frame the identity study and its goals were drawn from the work of Learning for Justice (formerly Teaching Tolerance), and built upon the same themes for different age groups in the school, culminating with the Middle School outcomes:

- I know and like who I am and can comfortably talk about my family and myself and describe our various group identities.
- I see myself as an engaged learner, a socially responsible community member, and a leader in my school.
- I know that I can use the democratic and progressive values of my school to positively contribute to my life outside of school.

By beginning the year with a focused identity study and incorporating these key elements into curriculum through the school year, Greene Hill School aims to support students' development of their individual sense of self, their awareness of their roles in the classroom and school community, and their ongoing growth into active contributing members of a wider society.

Racial Equity



A significant focus of our Identity and Social Justice work promotes racial equity and students' recognition of the way that race shapes our society and identities. Starting with our youngest students, teachers introduce vocabulary and concepts that help to define and explore race and racial equity. Greene Hill students develop an understanding of and comfort in using terms such as stereotype, discrimination, prejudice, racism, and identifiers that people use to describe themselves and their family. Both within the curriculum and in the daily community-building of the classroom, students and teachers dig into complex conversations that help build connections, empathy, and advocacy throughout the school community.

Social Justice

WE ARE COMMITTED TO ACTIVELY ENGAGING IN SOCIAL JUSTICE

At Greene Hill School children consider themselves as part of a larger community, whether it is their classroom, neighborhood or the wider world. They are attuned to how their actions impact themselves and others and use this lens as they investigate historical movements and relate them to contemporary times. Starting with a framework that examines social justice and is embedded in daily classroom life, young children are encouraged to love and know themselves while practicing respect for others. They begin to tackle issues of social justice, ones that relate directly to their own lives and in developmentally aligned ways explore concepts like power, discrimination and social change. Part of this work is exploring historical and contemporary movements for social change and participating in awareness raising and social action in the school and wider community.

This mission of Greene Hill School is based upon a commitment to social justice, and a desire to bring about positive change in our school, our local community, and the world. Our faculty design curriculum in order to make connections between classroom learning and social justice. Students throughout the school study literacy, history, and math with a lens

that allows for frequent exploration of ideas of power and inequality. Conversations and lessons on social justice topics often emerge organically and in response to current events. Students have natural interest in right and wrong, and teachers tap into this and get them excited about learning from a young age. In addition, teachers support students in understanding and sharing different points of view. It is a goal that students at Greene Hill recognize the development of similar themes and ideas throughout their years of study, becoming critical thinkers and learners across the curriculum.

Each class's curriculum includes themes and topics related to social justice that are regularly taught, aligned with the Six Elements of Social Justice Curriculum Design: Self-Love & Knowledge; Respect for Others; Issues of Social Injustice; Social Movements & Social Change; Awareness-Raising; and Social Action.* Throughout their years at Greene Hill, students build their capacity for grappling with, articulating ideas about, and asking meaningful questions related to justice, diversity, equity, inclusion, and belonging through work around concepts and topics that they are able to understand and relate to. This work is intentional and deeply embedded in even our youngest classrooms.

*Derived from Using Their Words: Six Elements of Social Justice Curriculum Design for the Elementary Classroom by Bree Picower

Social Justice Topics by Age Group

Fairness & Kindness
 Difference & Diversity
 Leaders & Change-Makers
 Geography & Opportunity; Discrimination & Privilege
 Civil Rights Movements & Activism
 Power: Slavery & Systematic Oppression
 Resistance, Activism & Social Change Across Civilizations
 Perspectives: Identity, World Religions & Bias
 Origins of Race and Power
 Identity, Citizenship, & Democracy

Sample Guiding Questions

How do people take care of themselves and others?

What do people and places need to flourish?

How do social movements impact people?

Who has access to power?

How do the beliefs and values of a diverse culture affect individuals and society?

How does a text reflect a set of cultural values?

How can math raise awareness of economic injustice and inspire social action?

What ethical issues arise in the study of science?

Social Justice



Our youngest students explore concepts related to Social Justice through their shared work as a classroom community (recognizing unfairness; standing up for others; self-advocacy) as well as through literature, art, and specific units of study on topics and ideas that are meaningful to them and related to their personal experiences. For older students this learning is often embedded in Social Studies (8s-10s) or Humanities and Activism (Middle School) units of study, and often makes connections between historical time periods that students are studying and examples in the world around them. Current events

conversations — a part of the regular class schedule in older grades and occurring as is necessary or desired with younger students — also bring up topics and issues related to social justice, especially around world news and events that lead to groups of people needing help and care from others.

Greene Hill has an annual All-School Study which often focuses on aspects of social justice to add further depth and integrated study to our Social Justice curriculum. Lower School students have studied everyday heroes such as essential workers and members of the community, used drama and role play to reenact civil rights movements, and created a Maker Space in the classroom to tackle the challenge, “How would you design a building or public space or change the architecture of an existing building to center happiness and improve quality of life?” by generating original solutions that they could design, build, and share to help to improve our classroom, our school, our neighborhood, our city, and our world. Middle School classes have investigated the causes and effects of Islamophobia, the topics and realities of living on minimum wage in the United States, restorative justice and how it might right the wrongs of the past, and the biggest issues facing our community regarding climate change.

Community Building

WE ARE COMMITTED TO CULTIVATING A STRONG COMMUNITY WHERE MEMBERS LEARN FROM AND GIVE BACK TO EACH OTHER

Throughout Greene Hill School, teachers support students in working together to navigate conflict, communicate effectively, and collaborate with purpose. Classrooms are student-centered which means that children’s developmental stages drive everything that occurs during the day, from academic lessons to classroom jobs and responsibilities. The importance of a strong community is taught both through targeted activities as well as through the purposeful structure of daily routines and instructional practices in all spaces of the school.

Home School Partnership



Based on an understanding that a strong partnership between families and school ensures that students can be successful, Greene Hill has a schedule of regular opportunities for family engagement as well as openness to ongoing communication with parents. Some of the ways that families learn about their child’s experience at school are:

- Welcome Conferences
- Curriculum Night
- Community Forums
- Classroom Newsletters
- Fall Conferences
- Midyear Reports
- Winter Conferences
- Spring Family Conferences
- End-of-Year Reports



Community Service and Service Learning

Greene Hill students are active stewards of community life in their neighborhoods, in NYC at large, and beyond. The aim of our community service program is for students to engage in projects where they can have a direct impact, develop meaningful relationships with members of the community and their peers, and have a high level of respect for their environment. Since service learning is an integral part of the social-emotional curriculum, we believe it is important for students to have a say in the projects that they undertake. By the end of Middle School, GHS students will have had the opportunity to participate in both internal and external community service and service learning projects. Through these experiences students develop their capacity for compassion, empathy, and caring.

HERE ARE SOME WAYS THAT GREENE HILL STUDENTS DEVELOP, FACILITATE AND TAKE OWNERSHIP OF COMMUNITY SERVICE INITIATIVES BOTH INSIDE AND OUTSIDE OF SCHOOL:

Internal (within the school)

- Overseeing recycling
- Organizing Lost and Found
- Caring for the garden
- Leading activist campaigns
- Creating student-run Earth Club to raise environmental awareness

External (in the community)

- Volunteering at local community service organizations
- Cleaning up Fort Greene Park
- Running drives to collect items such as food, coats, toys, diapers for those in need
- Working with local Business Improvement District to beautify and create pedestrian safety measures
- Planning events to raise money for global causes

SCHOOL WIDE PROGRAMS



Visual Arts

Greene Hill is deeply committed to arts education. Throughout each school day, students have opportunities to represent their ideas visually, creatively expressing their learning in both two dimensional and three dimensional projects. In addition to frequent classroom art-based work, all students participate in regular visual arts instruction. Students have hands-on experiences with a variety of media such as wood, wire, clay, paint, and paper, exploring them in an open-ended fashion in the younger grades and learning more specific techniques as they get older.

Our youngest students work on developing basic art skills through units in drawing, collage, painting, and sculpture, with an emphasis on exploration and experimentation with materials. Young students also learn to talk about art through sharing each other's work, as well as viewing and discussing works by a variety of artists. As students get older, they focus on work with new materials and using familiar materials in new ways. They also develop visual language through viewing and discussing a range of art work, and through sharing and reflecting on each other's work as well as by visiting museums. Our oldest students learn graphic design skills, help design our school yearbook, and have support in building a portfolio should they be interested in attending an arts-focused high school.

Drama

In Lower School students may develop class skits or role play with their classroom teacher as part of curricular work, most notably to make personal connections to historical events or more abstract concepts, such as the 9s role plays in which they embody the United States legislative branch ratifying student-proposed bills. Students' natural interest in drama and theater also tends to appear in Open Work and WOWs, as they write their own plays or even full-length feature films. There is often an all-school musical that students write and perform. In Middle School Drama class, students may learn improvisational games or develop a personal monologue. Additionally, students may connect their reading of Shakespeare in Humanities class to enacting parts of the play with guidance from a partner organization such as Irondale Theater Ensemble. Field trips also often include trips to see performances at Brooklyn Academy of Music, New Victory Theater, and Irondale. These activities also help prepare MS students to apply to performing arts focused high schools.

Music

The focus of music at Greene Hill is group music-making: learning to sing and play songs from various traditions, to accompany music and movement, to improvise words, rhythms and melodies, developing social skills as well as technical and creative skills. Each year, students learn new skills and repertoire, and contribute their hopes, dreams, and questions to their own emergent curriculum which they incorporate with greater complexity and flexibility within an ensemble setting.

In the early childhood years, the love and appreciation for music is introduced through the basic foundations. Students have the opportunity to explore it through singing, movement, listening and the playing of age-appropriate instruments. Material and activities include, but are in no way limited to, group singing, basic ear training, rhythm pedagogy, creative and choreographed movement, listening and responding to instruments and each others' voices, and music found in literature.

As students get older, music class expands on the elements of music learned in previous years, with an emphasis on melody, rhythm, and form. They develop their music-making abilities through echo-singing, pitch matching, and non-pitched (percussion) instrument playing. They learn about musical opposites (fast/slow, high/low, long/short), dynamics (loud/soft) and play musical games to develop skill and confidence in music-making. Students often demonstrate some of this work at share, featuring dance and music collaborations. In the spring there is often an All-School Musical where older students take on greater responsibilities including instrumental and vocal performance, as well as writing and arranging the production's songs, and younger students perform in ensemble roles. Students also have opportunities to develop an appreciation for music through attending musical performances at local cultural organizations.



Movement and Physical Education

Greene Hill's Physical Education program is designed with the changing developmental needs of children in mind, as well as beliefs in the value of regular physical activity and cooperative work. All students participate in physical education classes, though the nature of the classes changes as students move through school. Our youngest students have Movement classes that explore the elements of creative dance and basic game structure, as well as introduce yoga poses and practice that continue throughout their years at school. Children experiment with shape, quality, speed, and energy through dance. Gross and fine motor development is encouraged through running, jumping, galloping, skipping, as well as throwing, catching, kicking, and dribbling. Spatial awareness, bodily coordination and control, musicality, self-expression, and social cooperation are practiced through a variety of creative movement activities and group challenges such as relay races, obstacle courses, and collaborative games. Students learn to work together in space, navigating their own bodies safely while working with partners and in small groups.

As students get older, Movement expands from the basic elements of dance and sports to include the concepts of movement phrases, choreography, folk

dance, and performance, as well as traditional yoga practice and the more complicated game structures involved in soccer, volleyball, basketball, kickball, and games of the children's own invention. Students begin thinking critically about how games work and how to participate in them in a way that feels safe, fun, inclusive, and challenging. These games increase endurance, strength, and more advanced ball skills. Upper grade students continue to learn how to navigate their own bodies safely through space while working energetically and rigorously. They practice managing their social-emotional responses to game play and cooperation.

In PE class in the 8s, 9s, and 10s, students begin to learn specific sports skills while also continuing to play collaborative and community-building games. By Middle School, students have PE classes each week that focus on a variety of sports including soccer, volleyball, running, and basketball, and also have the opportunity to play on school teams in a small independent school league. Our sports program focuses on teamwork and good sportsmanship and allows students of all abilities to participate actively as a way to learn new skills, collaborate with peers and develop physical fitness.



Technology

Greene Hill is equipped with laptop carts and tablets that are shared by our older students and used purposefully to support meaningful student work and the development of technology skills. At Greene Hill students learn that, while computing devices are important tools for research and communication, they are also tools for creativity, design, and bringing ideas to fruition. By engaging in self-initiated projects and open-ended experimentation, children learn how to solve problems in innovative ways. Educational applications of technology are taught explicitly as students begin using our school Google domain as part of their academic studies in the upper grades, and become skilled at utilizing technology for Open Work and other projects. Digital media and citizenship guidelines and skills are taught as students become more independent with technology use. Greene Hill students are encouraged to see the situations in which computing and digital technology are useful tools, and also to continue to consider and seek out other means to communicate and share their ideas and what they have learned. End of unit projects often include digital slides, typed papers and audio-visual presentations, as well as hand-designed and drawn posters and 3D models.

LEARNING BEYOND THE CLASSROOM WALLS



Greene Hill School's location in the heart of Brooklyn, has influenced the school community because teachers utilize the offerings of the surrounding neighborhood as teaching tools. Greene Hill is fortunate to have many resources right in its own backyard ripe for exploration and experienced as a means to learn more about the people and places outside of school, New York City history, and current issues and topics in the wider world. Students are very aware of their surroundings and engage with the local community through neighborhood walks, field trips, Outside Time in playgrounds, and community events like picnics in local parks.

Outside Time

Greene Hill students spend large portions of the time at school outdoors, either in the several outside spaces on our campus or in local parks. We believe that outside time is critical to the physical, social-emotional, and intellectual development of students of all ages, and all students have at least one unstructured outdoor time each day at school. At times, teachers may contribute materials or offer to lead an activity or game, however, most often students are free to use these times to engage with their peers in a variety of open-ended ways, including dramatic play, explorations of nature, organized sports or other traditional schoolyard games, or simply talking and laughing with friends. Teachers also seek opportunities to teach lessons and conduct activities outside as appropriate. We are lucky to have several varied outdoor spaces on campus that students visit regularly, including a recess yard (the Big Yard), a Block Yard with large, moveable blocks, and a garden space.

Field Trips and Overnight Trips

Field trips play an integral role in our curriculum as students take full advantage of all that New York City has to offer. Walking trips around the vibrant neighborhood that surrounds the school allow students to see examples of community organizations as they study ways people work together to accomplish goals, to gather data on what businesses and services make up a neighborhood and how they meet the needs of the community, and to study gentrification from both an economic and social justice perspective. Field trips extending farther into the city include trips to community spaces and landmarks such as Ellis Island and the Brooklyn Bridge, cultural organizations such as Brooklyn Historical Society, the Lower East Side Tenement Museum, the Transit Museum, The Metropolitan Museum of Art, and the Museum of Chinese in the Americas, and walking tours of the African Burial Ground in Lower Manhattan. The purpose of these excursions is not just to view places and artifacts related to their studies, but also to provide children with primary experiences to help answer questions such as: What might it have been like to immigrate to a new country over 100 years ago? or How can art provide us with insights into belief systems and ways of life?

Our older students have an overnight trip experience each year, beginning in the 8s. Trips for middle schoolers may include a several-night nature-based trip where they do team-building, adventure activities and learn about the natural world in connection to what they study in science class.



LOWER SCHOOL ACADEMIC OVERVIEW

Lower School students are involved in deep and engaging studies that help them make sense of the world around them and build their own knowledge, with adult guidance. The core of our curriculum consists of in-depth, integrated studies aligned with a broad concept that students are able to investigate experientially and connect with personally. Classwork regularly includes whole-group instruction, partner- and small-group work, and opportunities for students to engage in multiple ways, providing differentiation and the ability for teachers to support students in working on the skills most pertinent for their individual growth. Through authentic work and exploration of open-ended questions, children develop more nuanced understandings over time of the complex systems and processes that make up our world, and see themselves as active participants. Math and Literacy skills are taught explicitly both in support of this work and to build foundational skills across the curriculum. In alignment with our recognition of the importance of meeting the social, emotional, and cognitive needs of children, we call our Lower School classes by the age of the children rather than a grade, as it more authentically describes the range of developmental abilities in each group.

4s-7s

The program for our youngest children at Greene Hill provides young children with opportunities to engage creatively with each other, and with a variety of materials. Great emphasis is placed on learning about what it means to be part of a classroom community, and finding joy in learning and exploring together. Teachers are active parts of the school day alongside young children, observing and encouraging their work and play. Children often make choices about how to spend their time throughout the day, using materials like blocks, paint, puzzles, and games. They gather for shared experiences like read-alouds, songs, class lessons and activities, and co-curricular Team Teacher classes such as Spanish, Music, Visual ArtsLab, or Movement. Their days are structured and consistent, with outdoor play time daily and a rest after lunch for 4s and 5s.

While activities and lessons supporting early literacy and mathematical concepts occur regularly in the 4s, direct instruction in reading, writing, and math begins in the 5s, within the context of a day still filled with play and exploration. The emphasis on independent reading and writing grows as students move through the 6s and 7s, as this work is both integrated in larger studies and taught at dedicated times during the day. Class-wide studies allow children to learn more about the social and natural world through community investigations, and group-based academic work supports the growth of independent skills as students get older. Work in the block area is crucial to these age groups, as children interpret structures and systems they have seen in their community.



OPEN WORK

4s - 7s

Open Work is a daily opportunity for children to engage in self-initiated work with a range of materials.

In the 4s, the unit blocks, easel paints, sensory table, and clay are always available. Through extended experience with those open-ended materials, the children's work develops in complex and often surprising ways. Students make discoveries about mixing colors or balancing tall buildings. They are deeply invested in the dramatic play that evolves around block buildings and clay, and tell elaborate stories to accompany their paintings or work at the water table. They move fluidly between materials and activities, finding opportunities to work independently or with peers. Most important, children experience the satisfaction of making their own choices and following their own ideas.

In the 5s and 6s classrooms, familiar materials continue to be available, while teachers add others, including a variety of art and building materials, curriculum-related explorations, and a woodworking station. Children learn to stay with their Open Work choices for longer stretches of time, beginning to return to work over several days. By the 7s year, students are proposing their own ideas for materials and explorations and engaging and teaching their classmates. Their repertoire expands to include activities like bookmaking, cardboard construction, science experimentation, and puppetry. The explorations and creations of Open Work in the early Lower School classrooms set the stage for continued self-initiated work throughout the upper grades, as children acquire the ability to manage more complicated projects. Encouraged to share their ideas with classmates, they become increasingly comfortable giving and receiving feedback and reflecting on their own work and process — skills that transfer readily to academic work.



COMMUNITY WORK

Social Studies and Science | 4s - 7s

In the early years of the Lower School, Social Studies and Science work are deeply intertwined in the classrooms, as children are immersed in experiences that help them better understand their communities and environments. While certain studies may fall neatly into the categories of “Science” or “Social Studies,” at this age the connections among them are very strong, with most explorations highly integrated in nature. We call these core studies “Community Work.” Whole-class block building is an important arena for learning: children build realistic scaled models based on first-hand research, and then use their structures to deepen their experience through dramatic play and reenactment.

Greene Hill faculty work collaboratively and reflectively to craft curriculum each year, aligned with core learning concepts for each age group that take into consideration the interests and learning styles of each group of students as well as current events or other real-world learning opportunities, ensuring that students experience a rich, comprehensive curriculum over the course of their time at Greene Hill School. Specific learning objectives provide benchmarks for student progress in each content area and teachers use a range of formal and informal assessments to assess children’s learning and plan future studies.

Social Studies and Science | 4s - 7s

4s

With a yearlong learning theme of Self & Others, explorations of families, jobs, stories, and life cycles are typical studies the 4s pursue as they begin thinking about their place in school and their neighborhood and paying attention to the natural world. As children grow, first-hand experience continues to be integral to learning. Beginning with an Identity Study and continuing through the year, reading books about family, community, and children of different ages help the 4s consider their own experiences as well as their classmates. Children reflect about themselves as individuals and as members of their classroom community, as they look into what makes them “them.” A sense of community is learned by working together to care for their space, as teachers and children think about daily jobs that need to happen to help maintain the classroom. 4s use their knowledge of the jobs people have to further learn about different community helpers in the school neighborhood. Through these explorations of themselves and others, they learn how to be together as a group and, at the same time, how to notice and value each individual in the room.

5s

In the 5s, Community Work encompasses topics related to Growth, as children develop deeper understandings of their changing selves as well as their urban and natural surroundings. In embracing their own growth, 5s are

encouraged and supported as they develop more independence in both daily routines and care for the classroom and school, as well as in their work and maintaining relationships with others. The 5s’ study of trees, and the creatures that live in them, extends throughout the year alongside other work, and provides meaningful opportunities for children to explore the intricacies and diversity of natural life. Literature, science experiments, and visual artwork are all regular parts of the Tree Study, and seasonal aspects of this study align with students’ outdoor experiences in all types of weather. In the Spring, the 5s explore growth and life cycles through planting and growing seeds into plants, observing caterpillars change into butterflies (and setting the butterflies free in the school garden), and incubating and hatching chick eggs.

6s

Community Work explorations in the 6s are locally themed. Children examine the yearlong concept of Community by investigating areas of their direct experience: their lives at home, their neighborhood, or their natural surroundings. During a “Block” Study, 6s learn about and visit businesses and community organizations in the commercial block around the school, exploring the ways in which people work together in various roles to accomplish complex tasks. For example, children may research the workings of restaurants through books, visits, and interviews, culminating in the creation of



Social Studies and Science | 4s - 7s

their own restaurant. In the spring, 6s typically study a class of vertebrate animals, such as birds or fish, both from a science and social studies perspective. Visits to places such as the East River or Prospect Park provide the chance to explore a local ecosystem, leading to a greater appreciation for how people and animals make use of their environment.

7s

Through a yearlong study of Systems, 7s investigate familiar and tangible elements of their urban environment in new and more complex ways. By observing aspects of their immediate surroundings, becoming facile with maps, and visiting other parts of the city, students learn about how people and places are connected and better understand the complexities of their urban surroundings. 7s study neighborhoods through the perspective of needs and wants, gathering data and drawing conclusions about how neighborhoods do (or do not) meet the needs of their residents, what leads to inequity across neighborhoods, and ways to advocate for change. An in-depth study of the transportation system gives 7s a stronger geographic understanding of the five boroughs, as well as a chance to look at how this complex system evolved over time as the city expanded. Other historical aspects of city life are introduced as students consider how changing needs and wants of a population create change in places such as the Brooklyn Navy Yard or the High Line.

Key Social Studies Skills: 4s - 7s

Develop a sense of identity and an awareness of the importance of diversity and inclusivity.

Develop conflict resolution skills and a sense of responsibility toward self and others.

Communicate needs and feelings clearly and with intention.

Acquire interviewing and recording skills.

Notice similarities and differences in people and places.

Recognize interdependence in a variety of contexts.

Key Science Skills: 4s - 7s

Use observation skills to generate questions.

Identify the needs of living things.

Explore changes in the natural environment through the seasons.

Understand how particular physical traits of animals affect their survival.

Compare and contrast animal species.

Explore concepts of architecture and design in person-made structures.

Begin to make logical inferences based on real-world experience.

ESSENTIAL QUESTIONS

Community Work, 4s - 7s

What makes me who I am?

Who are the people in my life?

How do people take care of themselves and others?

How do people and other living things grow?

How does growth create change?

Who are the people and places in our community?

What communities do we see in nature?

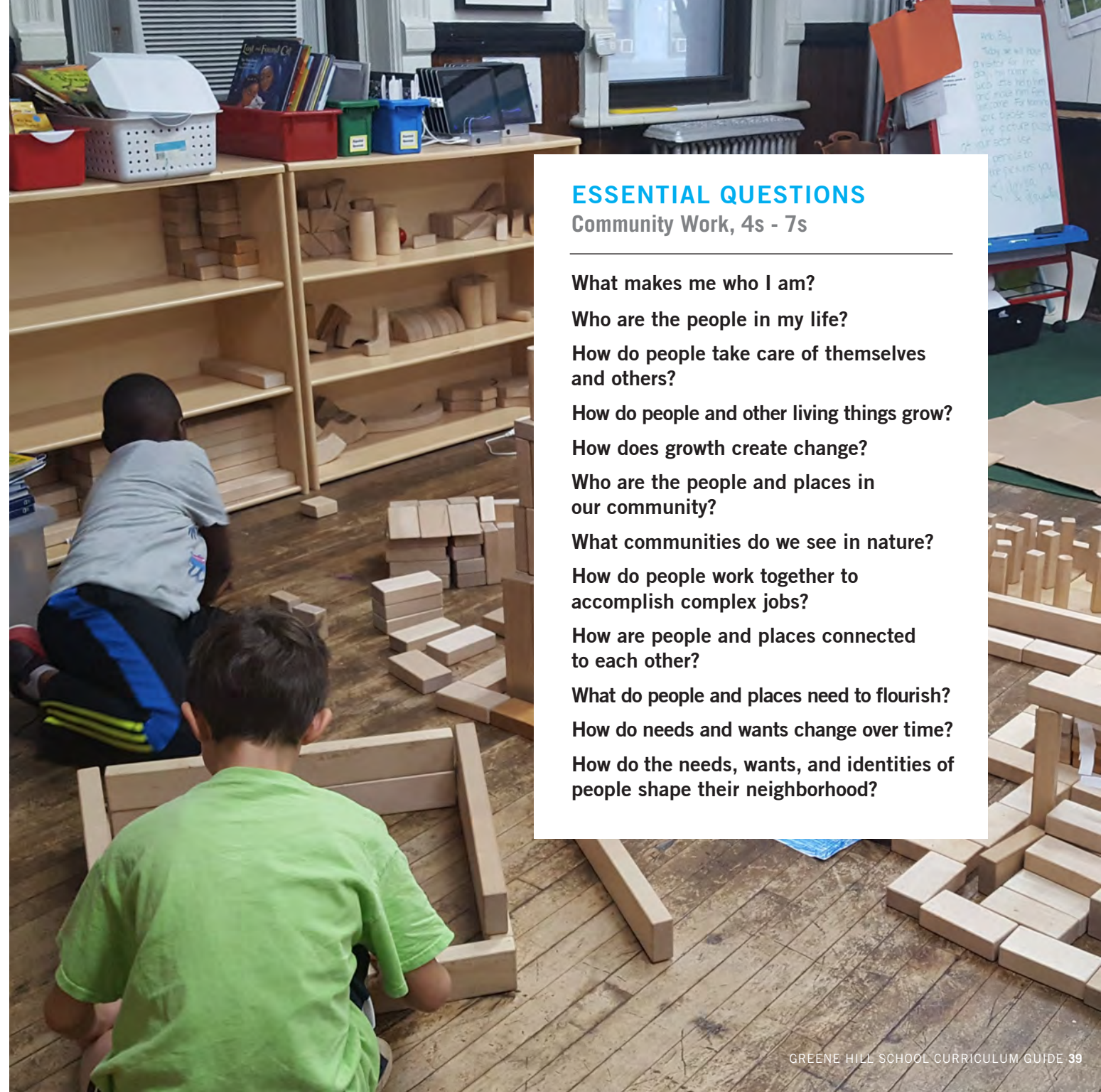
How do people work together to accomplish complex jobs?

How are people and places connected to each other?

What do people and places need to flourish?

How do needs and wants change over time?

How do the needs, wants, and identities of people shape their neighborhood?





LITERACY

4s - 7s

At Greene Hill we approach the teaching of reading and writing joyously and intentionally, with knowledge of the science of reading development guiding our work with early readers. Expectations of children's literacy skills are attuned to what we know about typical patterns of development and based on each child's progress. Children progress through emergent literacy stages into becoming fluent, independent readers and writers, engaging with the written word with zest and confidence. Beginning in the 5s year, students participate in intensive small-group work according to their reading developmental level. Literature and comprehension skills and concepts are modeled and taught through read alouds and other shared texts, and practiced independently and in small groups as students become fluent readers.

Children use writing across the curriculum as a means to form and communicate ideas; they also focus on particular genres of creative and informational writing. Strong phonemic and phonological awareness is developed through regular, engaging practice, and ongoing word study practice prioritizes phonics as students learn to identify and use predictable spelling patterns and rules, and work on committing certain high-frequency words to memory. Developing skills are assessed through teacher conferences and observations, periodic benchmark assessments for phonological development and reading, and checklists or rubrics specific to the writing genres they study.

Literacy | 4s - 7s

4s

Early literacy activities and experiences are embedded in the daily work of the 4s. Children listen to books read aloud, sometimes studying particular genres like fairy tales, and share books with each other. Children tell each other stories that grow from communal play in the block area, or from a child's painting. They use blank books to compose stories or record everything they know about someone or something close to their hearts. In the spring, we begin our Handwriting Without Tears program, which teaches proper pencil grip and letter formation, alongside a multi-week "Mystery Letter" study that introduces initial sounds through engaging activities and games. As their awareness of letters and sounds grows over the year, 4s begin sorting objects or pictures based on the first sound they hear, and some use those initial sounds to try writing words on their own. Much of this work takes place during Open Work and Choice Work times of the day, allowing students to come to literacy-based tasks on their own and to be supported by teachers to build their skills.

5s

Explicit reading and writing instruction begins in the 5s. At the beginning of the year, children of this age already have a strong relationship with literature — they can retell familiar stories and use pictures and words to help them narrate favorite books. They use drawings to compose their own true and imagined tales. Classroom

literacy routines include shared reading of both long and short texts to teach concepts of print and literature and comprehension skills, partner and independent "Book Looks," phonological awareness and word study practice, and explicit whole-class and small group instruction. Small groups are focused on students' reading development and emphasize teaching and practice of specific skills. Writing Workshop lessons help 5s become a community of writers using pictures and words to tell stories, label pictures, and write non-fiction. As the year progresses, 5s build knowledge of how written language works, and become increasingly skillful and independent as readers and writers.

6s

Many 6s anticipate learning to read and write over the course of the year and have high expectations for themselves. Our literacy instruction builds a solid foundation so that 6s identify themselves as readers by emphasizing reading as something to love. This continues throughout the year through consistent and structured literacy routines that include reading workshop, writing workshop, small group work, word study, shared reading, and read-alouds. Small group reading work focuses on specific skills that align with students' particular reading developmental stages. Phonological awareness practice continues in the 6s to solidify students' knowledge of letters and sounds as they develop into independent readers. Students also engage in other word work practice



Literacy | 4s - 7s

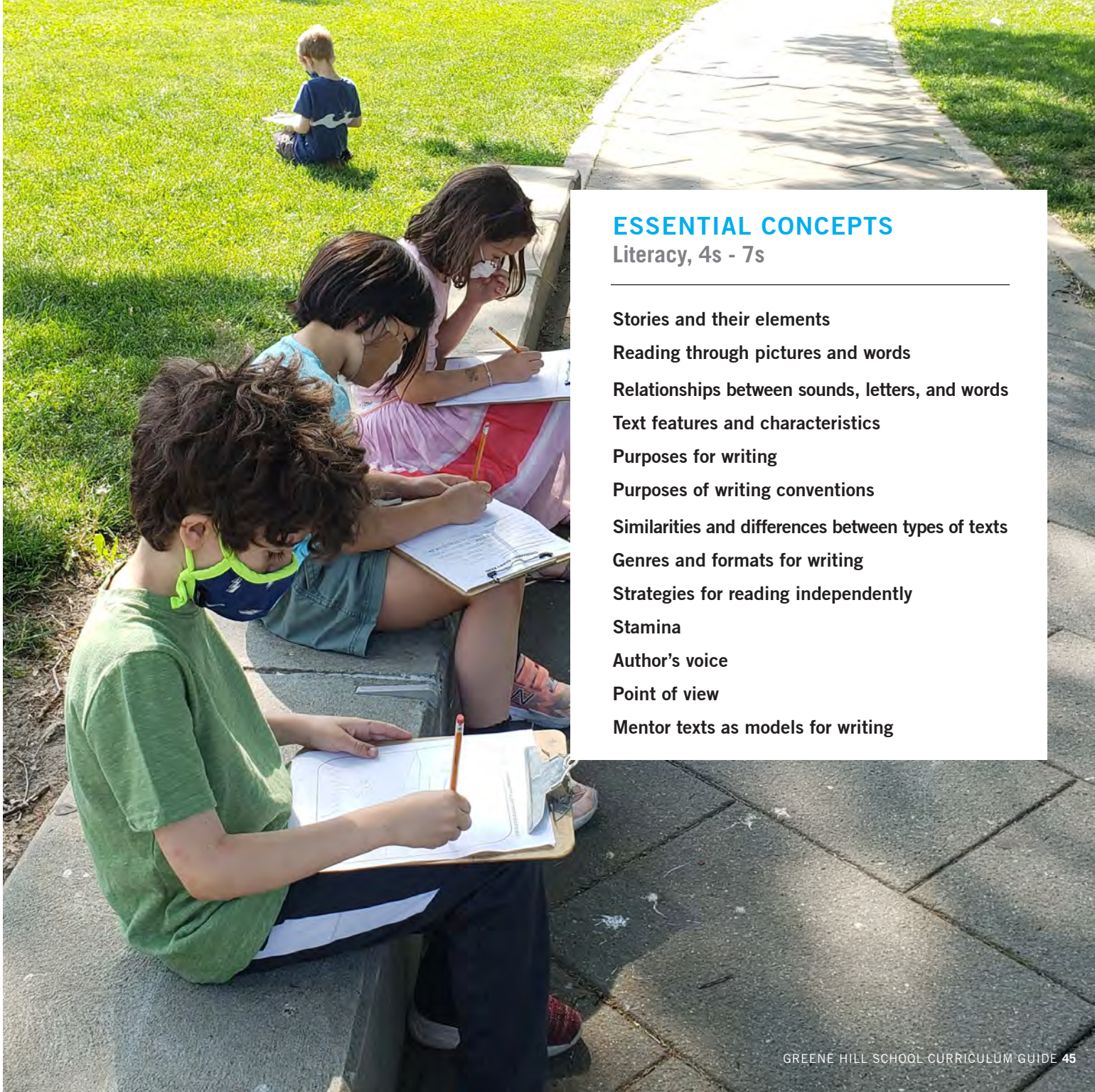
and begin to learn spelling patterns and rules as well as continuing to build their sight word vocabulary. 6s write for a variety of purposes and are introduced to the writing process through guided practice in developing ideas, drafting, revising, and editing their work. 6s typically revisit familiar genres, gaining experience writing narrative fiction as well as informational pieces, and writing more expressively and playfully.

7s

7s are increasingly fluent readers and writers, and will spend the year becoming more independent and skillful. Reading and writing are approached joyfully and pursued independently, but the class also develops strong community around literacy, forming discussion groups around shared books or series, or giving each other carefully considered feedback about written work. Students continue to refine their writing skills through more independence with the writing process, with a greater emphasis on revision for content and style. Writing is seen as purposeful, as a way to express ideas, and community-minded with frequent writing shares. Structures and routines for literacy in the 7s include shared reading and read alouds, word work practice to develop facility with common spelling patterns and rules as well as recognition of high-frequency words, focused small-group reading instruction with either a teacher or the Learning Specialist, and one-on-one conferences to provide guidance for students' ongoing independent practice.

Key Literacy Skills: 4s - 7s

- Make connections to stories and poems.
- Observe predictable story elements in a genre like fairy tales.
- Identify letters and recognize letter-sound correspondence.
- Notice and generate rhyming words.
- Recount and compose stories orally.
- Use writing and drawing tools competently.
- Stretch words to hear all sounds while writing.
- Use inventive spelling to represent phonetic sounds.
- Use conventions such as left-to-right orientation, spaces between words while building independent writing skills.
- Integrate decoding and comprehension skills to read with purpose and meaning.
- Recognize narrative arc of stories and incorporate in own compositions.
- Use writing to capture a moment, or share ideas.
- Recognize and use the conventions of a variety of genres.
- Write sentences with beginning capitals and ending punctuation.
- Use the writing process to generate ideas, draft, revise and edit, and share their writing.



ESSENTIAL CONCEPTS

Literacy, 4s - 7s

- Stories and their elements
- Reading through pictures and words
- Relationships between sounds, letters, and words
- Text features and characteristics
- Purposes for writing
- Purposes of writing conventions
- Similarities and differences between types of texts
- Genres and formats for writing
- Strategies for reading independently
- Stamina
- Author's voice
- Point of view
- Mentor texts as models for writing



MATH

4s - 7s

Our Math curriculum is guided by a constructivist approach that provides children with hands-on experience through which they build mathematical understanding and skill. Students begin to explore mathematical concepts through sorting, classifying, and grouping objects, as well as work with patterns and shapes. Number recognition and counting skills (including one-to-one correspondence: the understanding that, when counting, each number said represents an object counted) occur in self-directed Open Work, choice, and play times as well as in purposefully planned Math activities and games in the classroom. Daily routines are a large part of Math work of younger students, where counting classmates in school or responses to a morning poll question such as “Are you wearing boots today?” provide data for students to analyze and discuss. Work with place value increases, and computation work begins formally in the 6s as students begin to work with addition and subtraction facts and construct number sentences to represent their mathematical thinking, with the support of a range of math tools and manipulatives. Games continue to be a frequent way that skills are practiced, and flexibility and engagement is a regular aspect of Math work in the classroom.

Students explore the distinct mathematical strands of number and operation, patterns and functions, data and probability, geometry, and measurement. Assessment of their mathematical skills and reasoning happens through daily teacher observations, analysis of children’s work, and performance assessments built into the curriculum. By emphasizing flexible thinking and connections, Greene Hill’s math program provides a foundation that allows students to continue to grow as problem-solvers and strategic thinkers in Math as well as other areas of their academic lives.

Math | 4s - 7s

4s

Whether building with blocks, preparing class snacks, or counting their classmates during morning circle time, children in the 4s are using numbers to make sense of their world. They begin to move beyond rote counting to a deeper understanding of numbers as representations of specific quantities. They use simple charts to represent data, and play games that involve sorting, classifying, comparing sizes and quantities, or identifying patterns.

5s

The 5s math program introduces children to many of the materials, structures, and routines that they will be using throughout Lower School. Students use daily practices like studying the calendar and taking attendance to build number sense. The 5s work throughout the year to strengthen their number sense and fluency with counting and comparing numbers to 20. They refine counting skills, compare quantities, and add and subtract small numbers, using cubes or other math materials to make the work concrete. At the same time, 5s begin to use number sentences (equations) to represent computations with pencil and paper. They develop logical skills by sorting and classifying shapes according to different attributes, and by identifying and describing simple repeating patterns. Children design surveys and keep track of responses, learning to interpret real-world data.

6s

Young mathematicians in the 6s are becoming comfortable working with numbers in authentic and also more

abstract ways, acquiring a stronger understanding of the base-ten number system. Through teacher-modeled activities and lessons, games, and work with story problems, students' work focuses on gaining an understanding of addition and subtraction, using numbers and notation to represent these operations, and finding different strategies for solving problems. 6s develop strategies for accurately counting a set of up to 50 objects by ones, and begin to count by groups. They also discover more real-world uses for measurement and data analysis, and continue to work with patterns, functions, and two- and three-dimensional shapes.

7s

With stronger understanding of place value and increased fluency with basic math facts, 7s are becoming nimble with numbers and capable of more complex mathematical reasoning. Math work in the 7s continued to utilize familiar practices including games and partner work, but students' growing independence provide for more individual work. 7s work on developing strategies to compute with two-digit numbers accurately, and develop estimation skills for addition and subtraction up to 1,000. 7s develop skills that set the stage for multiplication and fractions, like skip-counting and working with "things that come in groups." 7s use their growing mathematical skills frequently throughout the curriculum, particularly as they gather data or investigate topics as part Community Work studies. Work continues with telling time, place value, coin combinations, and two- and three-dimensional shapes.



ESSENTIAL CONCEPTS

Math, 4s - 7s

Shapes and patterns

Sharing and dividing materials

Sorting and categorizing

Purposeful use of math manipulatives

Solving problems in multiple ways

Mathematical symbols

Counting strategies

Representing mathematical thinking

Key Math Skills: 4s - 7s

Develop strategies for accurately counting a set of objects by ones, fives, and tens.

Use the concept of equivalence.

Use manipulatives, drawings, tools, and notations to show strategies and solutions.

Construct, describe, and extend repeating patterns.

Carry out data investigations and represent data visually.

Describe, identify, compare, and sort two- and three-dimensional shapes.

Understand length and use linear units.

Make sense of strategies to solve addition and subtraction problems with small numbers.

Gain fluency with number combinations.

8s - 10s

In the 8s-10s classrooms, students build upon the strong foundation developed in the younger grades as they begin to consider more distant places and times, and more abstract concepts. While they are well-versed in the routines of being in school, ongoing community-building and social-emotional work expands older students' skills with social relationships and conflict resolution, along with their shared sense of responsibility as members of a classroom and school community. 8s-10s Social Studies work brings students in contact with the diversity of human experience, gaining a wider perspective and contending with issues of social justice both historic and current. Curricular studies increase as students visit the Science Lab for twice-weekly sessions with a science teacher, and 9s and 10s participate in Health & Wellness class.

The use of computing technology becomes a part of students' academic studies as they are introduced to school laptops, keyboarding and document and digital presentation skills, and online literacy practices. True homework begins, with 2-3 assignments a week beginning in the 8s and increasing in frequency through the 10s. Students continued to have daily opportunities for self-initiated work during Open Work, sometimes in connection with shared curricular studies but also in pursuit of outside interests and skills.



OPEN WORK

8s - 10s

Open Work is an important part of our academic program, providing daily opportunities for students to exercise choice, take ownership over their work, and develop skills in problem-solving and self-reflection that contribute to their work across the curriculum.

While teachers still introduce new materials or ideas for students to work with and may also have a class-wide focus for Open Work, 8s-10s students are capable of and eager to set their own courses for projects and investigations that pique their interest. While some Open Work sessions are still spent “messing around” with materials and exploring possibilities, older students are encouraged to devote time to longer-term projects that give them the opportunity to plan and follow-through. 8s-10s love to work collaboratively as well as independently, sometimes trying out something they have never tried before. At other times, students are able to incorporate skills they have learned in new ways, for example, by applying research skills to their own areas of interest, teaching classmates a new craft, or creating books, performing plays, or designing scientific experiments based on work in other areas of the curriculum. As students get older, greater emphasis is placed on planning independent or group projects during Open Work, reflecting on work and process, and articulating the standards by which they believe projects ought to be evaluated.



SOCIAL STUDIES

8s - 10s

In the 8s, 9s, and 10s classes, the main studies of the curriculum, referred to as Community Work in the 4s-7s, move into a Social Studies focus as we introduce more conceptual and historical topics to older students. The long ago and the far away are fascinating and motivating ideas for upper elementary students to investigate and explore, when they are introduced through the lens of our current context and their lived experiences. While each age group is guided by essential questions and concepts that are part of our school-wide trajectory and remain consistent from year to year, each group of students digs into Social Studies work in various ways, dependent both on current events and their individual and class interests and questions. Knowing that students learn best when they can form personal connections to their learning through prior knowledge and experience, Social Studies work in the 8s -10s begins with studying these concepts in our current context and time. Through their Social Studies investigations, Greene Hill 8s-10s broaden their understanding of their place geographically and historically, and further develop their ability to ask questions and make connections between their experiences and those of others now and throughout history. Our ongoing work around the six elements of Social Justice curriculum is woven throughout these studies, as students consider knowledge of themselves, respect for others, social movements & social change, awareness raising, and social action as they relate to the topics they study and their own lives.

Social Studies | 8s - 10s

8s

Students in the 8s year study the larger concept of Movement, including immigration and migration as well as social and activist movements, through the history of New York City and the lens of questions such as: What causes people to move from place to place? What happens when people move? and How do social movements impact people? 8s begin their study of immigration through researching their family history and creating personal timelines, and then interviewing family members or family friends who have immigration stories to share. This work helps them to begin to consider why people move from place to place, alongside studies of current and historical events related to immigration and migration, including topics connected to social justice, such as forced migration of groups of people.

9s

In the 9s year, Greene Hill students explore the structure and history of our government and the broader idea of Law through investigating questions such as: How do different groups of people govern themselves? Who has power? and What does it mean to have power? Before learning about colonial America and the beginnings of our country, the 9s learn about different types of government and study current events related to elections and policy-making. They create a class constitution, vote on a class mascot, and even go through a process of

attempting to legislate their own proposed laws through role play. Social justice is explored through both historical and contemporary lenses through investigation of topics such as contact between Europeans and indigineous Americans and how local and federal laws impact different groups of people.

10s

In the 10s year, our oldest Lower School students are tasked with considering the meaning of Culture through inquiry into questions including: How does the physical environment and natural resources shape a culture? What was daily life like for individuals living in ancient civilizations? How did the movement of ideas, goods, and people affect these cultures? How have the ancient Mesopotatians, Egyptians, and Greeks contributed to our lives in today's society? Social justice is incorporated into the curriculum through both robust work around current events as well as analysis of the roles and rights of various groups of individuals in the civilizations studied. To provide a solid foundation from which to jump further back in time than they have previously, the 10s begin the year by sharing their own personal culture through family stories and artifacts. They study geography in order to understand why the earliest civilizations began where they did, and make connections throughout the year to how our lives today have been shaped by the contributions of ancient civilizations.

**Key Social Studies Skills: 8s - 10s**

Understand concepts of chronology and historical events.

Explore the ways that power and identity may influence people in all cultures.

Appreciate similarities and differences among cultures.

Raise questions and seek answers from historical stories, documents, and records from the past.

Understand the interdependency of living things and physical environments.

Learn about government structures and the need for rules for resolving conflicts and disagreements.

Read and interpret different types of maps.

Apply information from field trips to classroom work.

ESSENTIAL QUESTIONS**Social Studies, 8s - 10s**

What causes people to move from place to place?

What happens when people or things move?

How do social movements impact people?

How do different groups of people govern themselves?

Who has power?

What does it mean to have power?

How does the physical environment and natural resources shape a culture?

How did systems of religion and government impact individuals living in ancient civilizations?

How does the movement of ideas, goods, and people affect cultures?

What can artifacts and structures help us to understand about ancient cultures and their impact on our lives today?



LITERACY

8s - 10s

Greene Hill students experience reading and writing across many contexts and genres, enjoying literature independently and socially, conducting research, reading and interpreting primary sources, writing and speaking persuasively, and analyzing texts in increasingly sophisticated ways. Their teachers come to know them deeply as readers and writers, and assess their growth through a variety of measures, including frequent observation and conferring, periodic assessments with benchmark books, and writing rubrics tailored to specific projects and genres.

While instruction and practice in foundational skills in reading, writing, and word work continue in the 8s-10s classrooms, literacy work is increasingly integrated into Social Studies as students engage in more in-depth units of study. Genres and literary structures are introduced as models and mentor texts, and students develop the ability to read and write across subject areas and in varied forms. Research and analysis of documents is combined with experiential learning from field trips and hands-on explorations as 8s-10s express their ideas and new understandings in oral, written, and digital presentations.

Literacy | 8s - 10s

8s

8s are becoming increasingly fluent and thoughtful readers and writers, and spend the year building stamina and critical thinking skills. 8s are highly social, and reading and writing as a community is important. Working in the contexts of whole-class book discussions, small, independently-run book groups and partnerships, 8s discuss what they read and reflect on various aspects of their books. Fluent, expressive reading is an important goal, which relies on automatic word recognition and extensive word knowledge. In addition, 8s will gain skills in note-taking and analysis of non-fiction texts as they examine books about history, as well as primary source documents connected to Social Studies.

Writing work in the 8s is often integrated with Social Studies and serves to deepen students’ understanding of the writing process, while building their skills and confidence as writers. 8s learn to follow the steps of the writing process more independently to develop their unique voice. Explicit instruction and work with words based on phonics and spelling patterns and rules continues, along with handwriting and keyboarding practice. Genres studied often include memoirs, interviews, letter writing, biographies, historical fiction and persuasive writing.

9s

Students in the 9s approach reading and writing in new ways by developing skills and applying them with greater independence and purpose. Much of the work they do is integrated with Social Studies, as students

become more adept at analyzing and creating nonfiction texts. Research and note-taking skills are developed through a variety of structures that provide tools and strategies to support students in taking on this work more independently. 9s are also cultivating a deeper love of literature, and are able to sustain whole-group or small-group discussions around books with more sophistication and depth. 9s also continue regular work with a spelling program that emphasizes phonics and spelling patterns and rules, and experience writing a variety of genres, with an emphasis on narrative, persuasive, and informational writing. 9s students often utilize technology tools to support their production of longer pieces of writing, and continue to build their keyboarding and digital literacy skills through this work.

10s

The 10s continue to practice and improve foundational reading and writing skills learned in previous years. Reading and writing is often integrated into Social Studies lessons, and also receives dedicated instructional time as students refine their critical and analytical thinking, comprehension strategies, and foundational grammar, writing, and spelling skills. 10s read a variety of genres to strengthen comprehension strategies of complex narrative and informational texts, and write with an awareness of audience and purpose. In addition, 10s strengthen note-taking and researching techniques such as collecting and analyzing, prioritizing and organizing, as well as presenting information clearly. A variety of writing projects throughout the year include creative, research-based, and response to literature pieces of writing.



ESSENTIAL CONCEPTS
Literacy, 8s - 10s

Story elements and arcs

Perspective and voice

Character development, traits, and motivation

Inferential and critical thinking

Questioning

Themes in literature

Writer's voice

Genres and formats for writing

Key Literacy Skills: 8s - 10s

Read and write with fluency and stamina across a variety of genres.

Make inferences.

Identify the author's perspective.

Identify themes in literature and the different ways authors develop those themes.

Utilize mentor texts to examine the author's craft and style and how they shape a piece of writing.

Strengthen writing by planning, revising, editing, and publishing varied pieces of work.

Recognize and use a variety of text-based strategies to comprehend both narrative and informational texts.

Integrate reading and writing skills by conducting research, extracting pertinent information, and presenting findings.

Engage with peers in conversation to express one's own ideas clearly and persuasively, and to actively respond to the ideas of others.

Generate and respond to meaningful questions about texts.

Demonstrate increasing mastery of the conventions of standard English grammar, usage, capitalization, punctuation, and spelling.

LOWER SCHOOL SKILLS

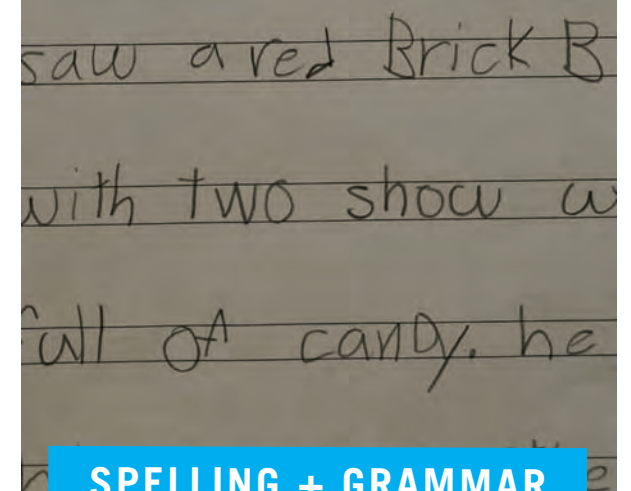
As children are becoming more skillful at composing their thoughts, they are also working toward mastery of the physical logistics of writing.



HANDWRITING + KEYBOARDING

In the 4s, as children are learning to identify letters and the sounds they make, they are also involved in multi-sensory experiences that help them form letters and numbers correctly. Explicit handwriting instruction begins in the Spring of the 4s year and extends through the 10s, using a program called Handwriting Without Tears. 5s, 6s, and 7s learn and practice correct letter formation in print to acquire fluency and stamina as writers; 8s begin to study cursive, and start using cursive more consistently in their own writing by the 9s. Children continue to practice handwriting skills through the 10s.

Keyboarding skills are taught beginning in the 8s; children in the 8s, 9s, and 10s practice their keyboarding skills at school and at home. By the 9s year, students are ready to use computers to publish written work.



SPELLING + GRAMMAR

Teachers use both engaging games and hands-on activities as well as structured curriculum to build a strong foundation of phonemic and phonological awareness in our earliest years at school. Specific phonics-based instruction that includes the teaching of spelling patterns and rules as well as an emphasis on high-frequency words provides students with a basis to grow their independent reading and writing skills. As students begin reading and writing more fluently, teachers continue to provide whole-class instruction in phonics as well as spelling patterns and rules while also supporting students to build their individual skills through their class writing assignments. They learn the rules, patterns, and conventions of English orthography needed to read and spell, understanding over time how the layers of alphabet, pattern, and meaning apply to spelling. They attend to correct grammatical usage and punctuation over time by examining good writing together, noticing patterns and anomalies, looking for rules, and experimenting with usage.

75 ÷ 9 = 52 r 7
 Divisor: 9, Dividend: 475, Quotient: 52, Remainder: 7

Divisibility Rule for 9
 you add up the digits of a number and if it sums to 9, that is evenly divisible by 9.
 $4+7+5=16$ $1+6=7$

Word Problem
 Mark has 475 basketballs. He has 9 teams. Mark wants to split the balls up between the teams. How many basketballs would he have to give to each team?

Solution Sentence
 Mark gave 52 basketballs to each team and Mark has a leftover of 7.

Partial Quotients

$$\begin{array}{r} 52 \overline{) 475} \\ \underline{450} \\ 25 \\ \underline{18} \\ 7 \end{array}$$

Double Check

$$\begin{array}{r} 52 \\ \times 9 \\ \hline 468 \\ + 7 \\ \hline 475 \end{array}$$

475 ÷ 9 = 52 R 7
 DIVIDEND / QUOTIENT REMAINDER
 DIVISOR

PARTIAL QUOTIENTS

$$\begin{array}{r} 52 \overline{) 475} \\ \underline{450} \\ 25 \\ \underline{18} \\ 7 \end{array}$$

DOUBLE CHECK

$$\begin{array}{r} 52 \\ \times 9 \\ \hline 468 \\ + 7 \\ \hline 475 \end{array}$$

Divisibility Rule for 9
 you add up the digits of a number and if it sums to 9, that is evenly divisible by 9.
 $4+7+5=16$ $1+6=7$

Word Problem
 There are 475 dog poops. There are only 9 bags. How many poops will fit in each bag? If there are any remainders they will be picked up by hand.

Solution Sentence
 There are 52 poops in each bag. 7 poops will be picked up by hand.

BY MARCUS

Box o' Cats

475 ÷ 9 = 52 r 7
 Divisor: 9, Dividend: 475, Quotient: 52, Remainder: 7

Partial Quotients

$$\begin{array}{r} 52 \overline{) 475} \\ \underline{450} \\ 25 \\ \underline{18} \\ 7 \end{array}$$

Division Algorithm

$$\begin{array}{r} 052 \overline{) 475} \\ \underline{045} \\ 25 \\ \underline{18} \\ 7 \end{array}$$

Double Check

$$\begin{array}{r} 52 \\ \times 9 \\ \hline 468 \\ + 7 \\ \hline 475 \end{array}$$

Divisibility Rule for 9
 you add up the digits of a number and if it sums to 9, that number is evenly divisible by 9. $4+7+5=16$ $1+6=7$

Word Problem
 Heather bought a giant box of 475 cats. Heather wanted to split the cats into 9 different boxes. How many cats would be in each box?

Solution Sentence
 There would be 52 cats in each box with 7 cats that don't have a box.

C3-PO'S MOVIE NIGHT

412 ÷ 5 = 82 r 2
 Divisor: 5, Dividend: 412, Quotient: 82, Remainder: 2

Partial Quotients

$$\begin{array}{r} 82 \overline{) 412} \\ \underline{400} \\ 12 \\ \underline{10} \\ 2 \end{array}$$

Division Algorithm

$$\begin{array}{r} 082 \overline{) 412} \\ \underline{040} \\ 12 \\ \underline{10} \\ 2 \end{array}$$

Double Check

$$\begin{array}{r} 82 \\ \times 5 \\ \hline 410 \\ + 2 \\ \hline 412 \end{array}$$

Divisibility Rule for 5
 The number ends in 0 or 5.

Word Problem
 C3-PO watches 5 Mandalorian episodes. Baby Yoda shows up 412 times in all the 5 episodes combined. How many times does Baby Yoda show up in each episode evenly?

Solution Sentence
 Baby Yoda showed up 82 times in all the episodes combined.

The Pharaoh's Wives

315 ÷ 3 = 105
 Divisor: 3, Dividend: 315, Quotient: 105

Partial Quotients

$$\begin{array}{r} 105 \overline{) 315} \\ \underline{300} \\ 15 \\ \underline{15} \\ 0 \end{array}$$

Division Algorithm

$$\begin{array}{r} 105 \overline{) 315} \\ \underline{300} \\ 15 \\ \underline{15} \\ 0 \end{array}$$

Double Check

$$\begin{array}{r} 105 \\ \times 3 \\ \hline 315 \end{array}$$

Divisibility Rule for 3
 The sum of the digits is divisible by 3. $3+1+5=9$

Word Problem
 The Pharaoh has 3 wives. He has 315 children. How many kids did he have with each wife?

Solution Sentence
 The Pharaoh's wives each have 105 kids.

Harry Potter and the Big Mac

228 ÷ 6 = 38
 Divisor: 6, Dividend: 228, Quotient: 38

Partial Quotients

$$\begin{array}{r} 38 \overline{) 228} \\ \underline{240} \\ -12 \\ 18 \\ \underline{18} \\ 0 \end{array}$$

Division Algorithm

$$\begin{array}{r} 038 \overline{) 228} \\ \underline{024} \\ 18 \\ \underline{18} \\ 0 \end{array}$$

Double Check

$$\begin{array}{r} 38 \\ \times 6 \\ \hline 228 \end{array}$$

Divisibility Rule for 2
 The number ends in 0, 2, 4, 6, 8

Divisibility Rule for 3
 The sum of the digits is divisible by 3. $2+2+8=12$ $1+2=3$

Word Problem
 Me, Harry Potter, Ron and Hermione went to McDonalds for lunch. They shared 228 Big Macs. They shared them out with each other except for 1. How many Big Macs Harry, Ron and Hermione each got?

Solution Sentence
 Harry, Ron and Hermione each got 38 burgers.

MATH

8s - 10s

As students move into the upper grades, Math work provides opportunities for them to continue to solidify their mastery of facts and to utilize a range of strategies to solve more complex problems. Work with data, measurement, and geometry continues, and the traditional algorithms for solving mathematical problems (for example, stacking numbers) are introduced once students have a solid conceptual understanding of the operations and the ability to check and explain their work. Flexibility in problem-solving and continuing to develop and express mathematical understandings are ongoing aspects of Math class, and games, hands-on projects, and collaborative and creative activities give students a range of opportunities to build these skills along with confidence that helps them see themselves as capable of working with math in school and in their daily lives. As in the lower grades, assessment for this age group happens through daily teacher observations, analysis of children's work, and performance assessments built into the curriculum.

Math | 8s - 10s

8s

A major emphasis for the 8s is on constructing a strong understanding of multiplication and division. 8s conceptualize multiplication as a way of representing “things that come in groups,” and work with arrays as a model. They understand division to be the inverse of multiplication; their initial strategies for solving division problems often involve using that relationship. They acquire fluency with multiplying numbers with a product up to 50, and also gain accuracy and efficiency in adding and subtracting numbers up to 1,000. Another key area for 8s is the study of fractions. They become more comfortable working with halves, fourths, eighths, thirds, and sixths, as well as simple decimal fractions like 0.50 and 0.25. Students learn to use graphs, and begin to develop a more refined vocabulary for describing and classifying geometric shapes. They learn to find area and perimeter and to determine the volume of rectangular prisms. All year 8s will work on clearly communicating their mathematical ideas orally and on paper, making sure they are convincing.

9s

One of the major goals for the 9s year is for students to develop greater computational fluency and solve multiplication and division problems in a variety of ways. Having already been introduced to the concept of multiplication, the 9s continue that work and work towards automaticity with their multiplication facts (“times tables”) through 12 by the end of the year. Students are introduced to arrays and various methods for breaking numbers apart in order to build their repertoire of strategies by learning and practicing efficient strategies for computing. They use their understanding of multi-

plication, and of factors and multiples, to tackle division problems with larger numbers as well. 9s become skillful in analyzing and interpreting data (sometimes gathered in support of Social Studies work), beginning to apply concepts of probability by determining the relative likelihood of different outcomes, and their work with fractions becomes more sophisticated. Geometry studies provide opportunities for hands-on exploration of real-world problems, and a way for students to incorporate their creativity into their math work. Throughout the year, students learn to articulate, present, and justify their solutions to problems through independent and group work. 9s math class routines, exercises, and games help to develop math skills and provide students with a real world context for their knowledge.

10s

Math in the 10s begins with a review of place value, rounding, estimation, and multi-digit addition and subtraction. Students explore number lines and a variety of number systems as they relate to the 10s’ study of the ancient world, review strategies for multiplication, and expand their knowledge of number properties, factors, and multiples. 10s create tables and graphs to represent the relationship between two variables in a variety of contexts, as well as develop understanding of data analysis by collecting, representing, describing, and interpreting numerical data. In their work with geometry and measurement, the 10s deepen their understanding of two-dimensional shapes, and determine the volume of three-dimensional shapes. The 10s have access to a variety of manipulatives and build strategies to support mathematical thinking and expression.

**ESSENTIAL CONCEPTS****Math, 8s - 10s****Operational relations****Foundational fact mastery****Purposeful use of traditional algorithms****Checking and explaining mathematical thinking****Complex problem-solving****Flexible use of strategies****Representing quantities in between whole numbers****Equivalence****Real world number patterns****Key Math Skills: 8s - 10s**

Explore problems in depth.

Compute with whole numbers with efficiency, fluency, and flexibility.

Apply familiar mathematical principles to unfamiliar situations.

Identify multiple ways to solve problems, and choose among different strategies.

Communicate mathematical ideas clearly and concisely.

Represent mathematical thinking using models, diagrams, and graphs.

Make connections among mathematical ideas.



SCIENCE

8s - 10s

Beginning in the 8s, students at Greene Hill participate in a lab-based Science class. Investigations are hands-on and exploratory, providing students with a solid foundation in content knowledge across the key fields of Earth, Life, and Physical Sciences. Students also acquire a strong facility with scientific process skills, learning how to conduct authentic research to make discoveries. An emphasis on stewardship and conservation is appropriate for this age group as children deepen their understanding of the interconnectedness of living things and the role of humankind.

Science class work begins by getting students acquainted with scientific thinking and concepts, defining the major fields, and then identifying important skills scientists have. Students practice making observations by isolating three of their senses (sight, hearing, and touch). They learn about the work of research scientists and review current research. They collect and organize data, making choices about the most appropriate way to represent their findings and looking for apparent patterns or relationships in data. As they get older, students take more ownership over the scientific inquiry process, pursuing topics and questions and constructing experiments more independently. Units of study in Science differ from year to year as students connect to all-school themes and studies and current events, and have opportunities to investigate interesting phenomena that spurs them to ask questions and make connections, developing deeper understandings of the world around them.

Science | 8s - 10s

Science work may take students on an exploration of the oceans of the world, starting with a curious event in 1992 when thousands of toy ducks and other plastic toys were lost overboard from a cargo ship crossing the Atlantic. Students examine ocean currents and their importance in the ocean ecosystem, and then dive more deeply into examining the ocean by studying various ecosystems: coral reefs, open ocean, estuaries, and tidal zones. Students will study the interactions between the living and nonliving entities of their ecosystem and create a hands-on project from what they have learned.

Physics studies may focus on forces in action as students plan and investigate phenomena in which objects stop and go. Students may explore and map energy transfers in toys to determine patterns and use the evidence they gather to explain how these transfers occur. They may investigate matter, using a variety of tools to identify whether materials are solids, liquids, or gases. Students investigate to provide evidence that gases have weight and are made of particles too small to be seen. The spring semester offers an ideal time to study patterns in life cycles and structures in living things. Students will have the opportunity to make observations of the natural world and plan experiments that will help them gain understanding of what living things need to survive.

Key Science Skills: 8s - 10s

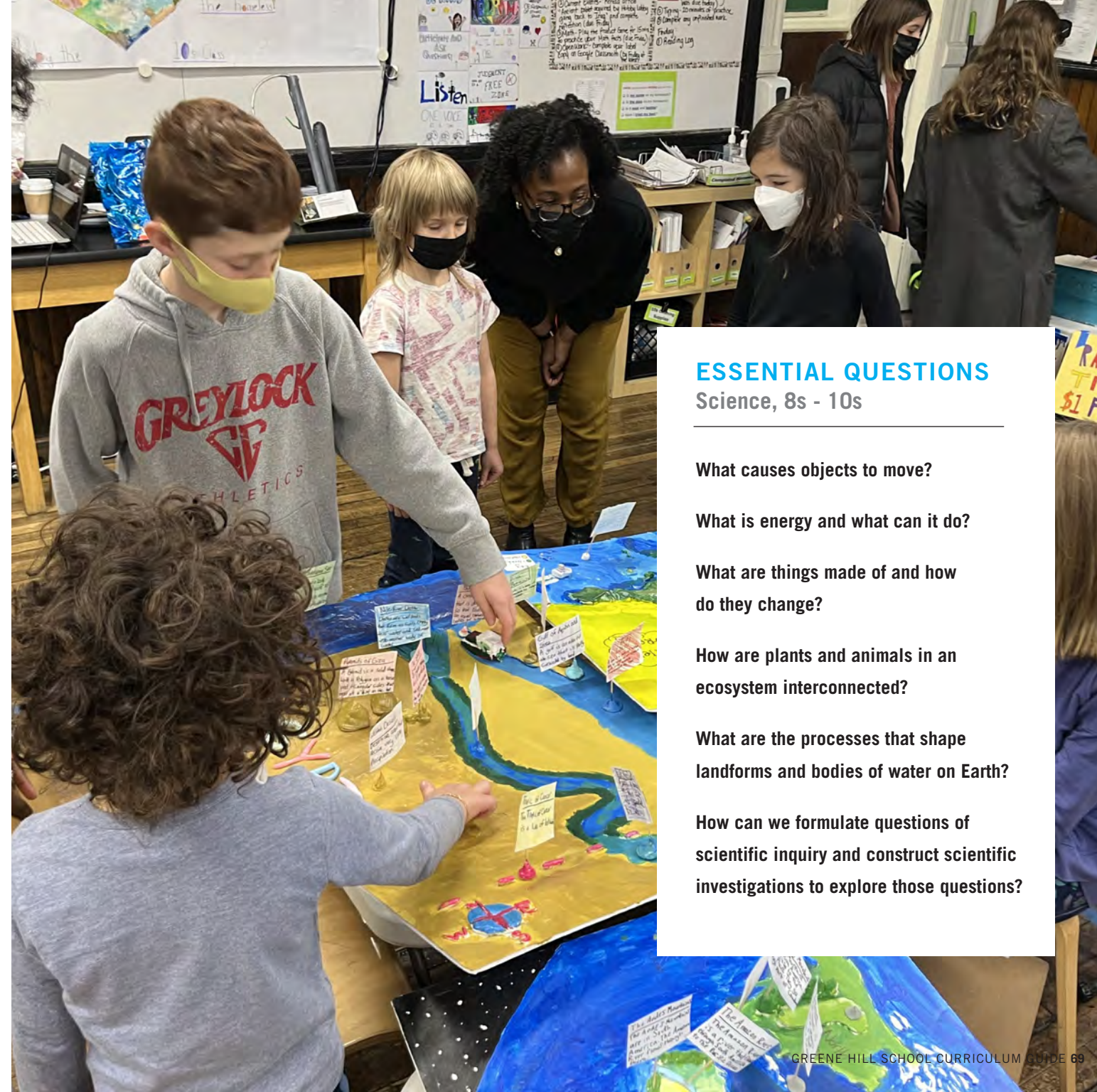
Describe and compare physical properties.

Describe the basic life functions and life cycles of plants and animals.

Develop reasonable hypotheses, and evaluate those hypotheses in light of data collected.

Employ tools to gather, analyze, and interpret data.

Formulate and communicate explanations using evidence. Identify dependent and independent variables.



ESSENTIAL QUESTIONS

Science, 8s - 10s

What causes objects to move?

What is energy and what can it do?

What are things made of and how do they change?

How are plants and animals in an ecosystem interconnected?

What are the processes that shape landforms and bodies of water on Earth?

How can we formulate questions of scientific inquiry and construct scientific investigations to explore those questions?

SPANISH

Lower School

Spanish instruction in the Lower School is designed to be fun and to encourage risk-taking for those learning a new language as well as knowledge of and respect for Spanish-speaking cultures and an awareness of the prevalence of the Spanish language in New York City. All Lower School classes have twice weekly Spanish lessons. Our youngest students learn basic vocabulary and expressions, focusing on greetings, colors, numbers, the alphabet, the calendar, animals, the body, and food, through art, games, songs, literature, puppetry, and other interactive activities. In the upper grades, students continue to increase their Spanish vocabulary and conversational skills, incorporating more sophisticated content such as prepositions, adjectives, common verbs, and some present tense verb conjugations. More and more, they learn to use Spanish across other areas of their curriculum: solving math problems in Spanish, telling time, learning vocabulary that relates to Community Work and Social Studies topics. As their conversational skills grow, they begin to practice their writing skills. Students also learn more about Spanish-speaking countries and cultures around the world.

HEALTH + WELLNESS 9s and 10s

Health education focuses on providing students with accurate information and clear communication skills around issues of human development, friendships and relationships, and other concerns. Greene Hill's Health and Wellness class gives students an opportunity to explore topics related to social, emotional, and physical health through activities, discussions, and shared readings. Students first discuss issues of emotional wellness, relationships, and problem-solving connected to their growing independence and maturity in the society and world we are living in. In the latter part of the course, students study the physical changes that individuals experience as they move towards adolescence and are encouraged to suggest specific topics for discussion that feel most relevant and meaningful to them, often including food and healthy eating habits, understandings of individual identity, and communication in relationships.



Transition from Lower School to Middle School

Throughout their time in the Lower School and particularly in the 10s, Greene Hill students and their families are offered opportunities to learn about the Greene Hill Middle School through visits and talks with middle school students, teachers, and administration. Work in the 10s class supports growing independence, ownership over learning, and increased autonomy and critical thinking skills that support students' transition to the Greene Hill Middle School where there is a departmentalized sixth grade working with a larger range of teachers.



MIDDLE SCHOOL ACADEMIC OVERVIEW

Greene Hill Middle School students are empowered and motivated to investigate their own areas of interest, work collaboratively, and complete complex projects. Students think creatively and with flexibility as they consider difficult questions and take ownership of their own learning. In sixth through eighth grade, core subjects are departmentalized with different teachers for math, humanities, science, and Spanish.

To address both academic and social-emotional needs, students are part of small advisory groups which meet weekly to build community and discuss adolescent issues. Middle School faculty and staff meet one-on-one with their advisees on a regular basis, using the time as an opportunity to set goals, check in on social-emotional well-being and enabling students to have a close connection with a trusted adult.

Students leave Greene Hill with a love of learning and a clear sense of themselves as important members of their community as they embark upon their high school experience. Our rich academic curriculum, emphasis on critical thinking, and student-centered approach support students in gaining entry into the high school of their choice.



HUMANITIES

Middle School

Our humanities curriculum supports the development of the traditional skills of critical reading, persuasive writing, analytical thinking, and research, within the context of learning about the past. These skills help students analyze situations through a historical lens. Humanities classes in the Middle School include content and skills from both literacy and history based on the premise that students become more engaged readers and more prolific writers if they are deeply immersed in their curricular content. History and social studies continue to be at the core of the curriculum as students engage in in-depth investigations of cultures from around the world. One goal of the Middle School humanities curriculum is to tie together contemporaneously occurring events around the world. In the Middle School, students study global and U.S. history through the lens of power and justice. Overarching questions include: Whose story is being told? How does conflict shape history? What are the roles and responsibilities of being a member of civil society? How has technology changed history?

Social Studies | Middle School

6th Grade: A Global Perspective on the Middle Ages

Following upon the study of ancient civilizations in the 10s, sixth graders delve into the Middle Ages, learning about European, Middle Eastern, African, Asian, and North American civilizations from the 5th to 15th centuries. For 6th grade, a key theme of the year is perspective, which is investigated as students learn about world history around the year 1000 CE. Classes look at ways in which aspects of modern society such as legal systems and mathematics stem from events and innovations that took place more than 1,000 years ago. By focusing on the theme of historical perspective and bias throughout the year, students learn to analyze history from a critical lens, and look for the perspective of the other, marginalized groups whose stories are not told. This critical inquiry fosters the growth of empathy and desire to create a more fair and just world.

7th Grade: The American Experiment with Utopia

Seventh graders explore the concepts of Utopia/Dystopia as they consider the founding of the United States. They read dystopian fiction and think about what it means to be a member of society. Students study the Colonial Era and the American Revolution, previously explored in the Lower School, with a deeper context for the colonists' desire for independence and change at the same time analyzing parallels to dystopian literature. As part of this exploration of the past, students look into the origins of race and power and the lasting effects of hierarchical structure put in place in the 17th and 18th Centuries. Students analyze patterns in immigration throughout history and make connections both to access to power as well current events. Students deepen their abilities to track themes in literature, write analytically, and present their ideas publicly.

8th Grade: Identity, Citizenship, Democracy

Eighth graders extend the study of American history by tracing the path from the Civil War to the Civil Rights Movement. This tumultuous period invites examination of issues of equality and justice, with attention to legal, military, social, and moral drivers of change. Complicated topics such as slavery, voting rights, marriage rights, privacy, and freedom of thought and speech are an important part of students' exploration of this era. Students make connections between challenges Americans faced in the past and those they continue to contend with today. The eighth grade Humanities themes of citizenship, identity, and democracy incorporate an emphasis on activism, as students discuss oppression, multiculturalism, and what it means to be a social change maker. Teachers aim to inspire students to get involved in more activism outside of school by learning about different types of activist work and considering where their own passions may take them.

Key Social Studies Skills: Middle School

Consider multiple perspectives.

Locate, interpret and integrate a wide variety of primary sources.

Analyze the interrelationships of a civilization's components, e.g. government, religion, trade.

Ask probing questions about history that spark conversation.

Process information; take notes, outline, summarize. Develop sophisticated arguments; support ideas with logical reasoning and evidence both orally and in writing.

Draw connections between historical and current events.

Analyze the origins, authenticity and validity of information found in electronic resources.

ESSENTIAL QUESTIONS Social Studies, Middle School

What are the roles, rights, and responsibilities of people in society?

What are the threads of continuity and change throughout history?

How do the beliefs and values of a diverse culture affect individuals and society?

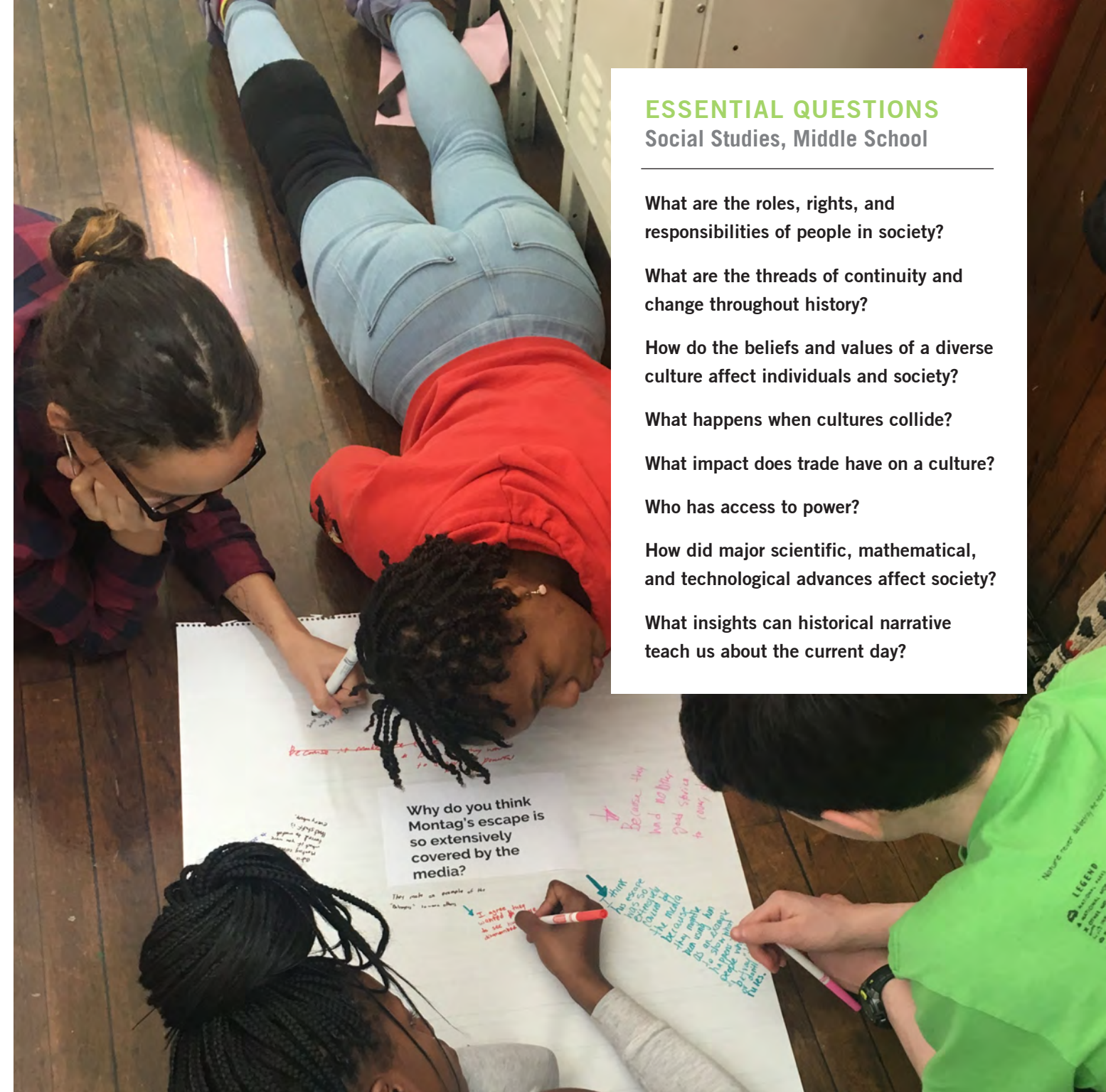
What happens when cultures collide?

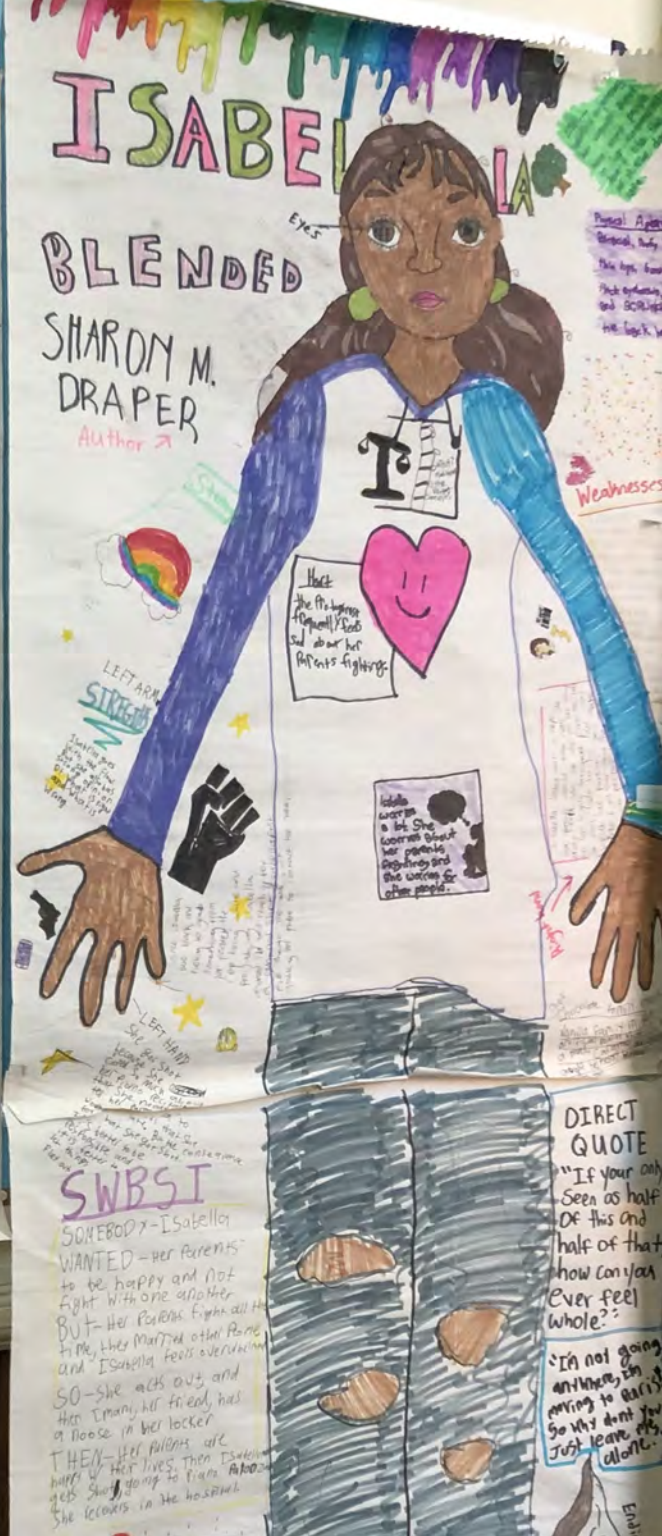
What impact does trade have on a culture?

Who has access to power?

How did major scientific, mathematical, and technological advances affect society?

What insights can historical narrative teach us about the current day?





LITERACY

Middle School

Reading and writing are embedded as part of our interdisciplinary humanities program in the Middle School. Teachers provide many opportunities for students to engage in analytical reading and model strategies for reading comprehension and analysis. Students express themselves creatively within the social studies content and beyond it. Throughout the sixth through eighth grade years, students write poetry, personal narratives, literary essays, research papers, and short stories. The emphasis of the curriculum is on encouraging middle schoolers to take ownership over all aspects of the writing process. Vocabulary development and the rules of spelling and grammar are incorporated into lessons; students are encouraged to recognize the importance of self-editing. Students read fiction and nonfiction independently and in small groups, and share their thinking about reading with their peers.

Literacy | Middle School

6th grade

Sixth graders examine character development across a wide range of literature. They compare and contrast themes in different genres such as poetry and short stories. Students expand their ability to converse about what they are reading through regular discussions and small book groups. Some of the novels that students may read: *Amina's Voice*, *The Kite Rider*, *Inquisitor's Tale*, and *Crispin*. Students work in genres such as essays and narratives, bringing new craft techniques and critical thinking skills to these forms. In addition, they make connections between their own family stories and those they are learning about.

7th grade

In 7th grade students are introduced to the works of William Shakespeare and have the opportunity to enact scenes from his plays. They examine closely the use of language and experiment with writing in a similar style. Some other books that students may read: *The Hate You Give*, *Chains*, and *The Giver*. Their writing includes fiction as well as persuasive and informational pieces that provide students with a chance to do more in-depth integration of research-based evidence.

8th grade

Eighth graders are able to employ a variety of literary techniques such as metaphors, variation in point of view, and comparison of themes across texts in their writing. They analyze complex texts and think about abstract themes in literature such as: how social norms affect character's choices, or the ways in which characters find happiness in the face of adversity. They incorporate this analysis into both written and oral presentations. Some of the books students may read: *The Diary of Anne Frank*, *Animal Farm*, *To Kill a Mockingbird*, and *Maus*.

Key Literacy Skills: Middle School

Analyze an author's point of view.

Compare and contrast texts, themes, genres, points of view.

Engage in collaborative conversations about texts by building on others' ideas.

Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.

Develop logical arguments and support them with relevant evidence.

Demonstrate command of the conventions of English in writing and speaking.

ESSENTIAL QUESTIONS

Literacy, Middle School

What are ways in which authors create characters who change over time?

What strategies can authors use to create a sense of identity for their characters?

How does a text reflect a set of cultural values?

How does the text rely upon or break cultural assumptions?

How can you use writing techniques to be persuasive?





MATH

Middle School

Our Middle School uses a constructivist Math program, which is a natural extension of the constructivist curriculum from the Lower School. This program allows students to build their knowledge of mathematics through exploration of real-world problems, engaging math activities, and opportunities to construct their own understandings of mathematical concepts. The focus is not on rote memorization of algorithms, but rather on determining strategies and finding different routes to the solution of a problem. We encourage students to reason abstractly, persevere in problem solving, and explain their solutions clearly. Math is another lens through which to see the world as students explore questions that address authentic applications such as economics, statistics, and architecture as well as societal inequities and scientific analysis.

THE FOUR MATH STRANDS THAT ARE TAUGHT THROUGHOUT THE MIDDLE SCHOOL YEARS ARE:

| | |
|--------------------------|-------------------------------|
| Number and Operation | Data Analysis and Probability |
| Geometry and Measurement | Algebra and Functions |

Each year builds upon what was learned in the prior year with the concepts and skills deepening as students progress. Teachers emphasize a growth mindset and encourage all students to consider themselves able to problem solve and persevere through complex problems.

Math | Middle School

6th Grade

Sixth graders explore the properties of numbers and the variety of ways that numerical comparisons can be made. They begin the year focusing on whole number properties, understanding prime factorization and the use of order of operations. Students study ratios, rational numbers, and equivalence. They deepen their familiarity with fractions and expand their ability to perform operations with fractions, decimals, and percents through working with number lines, examining rate tables, and making comparisons. Later in the year, sixth graders study geometry as they work with area, perimeter, and volume of two-dimensional and three-dimensional shapes.

7th Grade

Seventh graders spend the year analyzing concepts that are foundational for algebra, beginning with a geometry strand in which they use logical reasoning to analyze geometric attributes. They develop their understanding of similarity, congruence, and proportional relationships. Students’ grasp of proportional geometry transitions flexibly to grasping proportions, rates, ratios, and linear growth. Students embark on a study of integers and rational numbers, looking at order of operations and mathematical properties as a way to make computational sequences clear. They develop an understanding of the relationship between positive and negative numbers. Later in the year, seventh graders study probability through the creation of real-world activities that have fair and unfair outcomes.

8th Grade

Eighth graders spend the year developing their understanding of algebraic concepts, with units exploring linear, inverse, exponential, and quadratic functions. They learn to identify and represent each type of function in graphs, tables, and equations. Real-world connections are explored for each type of function, and students learn to understand the patterns in the world around them. Building upon their 6th and 7th grade exposure to variables, 8th graders look at the characteristics of quadratic relationships as they continue to explore algebraic concepts. Students who are interested in moving into advanced mathematics in high school are supported in preparation for taking the Algebra 1 Regents exam administered by NYC public high schools.

Key Math Skills:
Middle School

Analyze problems and persevere in solving them.

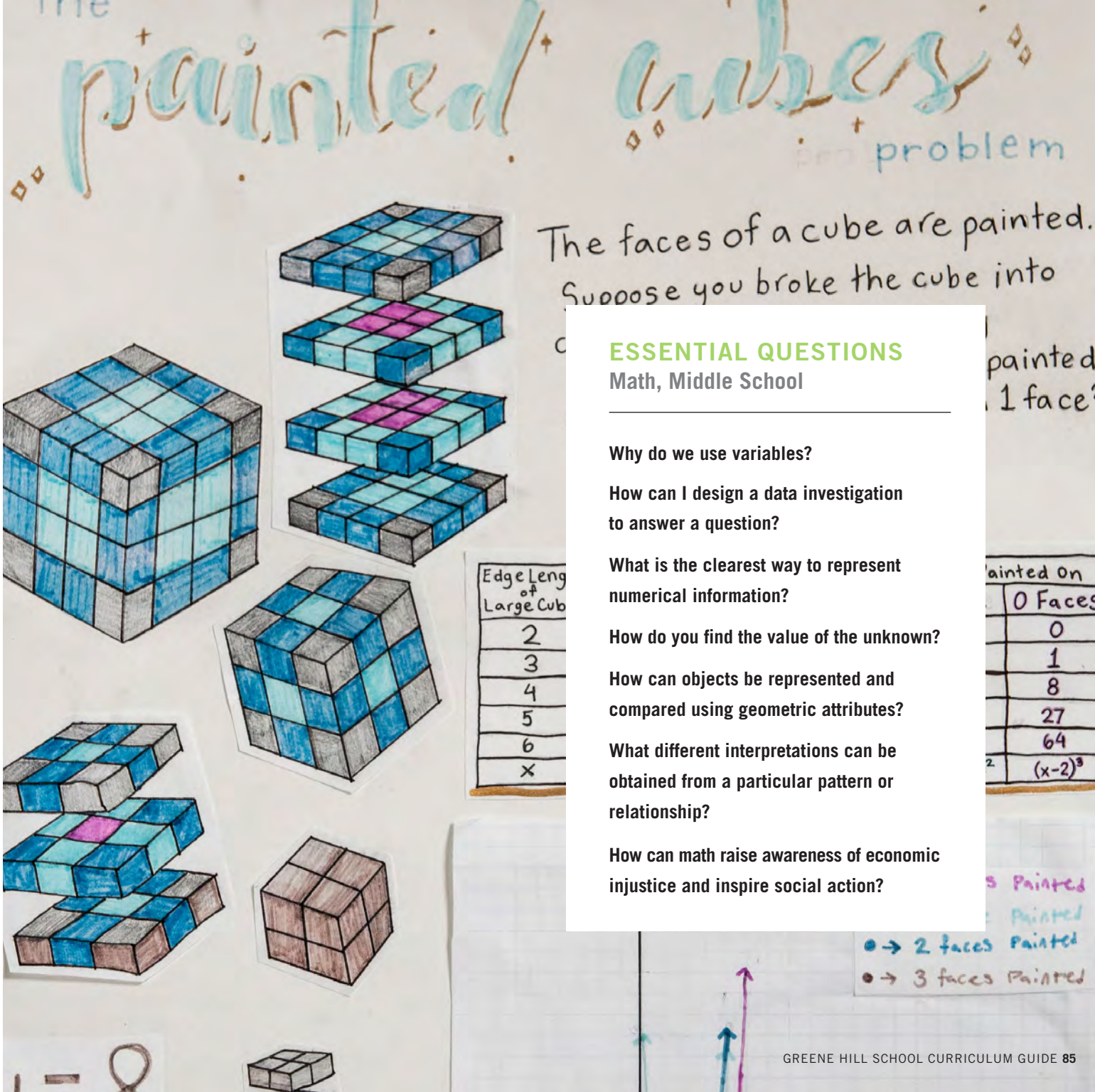
Reason abstractly and quantitatively.

Construct viable arguments and critique the reasoning of others.

Use a mathematical framework to analyze a situation or pose a problem.

Employ appropriate tools strategically.

Attend to precision.



ESSENTIAL QUESTIONS
Math, Middle School

Why do we use variables?

How can I design a data investigation to answer a question?

What is the clearest way to represent numerical information?

How do you find the value of the unknown?

How can objects be represented and compared using geometric attributes?

What different interpretations can be obtained from a particular pattern or relationship?

How can math raise awareness of economic injustice and inspire social action?



SCIENCE

Middle School

Middle School Science is based on in-depth investigations of the natural world. Students participate in inquiry-based units of study where they ask questions, make hypotheses, gather evidence, and share their findings. These investigations create a foundation of science knowledge that students will build upon in high school and beyond. Students explore topics within the core fields of earth, life, physical and chemical sciences, and engage in activities that spark curiosity and promote their interests. Taking on authentic problems, students will interpret data and use evidence to support their scientific conclusions. By the time students leave Middle School, they will be able to create and conduct scientific experiments independently, including analyzing their data and presenting their discoveries.

Science | Middle School

6th grade

Sixth graders start the year by reviewing the scientific method in order to understand all components including making observations, asking questions, forming hypotheses, making predictions, testing predictions and drawing conclusions. As part of a physics unit, students explore light, its movement, its effect on matter, and how it is perceived by the human eye. During a life science unit students take a broader look at living things, including investigating natural selection and the impact of environmental change on organisms. They also explore topics in chemistry, studying particles, elements, atoms, and molecules.

7th grade

Seventh graders continue learning chemistry through an investigation of the properties of matter and chemical reactions. Students complete a number of investigations as they further their understanding of substances and properties, and explain what happens when substances interact (i.e., chemical reactions). In that process, they also explore the core idea of the conservation of mass and the concept of systems. A study of life science explores the components that are essential to all life. Students examine cells, organ systems, and their functions to understand how human bodies work and change. As they delve into physics, students may create models to aid in their understanding of energy conversion and transfer.

8th grade

Eighth graders learn about genetics and inherited traits as part of an investigation into life science. They have the opportunity to put their learning into action as they venture out to Greene Hill School's oyster cage in the East River where they measure and track organisms as part of the Billion Oyster Project. During a unit on earth science, they examine weather patterns and develop an understanding of the global climate. Later in the year, students delve into an investigation of force, motion, and friction. Students hone their abilities to perform science-based research making connections to math through graphing data and developing evidence-based analyses.

Key Science Skills:
Middle School

Ask questions and define problems.

Plan and carry out investigations by collecting data.

Analyze and interpret data to provide evidence.

Develop and use models to describe, test, and predict.

Gather, read, assess, and synthesize information from multiple appropriate sources.

Develop scientific explanations based on valid and reliable evidence.

Construct an oral or written argument supported by empirical evidence and scientific reasoning.

Clearly communicate scientific ideas both visually and in written form.

ESSENTIAL QUESTIONS
Science, Middle School

What causes changes in weather?

What do all organisms need to live?

How does the human body function?

What can affect the traits of an organism?

What is energy?

How do the laws of physics affect movement?

What ethical issues arise in the study of science?

SPANISH

Middle School

Our language program is geared toward increasing tools for interpersonal communication and fostering a global perspective. It addresses the 5Cs: communication, culture, connections between disciplines, comparisons between languages, and communities of language speakers. Our language program focuses on Spanish because it is a language that students encounter in daily life in New York City. Middle School Spanish becomes more immersive over the course of the three years. We expect students to be able to engage as fully as possible with the people they encounter; our aim is for students to be proficient Spanish speakers by the end of Middle School.

Spanish I Middle School

6th grade

Spanish in sixth grade promotes a solid foundation as well as a strong connection between the academic aspect of learning a second language and real-life language usage. The emphasis is on speaking, comprehension, and building vocabulary. Through hands-on projects, study of Spanish-speaking countries, and skits, students learn about both cultural components and grammatical structures. For students who have had previous Spanish instruction, classes will be more intensive with a focus on conversation.

7th grade

In seventh grade, goals of the Spanish program include becoming more fluent in conversation, understanding grammatical forms, and improving students' ability to write. Students learn a variety of verb tenses and conjugations in order to increase their ability to communicate effectively. They delve more deeply into stem-changing verbs and learn how to speak about comparisons. The seventh grade curriculum is designed to align with students' current level of Spanish proficiency.

8th grade

In addition to strengthening their conversational skills, eighth grade students learn to present information effectively both orally and in writing. As part of their growing ability to think abstractly as well as their increased knowledge of grammar and vocabulary, eighth graders have opportunities to study activism and social justice issues taking place in Spanish-speaking countries around the world. As part of their grammar study, eighth graders expand their ability to employ a variety of verb tenses with a focus on irregular verbs. Students who are interested in more advanced language learning in high school prepare for placement exams.

Key Spanish Skills: Middle School

Engage in conversation.
Understand and interpret written and spoken language.

Present information, concepts, and ideas orally and in writing.

Understand cultural differences between native speakers of the language and speakers of American English.

ESSENTIAL QUESTIONS Spanish, Middle School

What are the key components necessary to be able to communicate in another language?

What cultural variations exist in the language?

What does language tell us about culture?

What can we learn about our own language by studying a second language?

How do we understand our place in the world and make global connections?

How does studying a language other than English influence our world perspective?



ADVISORY

Middle School

Each student is a member of a small advisory group that provides ongoing academic and social support. Advisory groups ensure that all students are connected to one of the adults in the community as well as to a smaller subset of their peers. We address the developmental needs of each student by assisting them in being well-organized, comfortable with routine study practices, responsible for their own work, and respectful in their social interactions. Advisory is also a place where we attend to the needs of the ever-changing social sphere of young adolescents. Students meet with their advisory once a week.

INDEPENDENT WORK

Middle School

Middle school students have many opportunities to follow their interests and delve into independent projects across the curriculum. Examples may include research projects on civilizations during the Middle Ages, current events presentations on topics of interest, or a multimedia presentation on a civil justice issue. Students also explore areas outside of the curriculum through weekly independent work time as well as electives.

HEALTH + WELLNESS

Middle School

Our health curriculum addresses the physical, social, and emotional stages of early adolescence. The focus is on providing students with clear information regarding adolescent development and answering questions they may have. Students discuss their changing bodies, interpersonal relationships, and issues of self-identity.



HIGH SCHOOL PREPARATION

Students graduating from Greene Hill are prepared to attend any of the broad range of excellent NYC high schools, both independent and public. Our commitment to instilling critical-thinking enables our students to think deeply, communicate effectively, and transition to high school smoothly. In seventh grade, we offer a formalized high school preparation program so that students are ready to take any necessary standardized tests in eighth grade. In addition, we support students in their collection of any portfolio materials they may need. Our small size enables us to support families in the high school admissions process and advocate on behalf of our graduates with high school admissions officers. Our graduates attend a wide range of selective public, independent, boarding, parochial and charter schools.