



MIDDLE SCHOOL

SPRINGSIDE CHESTNUT HILL ACADEMY

CURRICULUM GUIDE

5th-8th Grade

TABLE OF CONTENTS

English	1
History	3
Language.....	5
Science	6
Mathematics	8
Arts and New Media	10
Center for Entrepreneurial Leadership.....	15
Activities	19
Athletics.....	20



ENGLISH

The ability to read critically, to interpret figures of speech and characters' motivations, to analyze narrative and poetic structures, to speak with conviction, to listen with empathy, and to write clearly and confidently are not only crucial to literature studies but also invaluable skills for understanding this ever-changing global community. Our English program is skill based but also fosters a lifelong love of reading whose foundation is an investigative, curious spirit and a desire at every turn to respond with the student's own observations, beliefs, and analysis. SCH students graduate with the critical-thinking tools, writing abilities, and questing spirit that will make them confident to face whatever the world places in their paths.

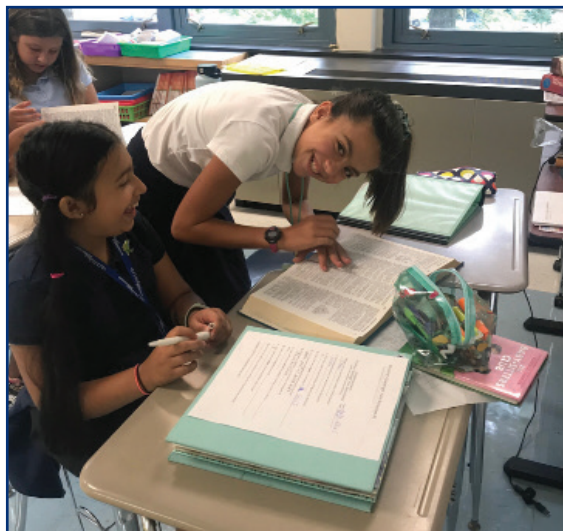
The Middle School English program reinforces and builds upon our students' reading fluency and comprehension, develops their interpretive reading and analytical writing abilities, and expands their grammar and syntax mastery. The books we read are chosen for their literary quality, diversity of voices, and appeal to Middle School students. Common books between the boys' and girls' curriculum include classics like *A Midsummer Night's Dream*, *Number the Stars*, and *The Giver*. More contemporary tales offer students windows into other worlds and experiences, including texts such as *A Long Walk to Water* and *I'll Give You the Sun* in the boys' curriculum and *Incantation* and *Brown Girl Dreaming* in the girls'. Writing assignments embrace expository, poetic, narrative, and analytic writing forms. Our students leave Middle School as budding analytical thinkers, critical readers, and dynamic writers with the confidence and toolbox to help them thrive in Upper School English.

5th grade

In 5th grade English, students across both divisions learn to become more effective readers, writers, and speakers and develop the ability to see things from different points of view. Because of the unique skills and perspectives all students bring to the classroom, students learn together how to enjoy literature and to see how books connect to their own lives. Students ask, "What can I learn from reading this book?" and "How can we best share our ideas with others?" Grammar and vocabulary study are integral course components.

6th grade

In 6th grade English, students pursue the goals of thinking, writing, and speaking effectively and critically, reading with greater competency and enjoyment, becoming conversant with the terminology of literary analysis, understanding the different qualities of the literary genres, incorporating good grammar and a varied vocabulary into one's writing and speech, and taking intellectual risks. Essential questions pursued during the year include "Why do we read and write literature?" "What makes a work of literature 'great'?" and "What makes a place feel like home?"



7th grade

In 7th grade English, students continue to pursue the goals of their previous year but with greater depth and rigor. In addition to the questions of why we read and write literature and how and why authors create their stories, students will ask, “Who am I, and how do I show myself to the world?” Specifically, this class focuses on the various aspects that make up a person’s identity and how that identity affects our interactions with the world around us. Through historical and contemporary texts, students will trace the evolution of characters’ identities and how authors use language to communicate feelings and promote societal change.

8th grade

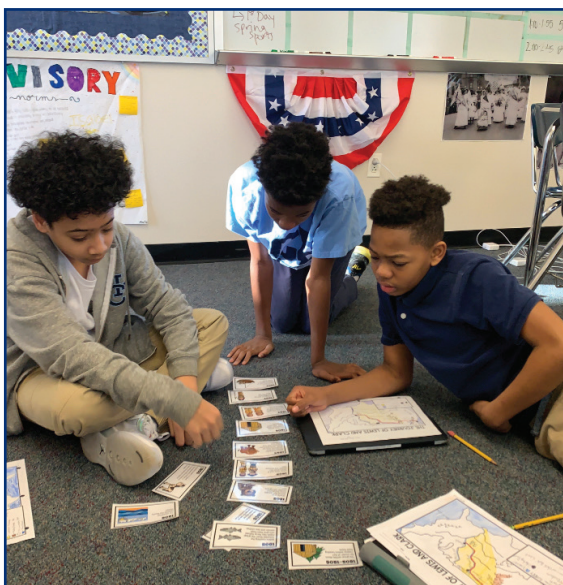
In 8th grade, students consider the themes of dreaming and the power of artistic expression in constructing self-identity. The characters encountered in this course are compelled by powerful social forces and must make bold choices about who they want to be in the world. Examining a wide range of literary forms—including memoirs, novels, lyrical poetry, short stories, and drama—students critically interrogate the ways authors explore class, race, gender, sexuality, family make-up, and other aspects of identity. They also get a chance to unpack these ideas creatively as writers in several literary forms. Throughout the year, much attention is paid to the historical context of each piece, how an author’s perspective is revealed by their use of language, and how divergent experiences conveyed through art can reveal a shared humanity that connects to our lives today.



HISTORY

In today's dynamic global environment, a strong knowledge of history and the ability to think critically is an essential part of how and what we learn. Middle School students study history in inquiry-driven classrooms that promote experiential learning and develop historical empathy. Understanding the perspective of historical figures and their diverse experiences allows students to reflect upon their own lives to understand more fully the world and cultures that shape them.

In Middle School, the history curriculum is tailored to the passion, curiosity, imagination, and energy of our students. In 5th and 6th grades, students examine the geography and history of the ancient world, exploring themes with contemporary relevance. In 7th and 8th grades, they participate in a two-year study of American history using the resources of Philadelphia to engage in real-life, hands-on learning. Students deepen their ability to analyze and create a wide variety of traditional and digital technologies, write in many formats, and present and speak publicly.



Our curriculum emphasizes geography, reading, writing, and analysis. Studying history is not just memorizing information about the past; it is a way of thinking and learning. Students will apply and demonstrate knowledge and understanding through a variety of activities and assessments.

5th Grade

History in 5th grade begins with the dawn of human civilization. We travel through time and place to explore a wide variety of communities, and in doing so, students learn to see their own lives from a new perspective. Students in this class create, critique, and collaborate, as well as strengthen their reading, writing, study, and communication skills. We bring in a range of technologies to showcase what has been accomplished. This course kicks off with a study of geography, historical timelines, and prehistory. Then we explore the government, economy, religion, military, and society (GERMS) of Mesopotamia, ancient Egypt, ancient India, and ancient China. Analytical essay writing prompts and discussions of current events in these modern countries and cultures are interwoven into the units. Some overarching themes for this beginning year in the study of history are developing historical empathy, perspective taking, and open mindedness.

6th Grade

In 6th grade, students continue developing their analytical writing, communication, critical reading, note-taking, and study skills, while studying a variety of important civilizations throughout time. Using a blend of primary and secondary sources, students learn to inquire into, organize, and explain events that have happened. In the first unit on ancient Greece, we explore their beliefs, government, and lasting impacts on philosophy and culture. This

gender, and class. Students will consider multiple narratives and diverse perspectives through a variety of primary and secondary source texts, documentaries, and images. We'll also connect these stories to the present to better understand our country today.

8th Grade

This class looks at American history from 1865 to the present through multiple narratives. Just as varied as the voices we will study are the ways we study them. We will explore the ways people have experienced and contributed to our country. Race, gender, and class will be three of our lenses as we examine how power and injustice have shaped the U.S. We'll also connect these stories to the present to better understand our country today. Students will consider multiple narratives and diverse perspectives through a variety of primary and secondary source texts, documentaries, and images.



LANGUAGE

The language program is shaped by two important beliefs: the first is that it is essential for our students, in an ever more interconnected world, to develop an awareness of and appreciation for cultures other than their own. The second is that they can accomplish this goal more thoroughly and meaningfully by competently communicating in their target language.

5th grade

In 5th grade, students take Chinese.

6th-8th

In 6th grade, students may either continue Chinese or begin their journey in French, Spanish, or Latin. Students entering the Middle School in 7th or 8th grade who do not have prior language exposure will be placed into Introduction to Language and will then have the opportunity to pursue a specific language in 9th grade. New 7th and 8th grade students who already have language exposure in French, Spanish, Latin, or Chinese have the opportunity to be placed into the respective language.



SCIENCE

The science curriculum offers students in every grade challenging and exciting learning experiences that help them develop the skills of scientific inquiry and an understanding of the laws, systems, and structures that define our natural world. Classes provide students with opportunities to use the most up-to-date equipment and technologies as they ask questions, design experiments, explore, collaborate, and become efficient and effective problem solvers.

Our interdisciplinary curriculum integrates engineering principles in meaningful and relevant ways and asks students to quantify their work using appropriate mathematical and statistical tools and to use the arts and new media to model their work or creatively and richly display what they have synthesized.

Teachers are guided by the Next Generation Science Standards, PA Science Standards, the National Science Teachers' Association, and local curricular materials. In addition, all divisions make extensive use of the surrounding Wissahickon ecosystem, as well as the school's work in sustainability, as part of our dynamic, real-world curriculum.

Our project-based approach to learning challenges students to design their own investigations by forming hypotheses, investigating in the lab or field, quantifying and analyzing data, and drawing conclusions. These projects involve them in meaningful, open-ended, inquiry-based problem solving from designing and constructing solar-powered cars, to engineering earthquake-resistant towers. In 7th and 8th grades, students have an opportunity to gain greater exposure for their research projects by entering outside competitions such as the Christopher Columbus Awards and the Junior Solar Sprint at the Franklin Institute. Through these experiences they strengthen their scien-



tific skills and begin to think of themselves as scientists and engineers.

5th Grade

In 5th grade science, students explore the relationships between the basic sciences of chemistry, physics, and biology. During the ecology unit, students investigate the world around them and improve their problem-solving abilities. Highlights include conducting fieldwork in the Wissahickon to study seasonal changes, culminating in a behavioral study of insects where they learn the process of experimental design as part of the scientific method. During their water chemistry unit, students conduct lab investigations that explore pH and solubility and explore drinking water and wastewater treatment processes. During their introduction to Newtonian physics, students conduct investigations to learn about Newton's second law. They use their knowledge of physics principles to design and build miniature golf course holes that they try out with Lower School students. The class focuses not only on science content and skills, but also on helping with overall studentship skills and science reading literacy.

6th Grade - Earth Science

In 6th grade earth sciences, students learn the basic concepts of astronomy, meteorology, oceanography, and geology through hands-on activities, experiments, demonstrations, and individual and class projects. During our astronomy unit, students design and build a model space probe capable of extraterrestrial exploration. During our meteorology unit, students use weather data to forecast each day's weather. Geology topics include minerals and the rock cycle, earthquakes (including the design and construction of earthquake resistant towers), and volcanoes (including a Google earth-based analysis of the "ring of fire"). Hikes around the school and in the surrounding Wissahickon enhance students' knowledge of the area's rich geological history. Other highlights of the course include an evening star party presented by Astronomy to Go.

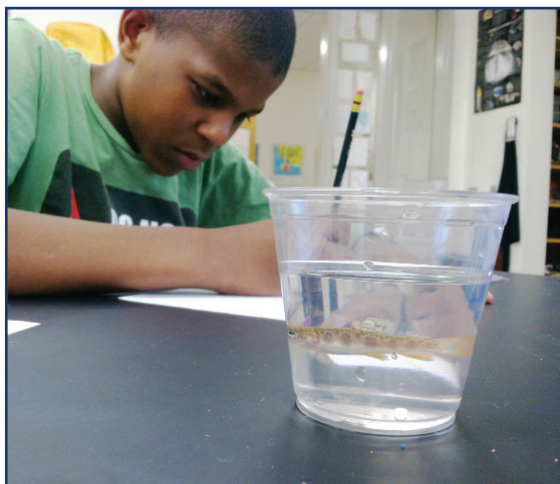
7th Grade - Life Science

In this course, 7th graders study the characteristics that unify living things. They begin by investigating cells, the basic units of life, and explore the interconnectedness and uniqueness of organisms by looking at adaptations, how species have changed over time, and how living things are influenced by the environment. They also investigate genes, chromosomes, and DNA, and use Punnett squares to investigate genetic inheritance. They extract DNA and use gel electrophoresis to separate and analyze DNA fragments. With this foundation in cell biology, genetics, and evolution, the 7th graders go on to study human anatomy and physiology. Several biophysics units highlight the interdisciplinary nature of science. For example, when studying the eye, students conduct optics investigations to understand the physics of light waves. Similarly, the unit on the ear and hearing integrates labs involving the physics of sound waves. Highlights include an original team experimental research project, where students

address a local concern related to the immune system, health, and disease transmission, then design and investigate a solution to the problem and present their work to their peers.

8th Grade - Physical Science

This course provides students with a basic understanding of the properties of matter, the various types of energy and their uses, and the effects of energy use on their own lives and on the environment. Students learn to explain and quantify everyday phenomena in terms of the scientific principles learned in class. They design their own experiments in order to solve a variety of problems, many of which are open ended, allowing individual creativity to shape their solutions. When studying heat, the 8th graders design and build their own model energy-efficient house. Other topics covered include atomic theory, home heating, and electronic circuit design. Students also participate in an extended interdisciplinary unit involving solar car design and construction that concludes with participation in the SCH Solar Sprint competition. At the end of the year, the 8th graders learn about alternative energy sources, including researching and designing infographics related to the "story of energy use."



MATHEMATICS

The mathematics program at SCH aims to develop students' problem-solving skills and logical thinking. At all ages, this is accomplished by applying standard skills and concepts to real-life applications as much as possible. We want our students to be willing and eager to tackle a new problem, regardless of the problem's challenge or ease.

Middle School math emphasizes process over results as it exposes students to the fundamentals of algebraic thinking. While reinforcing basic arithmetic skills with fractions, decimals, and percents, in 5th grade we use variables in mathematical expressions and equations, culminating in 8th grade with formal algebra and the solving of systems of equations as well as quadratic equations. We emphasize multistep problems to teach the importance of doing work on paper rather than in your head. Algebraic thinking is taught in the context of real-world problems which helps students grasp the relevance of what they are learning. Middle School students gain confidence and expertise in tackling multistep problems and translating words into mathematical expressions while learning good processes along the way.

5th Grade

Our 5th grade math is all about strengthening and solidifying students' number sense and problem-solving skills. Students engage with, and grow their understanding of, whole numbers, fractions, decimals, percents, place value, and the operations that relate them to one another. We push students to reach procedural fluency while strengthening their conceptual understanding of these numbers and relationships via visual representations. This is a key emphasis of our Math in Focus

curriculum. We also grow students' adaptive reasoning and strategic competence abilities by asking them to analyze, to strategize, and to solve real-world problems and situations involving these kinds of numbers, operations, and relationships.

6th Grade

Our 6th grade math course builds upon the number sense and relationships solidified during 5th grade. We take what students can do with whole numbers, fractions, decimals, and percents, and begin to include new kinds of numbers and operations such as integers, ratios, divisibility, factors, multiples, and proportions. We also push students toward fluency in simplifying larger, longer, more complex numerical expressions, and towards using their current math knowledge within the realm of descriptive statistics, basic probability, and important tools/themes of geometry. We ask students to work with data sets of non-whole numbers, to compute percentages and probabilities for real-world decision making, and to apply proportional reasoning to similar geometric figures. Overarching learned skills are mathematical communication, organizing mathematical work, making a problem-solving plan, and transferring their skills to non-routine problems.

7th Grade

Unlike in 5th and 6th grade math, in 7th grade students begin to use their knowledge of operational relationships to work with known and unknown quantities. They do so by writing and solving simple equations and inequalities. Real-world applications and percent change are re-examined from an algebra perspective. Students are asked to analyze, model, and solve such problems via algebraic expressions and solving multistep equations. We extend this application of algebra while circling back to



6th grade geometry skills. Students re-explore angle and line relationships from an algebra perspective, and then work with triangle, quadrilateral, polygon, circle, and area/volume properties in the same way. It is within this algebraic study of geometry that students are introduced to linear functions and the ability to graph within a coordinate plane.

8th Grade

The goals for students in 8th grade math are: 1) to complete a typical Algebra I course, and 2) to prepare for Upper School Geometry and Algebra II. During this year, we take their knowledge of algebraic expressions and linear equations and extend it to include two-variable equations, exponent properties, and solving multi-step linear inequalities. While more graphing is done with linear functions, we graph linear inequalities while discussing inclusion/exclu-

sion of values for a solution. It is also during this year that we begin to introduce non-linear algebraic relationships, such as polynomial and radical functions. It is within the learning of these topics that we loop back and draw upon students' 6th grade understanding of exponents and factors to support their ability to work with exponents of variables and with factoring algebraic expressions. Throughout this year, in preparation for transition to the Upper School, we expect and foster students' self-advocacy and self-reflection skills while preparing them to work with multiple representations of algebra and with solving non-routine problems.

ARTS AND NEW MEDIA

Fueled by the passions of our students, SCH Academy's Arts and New Media Department provides an extensive and ever-growing list of creative opportunities throughout all divisions. Beginning with Pre-K, students are taught skills woven around artistic principles, concepts, and habits that grow in complexity from year to year.

From our college-level ceramics facility to our Recital Hall that is home to many vocal and instrumental concerts, we take pride in our community of creators. With SCH's faculty of active artists, we hope to enable our students to follow their interests without boundaries and extend their creative abilities into the newest dimensions of arts expression.

To best set up our students for future success, SCH's new media curriculum consistently looks towards progressive, emerging technologies. These courses and afterschool programs include video production, music production, creative coding, design and fabrication, 3D design, interactive design, design and fabrication, photography, animation, and more. We're also proud to actively engage in STEAM-based projects as we believe these skills are a great bridge to other disciplines and our internationally recognized Center for Entrepreneurial Leadership (CEL) program.

VISUAL ARTS

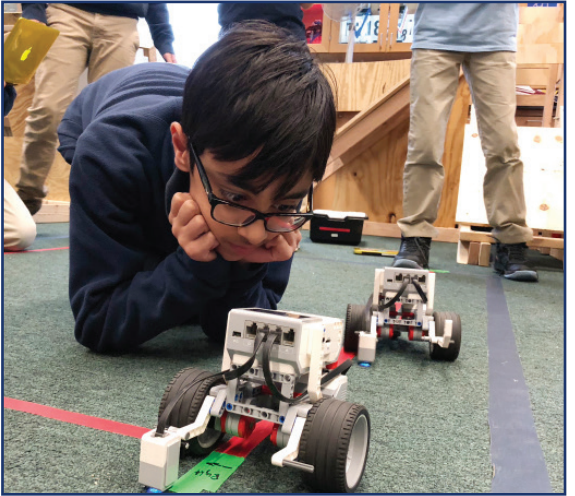
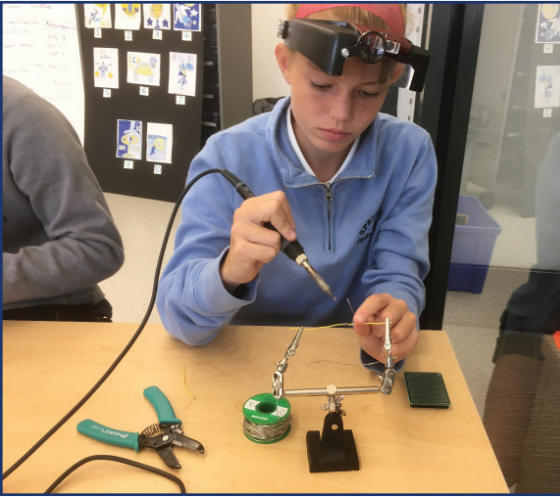
The Visual Arts program encourages students to think creatively while providing them with the instruction necessary for individual self-expression and artistic exploration. With the opportunity to be immersed in a wide variety of media, students are encouraged to be creative and inventive thinkers. The studio classroom is focused on individual and collabora-

tive projects, which are assessed through ongoing discussion and critiques. This process helps our students draw upon the different aspects of themselves as they grow into more accomplished and self-assured artists. Assessment centers around the process of making art and the maintaining of an ePortfolio to share self-evaluations and critiques. The Visual Arts Department celebrates students' works by displaying them year-round on the walls of the Middle School.



Drawing Progression

The progression of drawing and painting is fundamental to the Middle School art program and plays a crucial role in cognitive development. Students learn to think creatively, develop hand/eye coordination, refine skills, and conceptualize ideas. Drawing and painting facilitates students' creative process by learning to see, describing what is seen, and perfecting ideas and concepts. As a means for students to express themselves, whether it be through portraying something accurately, clarifying a thought, such as making a social commentary, or crystallizing an idea, drawing and painting is a perfect venue.



Sculpting Progression

The creation of three-dimensional art through molding, casting, carving, and construction is essential in the understanding of space and form. It fulfills the human desire to transform materials into three-dimensional forms to express ideas. Lessons in sculpting help students to develop observational skills, expand imagination, master techniques, and visualize space with detail and accuracy. In the process, students learn to manipulate the materials while gaining awareness of the physical world around them.

CONNECTING ART TO THE WORLD

Through the use of the neighboring Wissahickon, the SCH Barbara Crawford Gallery, local museums, and our artists-in-residence program, students experience contemporary ideas and learn to make connections to the world around them. This exposure is then connected to their own creative process, and students try out new media types and modes of thinking as a response to these experiences.

NEW MEDIA

New Media skills are essential for all students since they provide a gateway to digital creation. It is for that reason that new media courses are represented in the CEL curriculum in the Middle School as a way for students to be introduced to digital skills. These skills include creative coding, design and fabrication, interactive technologies, communications and design. New media courses continue through the CEL Capstone project in 10th grade. After Capstone, students may elect to pursue larger projects in classes in Creative Coding, Architecture, Digital Design, 3D animation, Video, and Gaming as an arts elective in the Upper School. The newly renovated new media VIDCAST suite on the Middle School campus features a production room with green screens, a recording studio, and two teaching spaces with desktop computers running professional-level video and music software.



DRAMA

6-8 grade

Formal performing arts education begins in Middle School when students in 6th, 7th, and 8th grade elect to participate in Middle School Drama—one of their first coed activities. They may participate either as actors or stage crew (including set design, props, costumes, lighting, sound, publicity, and more). Students may also apply for leadership positions as a stage manager or technical director. In this experience our Middle School students develop a well-rounded foundation for theater, focusing on collaborative scene-building, script analysis and character development, acting techniques, improvisation, and technical design. Past productions include, *Frozen Jr.*, *James and the Giant Peach* and *Beauty and the Beast*.



MUSIC

Music is a universal language that promotes communication and collaboration among all who share in the experience. In Middle School music classes we recognize that students can express their musical ideas through ensembles or a class that doesn't require public performance. Our offerings include choirs, ensembles, or a desktop classroom experience (Music Explorations). Each of these classes is designed to develop music literacy, listening skills, and dexterity in the language of music. Individual growth is varied, and students maintain an ePortfolio so they can reflect on their own musical journey through Middle School. The ensembles perform two times during the school year. Guest artists are invited to campus each year to enhance musical learning. Recent guest artists include blues singer Shemekia Copeland, double bassist Xavier Foley, and Grammy-award-winning composer Dennis Matkosky.

Instrumental Progression

The instrumental music program (string, woodwind, brass, or percussion families), presents a progression of classes that cater to the individual skill levels of each of its members. The 5th Grade Band or String Ensemble students learn the fundamentals of instrumental study such as posture, breathing (woodwind and brass), instrument care, and first notes. Students learn their role in an ensemble to create a musical product by working together. In 6th/7th Grade Band or String Ensemble, students develop discipline in sight reading, instrumental technique, interpretation, and musical independence. Understanding deepens through inclusion of music theory, composition, and music history. Ensemble participation develops skills through the performance of music from a variety of genres, styles, and cultures. The 8th grade Orchestra combines band students with string students for their first full orchestral experi-

ence. In addition to strengthening their ensemble skills, this full orchestra experience prepares students for their participation in the Upper School orchestra. Each ensemble performs twice during the school year.

Choral Progression

Middle School Choirs

The Middle School choral progression offers continued development of collaboration and musicianship skills. Through study and performance of choral music, students develop vocal technique, ear training, and sight-singing ability through exploration and performance of unison to multipart choral literature from a variety of styles, genres, and cultures. Through both sectional and full rehearsals, students build musical independence. Middle School boy choirs combine to form the 5th through 8th grade Boychoir while Middle School girl choirs perform in grade-level ensembles. The choirs perform twice during the school year.

Music Explorations Progression

The Music Explorations Program at SCH offers a unique hands-on study of music through varied curriculums. In 5th grade, students begin with creating music compositions using both digital sequencing and music notation. In 6th grade, students learn how music is constructed specific to the cultures studied, and students apply this knowledge to ensemble playing. In 7th grade, students delve further into ensemble playing with continued study of music from a variety of cultures. Past ensembles have included Handbell Choir, Percussion Ensemble, Ukulele Ensemble, Cajon Ensemble, Djembe Ensemble, Keyboard Ensemble, and Mallet Ensemble. In 8th grade, students explore the fundamental elements of composition with producing and recording music digitally. In addition to original compositions, the group will focus their studies on song arranging using notation and sequencing software.

SCH PRIVATE LESSON PROGRAM

The music program at SCH sponsors an after-school private music lesson program enabling students to study with master teachers in a wide variety of instrumental choices as well as voice. Our program features instruction in piano, violin, cello, woodwinds, brass, percussion, and guitar. Voice is only offered to students in Upper School. Private lessons take place in the practice rooms on the Middle School campus.

Music Recitals

Students are encouraged to participate in campus recitals to showcase their learning. Private-lesson teachers work directly with students and parents to ensure students are prepared to perform. In order for students to become accustomed to performing in front of an audience, students perform in studio classes arranged by the studio instructor in the fall. In the spring, the music program sponsors a Lower School and a combined Middle and Upper School recital.



CENTER FOR ENTREPRENEURIAL LEADERSHIP

The Center for Entrepreneurial Leadership (CEL) is committed to developing an entrepreneurial mindset and skillset in every student at SCH. While CEL extends to students Pre-K–12th grade, CEL in Middle School focuses on courses from Digital Storytelling - Audio to Money Matters to Intro to Coding. The CEL program prioritizes the development of four key traits that comprise the entrepreneurial mindset: opportunity seeking, creative problem solving, resiliency, and resourcefulness. These traits are woven throughout students' CEL curricular experience.

5th grade

Adventures in New Media

This course introduces students to the world of digital media, art, and interactivity through a variety of modalities. Students learn software programming using Scratch. They start exploring concepts like loops and if-then statements. They learn program flow control via sending and receiving messages. Students explore circuitry using the Bare Conductive touch circuit board. They build a wall with pictures of their names that randomly play facts about themselves recorded in GarageBand when touched. Finally, students get an introduction to 3D modeling and design using Fusion 360. They learn how to draw 2D objects and then extrude those objects into three-dimensional space. They start with squares and increase in complexity with various shapes, learning how to create objects on different planes. Students in the past have modeled airplanes and even the Titanic! Design thinking, computational thinking, creative collaboration, and debugging/iteration are embedded into all activities. This foundation class is about exposing students to

possibilities as well as building competencies. They need to see what's possible so they have tangible ideas on which to iterate as they pursue their own interests.

Teamwork and Collaboration

The Teamwork and Collaboration course teaches students the skills to be able to work effectively and collaboratively with peers. Students will participate in multiple projects throughout the course while also spending time reflecting on their group experiences. Throughout this process, students begin to understand the importance of collaboration, active listening, assigning roles, and being a leader while working alongside others. Students will learn about the differences between being a "boss" and being a "leader." Through various activities, students will begin to understand their personal strengths and weaknesses and problem solve with their peers. By the end of this course, our hope is that students will be able to apply the skills, knowledge, and experiences learned in this class to their daily work and studentship experiences here at SCH.

Digital Storytelling - Audio

This is an introduction to voice and sound as a method of self-expression and storytelling. Throughout the trimester, students work in groups to create a scripted podcast using text



and characters from an assigned comic book. Through analysis of vocal characteristics and how they relate to character and personality, along with exercises in diction, breath, and tone, the students will bring their distinct characters to life for an audio recording. In addition to vocal expression and storytelling through voice, the students also learn about sound effects, musical underscoring, and ambient sound and how they relate to bringing stories to life through what a listener hears. The course also serves as an introduction to audio recording and editing with GarageBand and Soundtrap, as each student creates their own episode file.

6th Grade

Digital Storytelling - Video

This is an introduction to video content development, creation, and editing through the guise of YouTube. Working in pairs or small groups, the students are tasked with inventing *a YouTube personality and creating content that supports that personal brand. We explore what impressions viewers get from images (through analyzing popular YouTuber Instagram accounts), the elements of good-quality videos, common errors and things to avoid when creating video content, and the steps needed to go from idea conception to a post-ready video. Each group will create Instagram-style posts for their channel, build a site to showcase their brand and content, and then plan, film, and edit video content to post. Through their sample channel, 6th graders will develop their storytelling and video skills while also learning firsthand the complexity of YouTube personalities and balancing time, quality, and content.*

Introduction to LEGO Robotics and Programming

Offered by the Engineering and Robotics Department, this course explores the expansive world of LEGO EV3 robotics. This course is challenge

based. In each class, students are given small challenges that introduce them to the basics of programming logic and include some level of competition. Students work in small groups to solve these challenges. We explore the basics of building and construction, instruction following, dead reckoning, line following, loop statements, programming hierarchy, sumo wrestling, and sensor usage for reading the environment. We also introduce students to challenges and activities that are used in the yearly FIRST LEGO League competitions. These challenges involve difficult tasks with specific constraints, in which the robots attempt to earn as many points as possible in a limited amount of time. At the end of the course, students are given some "free time" with their robots and programs so that they can creatively work on a problem that interests and challenges them.

Social Entrepreneurship

This course provides opportunities for students to learn and practice research, collaboration, presentation, finance, and digital skills in the global context of social entrepreneurship and microfinance. Students create small-business ventures to raise funds within the school community and take out small loans to support their small-business activities/plans. Proceeds from their ventures go to paying back the loans, with all net profits directed to supporting small business entrepreneurs in developing countries through Kiva.org. Students work in teams, using the Kiva website to explore and evaluate potential borrowers and different types of microloans. Students track their microloan investments and learn they can make a real-world difference in the lives of people challenged by lack of resources and opportunity. Students participate in social media to share their social entrepreneurship projects and learn from a wider audience.

7th Grade

Introduction to Coding

The Middle School CEL Coding course is designed to motivate students to continue learning computer science to improve real-world relationships, connections, and life. Students will be introduced to computer science, computational thinking, and computer programming, learning that success does not come on the first try—similar to how the world’s most difficult problems aren’t solved on the first attempt. Challenge is good when it is supported by plans and tools that lead to success. This course will help students persevere in solving problems in a personalized and collaborative learning environment, using a combination of online tools and offline activities to facilitate dynamic learning experiences.

Graphic Design

This course explores graphic communication through the understanding of the elements of design as well as the creative design process,

from idea development through final product. Students learn about the steps in design thinking, how to create a creative brief, and how to be good digital citizens.

Media and Presentation

The Media and Presentation course serves as a gateway to help students become confident and engaging presenters, both for the rest of their school career at SCH and for wherever they next find themselves. The 7th graders work through a gamified environment, powered by Classcraft, to develop their own short TED-style talk, focused on something they consider to be an idea worth spreading. Throughout the trimester they earn XP by completing quests that lead them through choosing a topic, analyzing good and bad presentations, writing an engaging speech, and then polishing it. They also dig into slide creation, using Apple Keynote to build a deck that enhances their talk while avoiding common slide pitfalls. The final portion of the class involves exploring the



performance piece of presenting—developing an awareness of body language, comfort with rehearsing content, and use of voice and tone to name a few elements, culminating with each student presenting a finished TED talk to the class.

8th grade

Digital Publishing

The CEL Digital Publishing course is designed to integrate digital platforms and social media tools in the classroom, as well as provide opportunities for students to learn and practice research, teamwork, presentation, and digital publishing skills. Students research topics of interest—local and global—and explore digital communication tools as a vehicle to establish a positive digital footprint and raise awareness of social issues. This includes lessons/activities centered on digital literacy, interaction with social media, blogging, web content writing, fair use, search strategies, and presentation in various forms of digital media. They will evaluate Internet sources and decide which ones are reliable, building an understanding of the importance of using reliable sources for research and information gathering. They will become aware of digital footprints and actively engage in the process of responsibly cultivating and preserving their own positive online identity.

Environmental Technology

This course introduces students to the Linux operating system, circuit building and sensors, and some basic programming. Students will explore the differences between hardware and software, understand why we have operating systems and what they do for us and basics like what an IP address is and why we use them. They will learn how to remotely connect to other computers, install Linux on Raspberry Pi Linux computers, and create basic web pages from scratch. They will build solar-powered circuits that will take environmental sensor

readings like temperature, humidity, and soil moisture and visualize that data on a web page. This course provides both breadth and depth and is intended to help students identify interests so they might explore those more in high school.

Money Matters

Money Matters is an introductory economics and finance course that provides 8th graders with a basic understanding of the many factors that drive our economy, including our everyday decisions. We spend time exploring theories of economics, analyzing psychological phenomena, discussing relevant issues, and examining our personal finance decisions. The ultimate goal of this course is to equip students with the tools to become a more informed decision-maker. The classroom experience encourages students to efficiently assess options, understand and avoid the causes of poor choices, and articulate the effect of our decisions on the world around us. In this course, students create a personal budget, engage in economic simulations, and practice money management with a classroom currency.



ACTIVITIES

Students have many opportunities to explore their passions in Middle School. Each trimester, they choose from approximately 15 different activities, ultimately participating in 12 over the course of their Middle School experience. Recent offerings have included Stop-Gap Animation, Student Council, Wallyball, Cooking, Improvisational Theatre, Independent Science Experimentation, Community Service, Student Newspaper, Theatre Technicians, Chess, Hiking, Debate Club, Book Club, Service On Campus, Chinese Calligraphy and Origami, and Drawing from Nature.

AEIOU

One of the highlights of Middle School is our unique AEIOU curriculum, which advances SCH's mission to create an inclusive community. AEIOU stands for Awareness, Empathy, Inclusion, Opportunity through differences, and Understanding. As a community, we care deeply about celebrating diversity in all its forms and recognize how important it is in today's world to be able to consider perspectives other than our own. Students engage in regular advisory lessons that enable them to explore myriad backgrounds, values, identities, and perspectives in order to build empathy and awareness. The dialogue and personal growth that result are powerful.



HEALTH AND WELLNESS

The Middle School health program is designed to develop health-literate students. The curriculum teaches students how to access, understand, appraise, apply, and advocate for health information and services in order to maintain or enhance one's own health and the health of others as defined by SHAPE America. An emphasis is placed on the importance of making healthy decisions that will lead to a higher quality of life.

Students learn about important topics related to healthy living and emotional wellness. Topics include nutrition, exercise, strategies for mindfulness and stress reduction, anatomy, puberty, human reproduction, sexual education, and drug education. In separate classes for boys and girls, students feel comfortable asking the necessary and important questions that shape them into healthy, caring adults. All Middle School teachers and staff are a resource when it comes to physical and emotional well-being for our students.

PE - 5th Grade

5th grade PE is designed to develop physically literate individuals. Students will learn to move with competence and confidence in a wide variety of physical activities. The skills learned will educate students about ways to improve their quality of life through the lifelong, health-enhancing physical activity. Students will continue to develop sport-specific skills, strategy, game concepts and problem solving in preparation for the Middle School athletic program.

ATHLETICS

6th-8th

Athletics are an important part of the total learning experience at SCH. We embrace, encourage, and teach all that is good about sport. We stress teamwork, sportsmanship, personal commitment, a striving for excellence, and how to win and lose with class and dignity. Knowing that participation in athletics improves students' self-confidence and overall health, our coaching staff is committed to fostering each student-athlete's confidence, decision-making skills, sense of responsibility, and leadership skills—qualities that will serve them well throughout life. The department seeks to provide each student with a sense of affiliation, motivation, and accomplishment by balancing challenge and demand with support and encouragement. We hope that, by taking advantage of the many positive experiences that sports have to offer, all participants will enjoy their time on the playing fields and courts and will take with them memories that will last a lifetime. By encouraging broad participation in sports, the Athletic Department also seeks to generate a sense of pride within the student body, the faculty, and the larger school community for its teams and the overall school as well.

All students in grades 6th-8th are expected to participate in two out of three of the following seasons on an athletic team:

Fall	Winter	Spring
Cross Country (B/G)	Basketball (B/G)	Baseball (B)
Field Hockey (G)	Fitness (G)*	Golf (G)
Football (B)	Intro to Crew (B/G)*	Lacrosse (B/G)
Golf (B)	Lifetime Sports (G)*	Outdoor Track (B/G)
Soccer (B/G)	Ice Hockey (B/G)	Softball (G)
Tennis (G)	Squash (B/G)	Tennis (B)
	Volleyball (G)	Wrestling (B/G)





Friendship surpasses team rivalry in the annual girls' color war competition called Blue Gold Day.



Middle School
8000 Cherokee Street | Philadelphia, PA 19118