



# UPPER SCHOOL: GRADES 4–8

## WHITEHAVEN CAMPUS: GRADES 4–5

## MACARTHUR CAMPUS: GRADES 6–8

### GRADES 4 AND 5

Grades 4 and 5 have three homeroom sections at each grade level. Grade 4 students learn language arts and social studies in their academic homerooms. Beginning in the winter, Grade 4 students regroup, and many change classrooms, for math. In Grade 5, teachers specialize in an academic subject, so students move among Grade 5 classrooms to have different teachers for language arts, history and social studies, and math. Accelerated sections are available in Grades 4 and 5 math, and accelerated work in language arts is offered to students through a process of differentiation within their classes. Special classes continue in Spanish, science, religion, art, music, and physical education. Teachers integrate technology into student learning experiences throughout the Upper School.

### GRADES 6, 7, AND 8

The academic core of the Grade 6 experience bridges the elementary- and middle-school years as students maintain many of the structures that have been in place—chapel, PE classes, special grade-level performances—while also preparing for the new structures and opportunities of middle school. This approach allows students to transition to a middle-school program that consists of a fully integrated humanities program—including a two-year study of American history and literature—and mathematics, science, and Spanish, with greater ease, comfort, and understanding. Special-subject classes include religion, health, service learning, study skills, art, and music. Study skills, which has a carefully planned curriculum over the span of three years, is embedded into the classes that the specific lessons support. All students are assigned to advisory groups, typically consisting of eight to 10 students, which meet daily to start the day, and they have a weekly hour-long period to address academic and social and emotional needs more deeply. Our advisory program is at the core of our curriculum, emphasizing St.

Patrick's values and their daily application and equipping students with social skills and awareness to be empathetic citizens and alert consumers of social media and other societal influences.

## Core Courses

### GRADE 4

#### LANGUAGE ARTS

Promoting a love of the English language and its effective use in both oral and written form is the objective of the language arts program. Students strengthen their skills and improve comprehension through whole-class shared novels, small-group shared texts, and independent books. Students reflect on what they read in thoughtful, meaningful responses. They examine the elements of genres such as fantasy, realistic fiction, and historical fiction. They continue to develop skills necessary for reading nonfiction texts for meaning.

The writing program focuses on style, voice, and mechanics. Students move both individually and as a group through the process of generating and developing an idea, drafting, revising, editing, and creating a final product in both narrative and expository writing. They study authors and follow the examples of their craft to hone elements of style, as well as organization, paragraphs, and mechanics. In addition to these individual writing projects, writing is integrated throughout the curriculum. Students are frequently called upon to respond in writing to topics in literature, math, science, and social studies.

We reinforce writing mechanics and grammar through explicit instruction and daily practice. Spelling continues to be a focus in Grade 4. Students begin by studying

high-frequency words and then move on to study specific spelling patterns and rules. Grade 4 students use *Wordly Wise* to encourage growth in vocabulary and verbal reasoning. Students also learn and review content-specific vocabulary words in related subject areas.

Language arts work is often integrated with social studies content and includes geography, the arts, fiction reading and writing, nonfiction reading and writing, and science and technology. Further development of nonfiction reading and writing skills as well as presentation skills occurs during an end-of-year travel agency project highlighted in the social studies curriculum.

## SOCIAL STUDIES

The overarching theme of Grade 4 social studies is exploration of the question *How do physical and social environments affect individuals and groups?* Students study different time periods and varying perspectives in United States history to expand their knowledge of their local community and other areas within and beyond the Mid-Atlantic region.

Grade 4 students begin to identify places, events, and documents that represent the history of the United States. A study of colonization and the American Revolution provides students with an overview of the historical factors that have shaped their community and nation. Using a case study of Chestertown, Maryland, near the Chesapeake Bay, students identify the geographical features that influenced explorers and settlers to come to the region during the colonial period. A field trip aboard the schooner *Sultana*, docked in Chestertown on the Chester River, shows students the ways in which some people lived and the concerns they had in the eighteenth century. These studies also expand students' developing understanding of freedom and democracy as they examine heroes, traitors, and great thinkers. Throughout this social studies unit, students acquire greater understanding of citizenship, history, geography, and culture from multiple perspectives.

In the second and third trimesters, students study Lewis and Clark's expedition and its impact on the ever-evolving American story. Students use historical maps and read *In Their Own Words: Lewis and Clark* by George Sullivan, diaries, and nonfiction accounts to learn about United States history during the late eighteenth and early nineteenth centuries. A writing project during the Lewis and Clark unit requires students to create a first-person narrative journal, much like Lewis and Clark wrote on their expedition.

At the end of the year, students focus on world geography by researching and reporting on physical and cultural aspects of different countries. Students learn how to read various world and continent maps and work in groups to study the geographic, economic, and cultural aspects of

one particular country. Students then assume the role of a "travel agent" and present their findings to "clients" both in writing and as a presentation.

## MATHEMATICS

The Grade 4 math program is built on the curriculum *Investigations in Number, Data, and Space*. By undertaking a series of related investigations, students deepen their understanding of areas of mathematics previously introduced, while also exploring and developing an understanding of new areas. The curriculum focuses on five strands of mathematics: Number and operations, algebra, data analysis, measurement, and geometry.

In the number and operations strand, students begin by returning to the operations of multiplication and division. They strengthen their computation strategies while deepening their problem-solving skills. Students learn to solve computation problems efficiently and accurately. They then move on to work with fractions and decimals. They continue to develop their understanding of part-whole relationships and move into adding and subtracting fractional parts. In the algebra strand, students determine missing numbers in equations and begin to use symbols to represent numbers. In the data-analysis strand, students read and create increasingly complex graphs. They identify common statistical markers, such as median and mode, and learn to draw meaningful conclusions based on a given data set. In the measurement strand, students use both standard and non-standard forms of measure. Finally, in the geometry strand, students deepen their understanding of shapes and continue to explore two-dimensional geometry. Throughout the strands, there is a coordinate focus on computation and number sense. In addition, students benefit from daily practice and review in each of the five strands.

## SCIENCE

Experimentation, observation, analysis, and collaborative discussion drive the Grade 4 science experience. Science is an active discipline, and Grade 4 students are expected to be involved participants in a variety of activities that will ultimately enhance their scientific literacy. In the beginning of the year, students explore energy and change through first-hand experiences. Students investigate electromagnetic forces and useful applications of electromagnetism in everyday life through engineering design challenges. Students explore energy transfer through waves, repeating patterns of motion that result in sound and motion. In the Grade 4 environments unit, students study structures and behaviors of organisms and relationships between organisms and their environments. Understanding these relationships, students are armed with the knowledge and awareness of limits and how human behavior can change environments. Students explore a variety of organisms across the unit, conducting experiments, collecting data,

and analyzing and interpreting results. Grade 4 students participate in a fish-hatching program to help restore populations of the American Shad in the Potomac River. Following the release of newly hatched American Shad, students explore river systems, erosion, and patterns of change over time.

## GRADE 5

### LANGUAGE ARTS

Reading, writing, speaking, and listening form the backbone of the Grade 5 language arts experience, as students grow as active readers, confident writers, and critical thinkers. Literature selections reflect a wide variety of genres offering varying cultural and historical perspectives that provide students with opportunities to process text in many different ways. While writing is connected to reading through literature, students are encouraged to select topics about which they care and then to write within a given structure—narrative, informational, research-based persuasive essay, letters, memoirs, and more. Ongoing exposure and practice in vocabulary, grammar, and spelling serve to strengthen each student’s literacy skills.

Throughout the year, students read books for each of the genres—realistic fiction, biographies, nonfiction/informational, short stories, poetry—independently, in small groups (book clubs), and as a whole class. Independent reading and associated projects afford students opportunities to experience literature in a self-directed manner. Works read in class help students create a shared framework for analysis, encouraging them to become critical readers. Small groupings of students meet, providing a more intimate setting in which students and their teacher work together to comprehend a text *before*, *during*, and *after* reading. As close readers, students examine the elements of literature—character, setting, conflict, theme, and style. They seek to meet the demands of whatever they decide to read by practicing important reading strategies such as making predictions, determining importance, making inferences, and summarizing information. Through engagement with guided discussions, varied text, and explicit reading instruction, students think more effectively and with greater depth and insight.

An integral part of the curriculum in language arts, writing is embedded in all the academic subject areas, particularly social studies. In language arts, students have extended time and space to write about things that matter to them. They start the year with an emphasis on maintaining a writer’s notebook to record insights, observations, and anecdotes. In addition to a writer’s notebook, students keep a folder for drafts and mentor texts related to the current unit of study. The writing folder may also contain checklists in which students self-assess their writing and

create goal sheets. Using the process approach to writing, students learn the strategies they need to brainstorm ideas, draft, revise, edit, and publish. Explicit teaching of key characteristics of writing is a part of a writer’s workshop where ideas, organization, word choice, sentence fluency, and conventions are examined closely. Additional classwork focuses on the foundational skills, including handwriting, keyboarding, spelling, grammar, usage, and vocabulary. Creating a supportive classroom community of writers is a critical element in encouraging students to enjoy writing and expand their writing skills.

### HISTORY AND SOCIAL STUDIES

The Grade 5 social studies curriculum is built around two significant concepts: Geography provides us with the setting of our world’s story and the development of agriculture had an immense impact on human advancement. The year begins with a unit focusing on the five themes of geography: Location, place, human-environmental interaction, movement, and region. Throughout this unit, students gain the necessary skills and knowledge to understand how the physical features of an area affect the decisions people make and how those decisions, in turn, affect the land itself. Students then turn their attention to the lives of early hominids and focus on how prehistoric species used the land and adapted over time. The study of basic human needs leads to exploration of why people eventually abandoned nomadic life as hunters and gatherers, why they chose agricultural lives, and how advances in technology led to a surplus of crops—all pivotal elements in the birth of civilizations. Conversations throughout each unit focus on archaeological methods and specific excavation sites that have helped historians learn valuable information as they piece together the story of our past.

Throughout the year, students use atlases, maps, *The World* history text, National Geographic’s *World Regions* series, magazine articles, resources from our library, audio-visual materials, and field studies. Experiences include writing a descriptive essay about a personal connection to specific landforms, analyzing various maps, creating skits to represent tectonic plate movement, exploring the cave paintings of Lascaux, and writing a research-based persuasive essay on the societal shift from hunting and gathering to agriculture.

The highlight of the Grade 5 year is the Archeological Dig, a cooperative effort in which each homeroom develops a fictitious culture using the knowledge students have gained during the study of ancient civilizations. Students create all aspects of the culture, which are then represented by artifacts designed and constructed in class and later buried at the on-site Dig location. Students from another Grade 5 homeroom excavate the artifacts and analyze the created culture in an attempt to replicate the challenges and successes associated with a real archaeological excavation.

## MATHEMATICS

There are three overarching goals of the Grade 5 mathematics course: Gain computational fluency with whole numbers, make sense of rational numbers, and solve challenging problems. Continuing with *Investigations* and supplementing with other resources, students begin the year consolidating their understanding of computational strategies for multiplication and division of whole numbers and learn efficient methods for solving problems using those operations. The study of multiplication extends into student work with 3-D geometry and volume measurements. An important goal of the year's work is to gain an understanding of the relationships between fractions and decimals. In their work, students learn strategies for computing with fractions and decimals. Students learn to analyze patterns in tables and graphs to reason about and represent change. In addition, students measure, classify, and describe two-dimensional geometric figures. The sequencing of topics in Grade 5 is intentionally designed to coordinate with appropriate science topics, so that students experience a complementary approach in mathematics and science, with overlapping concepts and skills reinforced between the two disciplines.

## SCIENCE

By Grade 5, students have become adept in their ability to frame questions about the world. These questions serve to initiate a process of discovery that culminates in a broader understanding of the earth, life, and physical sciences they encounter every day. Students enhance this understanding by developing and conducting original experiments and constructing and testing models. Students have the chance to explore the living and nonliving characteristics of oceans. By studying our world's ocean systems, the organisms that inhabit them, and the environmental conditions that affect them, students develop a greater sense of responsibility for their world.

A large part of the year is devoted to exploring the physical properties that help shape our lives. The curriculum covers the fundamental principles behind motion as students study friction and Newton's laws of motion, force, and speed. In this unit, students design their own experiments to learn about the relationship between mass, force, and acceleration. Throughout their study, students hone their skills in data collection and analysis. The work enables students to see how some of the world's greatest inventions have resulted from understanding the basic principles of motion. Following the physics unit, students are introduced to the electromagnetic spectrum. They learn about the different types of electromagnetic radiation and ways we utilize it. Later studies focus on visible light, the light spectrum, mixing light, and understanding why we see different colors. This unit culminates in several investigations involving the reflection, refraction, and absorption of light. Grade 5 students end their scientific

studies learning about the earth science concept of plate tectonics and by completing a design challenge.

## GRADE 6

### HUMANITIES

Grade 6 humanities introduces students to the development and rise of democratic practices in the classical Mediterranean world and the contexts and belief systems of major world religions through a multifaceted curriculum. Students begin the year with a rich exploration of mythology, examining how myths represent the worldviews and belief systems of different cultures and studying individual pantheons of gods and goddesses. Then students move to a study of the values, perspectives, and faith traditions of Judaism, Islam, and Christianity, as well as the cultures from which these religions developed. This exploration, through history and literature, includes sacred texts, myths, and contemporary works. Students then study the selection pressures that gave rise to the first recognizable iterations of Western civilization and, in particular, trace the progression of the Greek and Roman civilizations. In doing so, students discover the roots of many current systems of government and cultural customs, which serves as a precursor to their Grades 7 and 8 study of American history. Examining common elements in the creation and expansion of civilizations provides a thematic structure to the course, while investigations of the differences in government, art, philosophy, religion, and culture allow students to gain a deeper appreciation for, as well as a broader understanding of, these societies. Students explore the aspects of each civilization further using a variety of texts, expository and creative writing opportunities, hands-on activities, and projects.

The literature curriculum supports this exploration, exposing students to texts of various genres and styles. Selections ranging from myth and legend to fiction, short story, and nonfiction spark discussion of literary devices, language, and character. These texts inspire students' own writing. Students explore character motivation, author purpose, metaphor, and theme in analytical writing and class discussion. A strong emphasis on independent reading, supported by our literature circles curriculum, helps each student to develop a profile as a reader, at once encouraging students to reach beyond their comfort zones and supporting them in making choices of just-right books to inspire a lifelong dedication to reading.

In Grade 6 humanities, students will:

- gain an understanding of the commonalities of human existence, both on an individual level and in the context of building and maintaining a civilization;
- engage with meaningful literature in order to better understand the written word, themselves, and the larger world;

- increase and sharpen geographical skills, including the effective use of maps;
- practice essay-writing, note-taking, research skills, logical and creative thinking, and oral expression;
- become more effective at reading and comprehending textbooks and other written material;
- develop an awareness of and facility in discussion of current events as they relate to our global society;
- examine the connections between the circumstances and events of their own lives and the lives of the inhabitants of the civilizations they are studying;
- practice cooperative learning skills for cognitive development, interpersonal team-building, and growth of positive habits of social interaction; and
- promote interdisciplinary awareness through integration of art, mathematics, Spanish, and language arts.

## MATH

Using units from the *Illustrative Mathematics* curriculum as well as teacher-developed materials, students explore and deepen their understanding of areas of mathematics previously introduced, while also investigating new areas. Most of the mathematics arises from realistic contexts from which students must extract the relevant information. The curriculum focuses on four strands of mathematics: Number, algebra, geometry, and statistics.

In the number strand, students work to enrich their understanding of, and computation skills with, fractions, decimals, percentages, and ratios. In the algebra strand, students explore ways to generalize calculations and solve one-variable equations. The geometry strand centers on topics of volume, scale, and geometric transformations and repeating patterns in art. Finally, work in the statistics strand concerns measures of central tendency (mean, median, and mode) as well as graphical representations. Students use data to draw conclusions and to evaluate the conclusions of others. Throughout the strands, there is ample practice in whole-number arithmetic and number sense. A number of the units across the year are interdisciplinary in nature and are taught in conjunction with science, social studies, and art. There is also a significant engineering and design component throughout.

## SCIENCE

The Grade 6 curriculum blends earth, life, and physical sciences in real-life simulations that allow students to experience scientific problem-solving and the consequences of choices they make. In a unit on wetlands, students explore subjects such as weather, water chemistry, habitat destruction, invasive species, and the influence of human activity on our scientific community. This unit includes a fall trip to the Eastern Shore of Maryland, where students see first-hand the biodiversity and conservation issues

associated with a local estuary. In a space science unit, students learn about our place in the solar system, conduct experiments modeling astronomical observations, and explore extraordinary objects in space. Drawing from their previous experiences with investigative inquiry, group discussions, and research, students use the scientific method as a tool for creating, organizing, and conducting a formal laboratory experiment focusing on topics in buoyancy and density. Units in science build upon interdisciplinary work involving both science and mathematics.

## GRADE 7

### HUMANITIES

The humanities program in Grade 7 begins a two-year interdisciplinary study of American history and literature. Humanities coursework emphasizes the role of diverse perspectives in shaping the United States through the use of literature, both historical and contemporary. By understanding an individual's experience during a particular period of history, students learn about the complexities that abound in understanding the past. Students consider the purpose and point of view behind a primary document or work of literature. In adopting the perspective of historians, students engage the challenge of interpreting history from multiple perspectives, develop essential critical-thinking skills, and experience the joy and difficulty of grappling with the past. The study of literature enriches students' historical understanding on both literal and thematic levels while developing their skills as critical, analytical, and appreciative readers. In addition, a continuing emphasis on each student's development as a lifelong reader grows from a strong independent reading program that encourages students to develop their own profiles as readers.

The course focuses on several major points in American history and includes units on colonization, the roots of the transatlantic slave trade and North American slavery, the American Revolution, the creation of the Constitution, and a review of the events leading up to, through, and just after the Civil War. A wide array of primary documents and historical fiction directly supports these studies. Selected novels may include *The Ransom of Mercy Carter* by Caroline B. Cooney, *The Winter People* by Joseph Bruchac, *Chains* by Laurie Halse Anderson, and *Brotherhood* by A.B. Westrick. These works give students the opportunity to practice literary interpretation while drawing on and expanding their historical knowledge. In addition, novels such as *The Giver* by Lois Lowry and *Animal Farm* by George Orwell support the historical study by exploring complementary themes. In using the online textbook *History Alive!*, students also practice extracting main ideas, taking notes, and organizing information. All class instruction is captured in Cornell Notes, which are

at first modeled by the teacher and gradually offered to the students for their analysis and then creation.

Teachers connect literature to the world that produced it, introducing students to the work of major American writers of the time period. In the past, these have included Walt Whitman, Louisa May Alcott, Thomas Paine, and Frederick Douglass. Literature in the humanities program extends beyond novels to include short stories, memoirs, and poetry. All selections provide the basis for studying plot, characterization, theme, figurative language, and other literary elements. Students explore works that capture their imaginations and require critical examination of their beliefs. Students develop strategies for both comprehension and their appreciation of literature. Informal writing, discussions both in small groups and involving the entire class, and other forms of response help students demonstrate their understanding of class- and literature circle-based reading.

Students write frequently, and writing remains a particular area of focus throughout the year. Through a study of nonfiction writing, students develop the skills to craft a meaningful argument, incorporate supporting evidence and quotations, organize logically-structured paragraphs, and increase the clarity and formality of their prose. Through their independent studies of history, students also engage in the research process in order to produce effective essays. Over the year, they continue their study of grammar and sentence construction. Creative assignments allow students to compose their own works of historical fiction, share their knowledge of different time periods, and reflect on experiences throughout the course.

An integral part of the curriculum, technology provides access to a variety of primary sources. The ability to share documents facilitates collaboration on group assignments and allows for immediate and thorough feedback at each stage of the writing process. Technology is also at the core of the project-based learning students do throughout the year. In addition to traditional research papers, students work on interdisciplinary projects that incorporate skills emphasized throughout a St. Patrick's education: Critical thinking and problem-solving through collaboration, creativity, adaptability, resilience, and accessing and analyzing information.

### **MATH: PRE-ALGEBRA**

Using materials from *Illustrative Mathematics*, students start Grade 7 by studying scale drawings to support the subsequent work on proportional relationships. Geometry and proportional relationships are woven through the year along with the study of operations with rational numbers. Rational number rules are generalized to inform students' work with polynomials and equations. Students examine inequalities and graphs of linear inequalities using their understanding of linear relationships. Students finish

the year with rigid transformations. The curriculum is a problem-based course geared toward developing students' conceptual understanding of the material. Emphasis is also placed on problem-solving, using resources such as the National Council of Teachers of Mathematics Palette of Problems and YouCubed Mathematical Mindset materials. The course is a pre-algebra course, preparing all students for algebra in Grade 8.

### **SCIENCE**

The content for Grade 7 science is divided into three major units. In the Fall Trimester, students study physical science with the primary focus on electricity and magnetism. Students use active physics along with inquiry-based lab activities to explore magnetic fields, electricity, circuits, conductors, insulators, resistors, current flow, and series and parallel circuits. Students gather quantitative data from labs and enter it into spreadsheets in order to manipulate it and create several types of graphs using Excel and Google Sheets.

In the Winter Trimester, students study environmental science with the primary focus on sustainability. We analyze our human footprint, both individually and globally, and study product consumption, transportation, and waste. Through hands-on experiments and projects, students examine their impact on the world around them while answering the question *How can we be the catalyst for change?* Students use infrared thermometers to compare incandescent, CFL, and LED light bulbs. They determine the relationship between heat output and wattage and use light meters and watt meters to compare and contrast energy use and light output. Students use the knowledge gained in this unit to answer the question *How can we transform Washington, D.C. to be a sustainable city in the future?*

The Spring Trimester is devoted to life science, with the primary focus on cellular biology. We examine the components of plant and animal cells, create wet- and dry-mount slides of various types of cells, and examine those cells under the microscope. Students deepen their understanding of cells as the basic unit of life and the relationship between the form and function of cell types and study the organelles within the cells and their functions through a series of lab activities.

## **GRADE 8**

### **HUMANITIES**

Building on the interdisciplinary study of American history and literature begun in Grade 7, the humanities program in Grade 8 examines the twentieth century and the creation of modern America. Continuing an emphasis on the importance of multiple perspectives, the special focus in Grade 8 is on the core values of the American

republic as presented in the Constitution (justice, freedom, peace, common defense, and the common good) and their support for social progress and justice. From an even larger perspective, the course addresses the following questions: *What is the role of the individual in social systems? How do individuals stand up and take responsibility for changing an unjust system? How do the struggles and triumphs of life shape us as individuals and as a society?*

Historical studies compare the noble ideals and sometimes competing realities of American life throughout the century, focusing in particular on immigration, the Great Migration, World War I and America’s emergence as a world power, the Great Depression, World War II, and the Cold War. The study of civil rights throughout the year culminates in a trip to Atlanta, Montgomery, and Birmingham in May.

Teachers supplement the textbook *History Alive!*, which students began in Grade 7, with more in-depth readings as well as internet research, primary sources, and exposure to the art and music of each era Grade 8 students study. Trips to local museums broaden the students’ understanding of our rich culture. The curriculum requires students to build their skills in reading and writing, historical analysis and interpretation, and decision-making.

Selected literature explores individual voices in society and complements each historic period. Some texts include *Uprising* by Margaret Peterson Haddix, *The House on Mango Street* by Sandra Cisneros, *Of Mice and Men* by John Steinbeck, *A Raisin in the Sun* by Lorraine Hansberry, and *March 3* by John Lewis. In addition, our study of American short stories reviews the essential elements of fiction—setting, point of view, conflict, character, and theme—and a scattering of poetry throughout the year looks at the power of rhythm, sound, and figurative language to intensify meaning. Students also do independent reading or viewing and prepare individually tailored reflections. Regular writing assignments, starting with the review of simple paragraphs and working up to a five-paragraph essay, address the history and literature studied and continue the practice of various forms of writing, emphasizing, in particular, the development of a persuasive argument. Students also enrich their vocabulary through study rooted in their reading and work regularly on grammar, writing mechanics, and style in a regular writer’s workshop. Individual and group assignments develop oral presentation skills. Targeted use of Google Docs and a class website allow more collaboration and continued conversation outside of the classroom.

Finally, as part of a growing push for students to have more ownership over their learning, Grade 8 students embark on the Capstone project that is focused on a specific humanities theme involving policy reform. In addition to teaching real-world skills—such as research, writing, presentation skills, time management, and

organization—the project enables students to become experts in their chosen topics. This project is aptly titled “Capstone” because it is the culminating academic achievement of their St. Patrick’s career.

## MATH: ALGEBRA I

Using materials from *Illustrative Mathematics* as well as more traditional Algebra I texts, students begin Grade 8 by revisiting transformational geometry. They study dilations and similarity, providing background for understanding the slope of a line in the coordinate plane. Next, students explore linear relationships and express them using equations, tables, and graphs. Students solve linear equations and systems of equations in one or more variables. They also study quadratic equations. Exponents and irrational numbers are used to learn about real numbers. Throughout the course, students use the TI-83 or TI-84 calculator. The curriculum is problem-based, geared toward developing students’ conceptual understanding of the material. Emphasis is also placed on problem-solving, using resources such as the National Council of Teachers of Mathematics Palette of Problems and YouCubed Mathematical Mindset materials. The course is a complete Algebra I sequence.

## SCIENCE

As in Grade 7, the content for Grade 8 science is divided into three major units. During the Fall Trimester, students study physical science with a primary focus on kinematics. Through inquiry-based lab activities and small- and whole-group discussions, students study motion. Using sonic rangers, students collect data on the motion of different objects and describe the motion of the object using scalar and vector quantities. Students graphically represent motion, using distance-time graphs and speed-time graphs, and quantify distance, displacement, speed, velocity, and acceleration.

The Winter Trimester consists of a study of physical science through a chemistry unit focused on the properties of matter. The chemistry unit focuses on five big ideas:

- elements are fundamental substances;
- ordinary matter is made up of atoms, and each element has its unique atom;
- atoms combine to form complexes of associated atoms, which are the basic particles of substances;
- ordinary matter exists in one of three states—solid, liquid, gas—depending on the energy characteristics of the particles of the matter; and
- abstract concepts of chemical structure, composition, and interaction can be communicated using a variety of representations, symbols, and conventions.

In the Spring Trimester, students continue to expand their knowledge of cells, genetics, and DNA. Thanks to

our affiliation with the Carnegie Institution for Science, Grade 8 science students study live zebrafish in order to learn about genetics and the life cycle of vertebrate animals through direct observation and experimentation. The goal of the experiment is to have the students crossbreed wild type and nacre zebrafish in order to determine what the offspring will look like.

Grade 8 students also have a dedicated robotics/engineering class once a rotation. The SeaPerch program is sponsored through the National Naval Responsibility for Naval Engineering (NNRNE) with the goal of helping to inspire the next generation of naval architects and marine, ocean, and naval engineers. A SeaPerch is an underwater robot known as a remotely operated vehicle, or ROV. Students cut and drill PCV piping; build, solder, and waterproof motors; and solder circuit boards during the engineering process. Students then test their ROV on a pool obstacle course. From the classroom activities during SeaPerch construction through in-water application of the ROV, they have opportunities to learn about and apply various subjects including mathematics, robotics, and physics, as well as valuable problem-solving and teamwork skills.

Finally, as part of a growing push for students to have more control and ownership over their learning, Grade 8 students complete an independent Science Fair project on a topic of their choice. The project involves writing a three-page research component, investigating and building models to test their hypotheses, recording information and data in a logbook, creating a tri-fold poster displaying their findings using the scientific method, and making a 10-minute presentation. Besides teaching real-world skills—such as research, writing, presentation skills, time management, and organization—the project enables students to follow their curiosity, choose a topic, and become experts.

## Special-Subject Classes

### RELIGION

Episcopal schools are created to be communities that honor, celebrate, and worship God as the center of life. They are created to be models of God's love and grace. Episcopal schools have been established, however, not solely as communities for Christians, as parish churches are, but as ecumenical and diverse ministries of educational and human formation for people of all faiths and backgrounds. (National Association of Episcopal Schools)

The Upper School study of religion is centered around creating lessons and experiences that introduce our students to interfaith understanding, values and ethics,

and a lifelong commitment to service. Classroom lessons encourage students to explore ideas freely, while providing an atmosphere that enables individuals to maintain and develop their own religious beliefs and personal values within the context of structured, academic study. Our aim is to cultivate within the hearts and minds of our students the recognition that we are all part of something larger than ourselves, that we inhabit a country of many faiths, and that all of us are children of God, with infinite value.

Each week, students attend Chapel. Every Grade 4 student has the opportunity to read lessons and prayers in chapel while every student gives a chapel talk in Grade 5. Grade 6-8 students choose and lead the music, select and read the lessons, write and deliver homilies, and offer prayers at in the MacArthur Campus chapel. Students choose meaningful topics within the framework of God's love and care for them and their world. The Chaplain builds personal relationships with the students, reinforcing the underlying message of our religious education program.

The **Grade 4** curriculum is organized around the study of sacred spaces, symbols, and stories, beginning with those within our own families. The course begins with students sharing sacred family stories, exploring the sacred space of St. Patrick's, and finding their voices in that space. Students read and explore different themes of covenant, community, responsibility, and the goodness of God as expressed in sacred stories found in the Hebrew Bible. Through primarily student-led class discussions, art and art history, scripture readings, and videos, students explore the formation of the Hebrew people, the ethical lessons of their sacred stories, and the teachings of a loving God. Course discussions honor the variety of religious expressions among students.

The **Grade 5** curriculum is organized around social justice. Students explore the ways in which history, the parables of Jesus, and sacred texts from Judaism, Islam, Hinduism, and Buddhism inform our understanding of serving others. Students explore how empathy, compassion, and justice can be fostered in the school community and the larger world. All students participate in our annual Gifts for Good alternative holiday gifts fair and hear from guest speakers from throughout the greater Washington area about what it takes to serve and uphold the dignity of every human being. Close reading and discussion of scripture from many different faiths, writing projects, class discussions, and videos frame the subject matter and enhance the classroom experience. Ultimately, students will learn the essential link between faith and action.

Through the study of world religions, the **Grade 6** and **Grade 7** curriculum seeks to encourage understanding of, and respect and appreciation for, the pluralistic world in which we live. The class begins with an exploration of what religion is, followed by an in-depth look at a number of the world's religions. Using religious artifacts, reflection,

note-taking in a world religions journal, creative writing projects, film, and guest lectures, Grade 6 students explore Judaism, Christianity, and Islam. Grade 7 students expand their inquiry to Buddhism and Hinduism, as well as additional faith traditions chosen by the students as time permits. Studying the people, dimensions, principles, and worship life of adherents of the world’s major religions, the class seeks to broaden the students’ cultural and religious understanding, while deepening their own sense of spiritual identity.

The **Grade 8** religion course is a study of ethics. Embedded in the humanities curriculum, the course examines the social, cultural, and spiritual influences that inform our personal ethical decisions as well as the values that have shaped our history. This introductory study of ethics and moral formation challenges students to identify the values that they hold and the origins of those values. Through philosophical arguments, literature, historical documents, and personal reflection, students examine the many ways in which individuals and communities live their values and then compare these values with their own. In doing so, students are challenged to examine the complexities of ethical decision-making and the various value systems that have shaped the human experience in general and American history in particular. Students therefore apply an ethical framework to their study of the Progressive Era, the response to the Great Depression, the Holocaust, and the Civil Rights Movement.

### COMMUNITY SERVICE, GRADE 6

Service opportunities provide a vital part of the curriculum. Serving others teaches students to move from their own world into the larger world to explore how important, fulfilling, and life-giving the experience of helping others can be. While service opportunities are numerous and varied, they all serve one purpose: To inspire a spirit of compassion and understanding, not only of oneself, but of those we serve.

Service activities have included:

- participating in the award-winning Salvation Army Grate Patrol program in which members of the St. Patrick’s community prepare and distribute soup, sandwiches, toiletries, and snacks for the homeless twice each month;
- reading partnerships that draw together Nursery School, Lower School, and Upper School students;
- managing the Grade 6 Cake Raffle and Grade 8 Family Fun Day lunch fundraisers to purchase class gifts for St. Patrick’s;
- conducting drives and fundraisers for our sister school in Haiti, St. Etienne (Hoops for Haiti, school supplies, scholarship sponsorships, underwear and socks, toiletries, prescription glasses), along with other relief efforts;
- singing holiday carols at Mologne House at Walter Reed Army Medical Center;
- visiting Lisner-Louise-Dickson-Hurt Home for seniors in Washington, D.C.;
- supporting the Dream Dog Foundation in partnership with America’s Bookshelf;
- supporting D.C. Dress for Success, which helps women return to work; and
- making quilt squares for St. Peter’s Love Quilt Project, which provides quilts to orphaned children in South Africa.

### SERVICE LEARNING, GRADE 7

A more structured approach to service emerges in Grade 7, where students participate in a service learning class for one trimester. Service learning provides students with opportunities to develop civic engagement abilities and personal experience working with diverse members within their communities. Relying on four overarching questions—*What is service learning? What is my service role within my family, my school, and my community? How does marginalization affect society?* and *How can we be agents of change?*—the course complements classroom learning about critical social issues with experiential learning by providing them with opportunities to engage in service in the larger community. Prior to engaging in service activities, students examine the root causes of hunger, homelessness, and poverty and learn about local organizations that combat these social conditions. Students then participate in the work of these organizations by spending time partnering on specific projects. Upon completion of a service project, students take time to reflect on their experiences. This process of class preparation, engaged service, and thoughtful reflection is accomplished through a variety of methods, including internet research, class discussions, creative presentations, and regular writing assignments. Finally, Grade 7 students champion one of the causes they have learned about by hosting a booth at our annual alternative gift fair, Gifts For Good.

At St. Patrick’s, service learning means that students become actively involved in concrete activities that enhance the community; that students work in a shared space with others from the community; that they work in a respectful, collaborative manner on dilemmas related to life in cities; that they enhance their academic skills as they work on the project; and that they transform their own perspectives, relationships, and understanding of self in the process.

To date, St. Patrick’s students have engaged in service projects with organizations that include Iona Senior Services, So Others Might Eat (SOME), Community Council for the Homeless at Friendship Place, City Year D.C., Capital Area Food Bank, Claggett Farm, Martha’s Table, D.C. Central Kitchen, THEARC, Shalom Farms, and the Lisner-Louise-Dickson Hurt Home for seniors.

## SPANISH

Students in **Grade 4** continue their study of Spanish language and culture. Meeting three times in a six-day cycle, they immerse themselves in a multi-sensory environment. Through conversations, activities, and the use of technology, students continue to build a working knowledge of the Spanish language. Students continue to learn everyday vocabulary and incorporate this vocabulary into conversations. Students learn to express likes and dislikes as they begin to form complete sentences. At the end of the year, students read a short novel, which supports and strengthens their understanding of how to ask questions, form proper grammatical structures, employ basic verb conjugations, and expand their vocabulary. Students learn about various traditions and customs in the Spanish-speaking world and, by year's end, are able to express basic ideas in Spanish, both orally and in writing.

Students in **Grade 5** continue to become familiar with speaking and listening while learning grammatical concepts and building on their existing vocabulary. Classes are multi-sensory and provide haptic, auditory, and visual input with the goal of helping students become confident in reading, writing, listening, and participating in conversations and discussions that employ the vocabulary learned in the course. Following a comprehensive review of the previous year, students embark on a more intensive Spanish course, which eschews English in the classroom. During the year, students have several oral presentations geared toward developing confidence in speaking Spanish and, at the end of the year, they read a short novel in Spanish, which provides multiple opportunities to use the language orally and in writing.

By middle school, the purpose of the Spanish program is to develop an immersive environment that fosters rapid growth in students' language abilities and exposes them to the culture and history of Spain and Latin America.

**Grades 6 to 8** courses focus on using conversational Spanish while practicing listening-comprehension skills through a mixture of audio-lingual instruction, grammar-translation, and direct instruction. Reading increases students' vocabulary and knowledge of grammatical structures, as well as their general understanding of the language. By exploring and discussing literary texts, students compare different cultures and increase their understanding of the Spanish-speaking world. Students also make use of a variety of online resources, such as Quizlet, Señor Wooly, and IXL, to solidify their skills. *¡Buen Viaje!*, a textbook course rich in resources, is the primary text for Grades 7 and 8. Students in Grade 7 complete Level 1, and students in Grade 8 use Level 2. Finally, in both Grades 7 and 8, students examine significant cultural happenings and events related to the Spanish-speaking world.

The **Grade 6** course is conducted primarily in Spanish. The main goal is to continue to develop the skills of listening, speaking, writing, and reading while building knowledge of Hispanic culture. Grade 6 students also develop their reading and writing skills through class projects, which allow them to acquire and solidify vocabulary and grammar concepts. Other activities include reading short novels in Spanish, participating in dialogues, role-playing, games, songs, and projects related to holidays, culture, and geography.

The **Grade 7** course, which is conducted primarily in Spanish, is centered on improving both oral and written communication. It emphasizes listening comprehension and the use of basic conversational patterns of Spanish. Elementary grammatical and idiomatic structures, as well as appropriate reading material, are introduced. This year is critical for students as they solidify the structural foundations upon which future progress is based. Topics covered include articles, numbers, nouns, possessive adjectives, interrogatives, and regular and irregular verbs in the present and preterite tenses. Understanding proper sentence structure and incorporating daily vocabulary are both essential to building a strong foundation in the language. Students also acquire a wealth of cultural knowledge and awareness about the areas of the world in which Spanish is spoken.

As the culmination of the study of a second language at St. Patrick's, the **Grade 8** course builds on students' Spanish language skills acquired to this point. The class is centered on refining four essential skills: Listening, speaking, reading, and writing. Following on the Grade 7 grammar study, students learn many new tenses, including the imperfect, future, and present progressive. Students also learn to use reflexive verbs, demonstrative adjectives and pronouns, and double-object pronouns with various verb structures. In addition to regular class exercises, students learn about different Spanish-speaking countries, focusing on geography, history, and cultural attractions. By the end of Grade 8, students are able to express themselves orally with more confidence, and they begin to write longer and more complex compositions.

Building on their work in lower grades, students who are heritage speakers continue to participate in the **Spanish for Heritage Speakers** programs. They meet once a cycle to deepen their study of the Spanish language and culture with an emphasis on speaking, reading, and writing. During these full-immersion classes, students read and analyze Latin American and Spanish literature and deepen their command of Spanish grammar and writing mechanics as they continue to develop an awareness and appreciation of the diverse cultural heritage in the Hispanic world. They are also given multiple opportunities to experience the culture through shared conversation, field trips, and participation in the annual Café de Poetas at which they recite Spanish literary works to the community.

## SOCIAL-EMOTIONAL LEARNING (SEL)

An expression of St. Patrick's commitment to character education, the SEL curriculum recognizes both the individual and communal dimensions of good character. SEL is aimed at teaching children fundamental skills necessary for healthy social and emotional functioning. The Upper School-wide curriculum helps students develop greater emotional intelligence, their awareness of themselves and their own emotions and how this awareness, along with other social skills, is so crucial to interpersonal success. The SEL curriculum reflects St. Patrick's determination to achieve wholeness in the school's approach to education. Taking a proactive approach to teaching these important skills allows St. Patrick's to contribute further to the social and emotional development of Upper School students.

Our SEL work, which occurs regularly during morning meetings and Advisories across the year, focuses on topics including emotional intelligence, identity, self-esteem, communication, friendship, and conflict resolution. Instruction proceeds through discussion, in-class writing exercises, presentations, and role-playing. An additional goal of these sessions is to build cohesion and cooperation within classes and among students.

## HEALTH

The goal of the health curriculum is to provide students with the knowledge and skills they need to develop, maintain, and enjoy healthy lifestyles, as well as solve problems, make decisions, and set goals that are directly related to personal health and well-being. The program encourages students to develop attitudes, beliefs, and values related to identity and relationships with a sensitivity to and respect for individual differences. Grade 5 health, the first year when students have a dedicated health class, focuses on students' changing bodies and human reproduction. The Grade 6 health curriculum focuses on the body's systems and the developing teenage brain. In Grade 7 health, the major strands center on personal health and growth and development. Grade 8 health continues to encourage healthy individual choices by examining the question *How well do we know ourselves and others?*

**Grade 5** Human sexuality is taught for the first time in Grade 5. Students meet in their homeroom groupings for general information sessions and then meet in separate groups according to biological sex, led by a same-gender faculty facilitator, for more information and discussion on changes during puberty. School nurses and science teachers lead this portion of the SEL curriculum.

**Grade 6** This trimester course explores the anatomy and physiology of the human body and its life functions. Students examine the structure, function, and relationships of these systems, including reproduction, to healthy growth and development. Students also investigate the developing

teenage brain's prefrontal cortex as it relates to individual critical thinking, decision-making, and emotional well-being. Other areas of concentration are lifetime fitness, disease prevention, and self-management skills. Hands-on activities include learning hands-only CPR and the Heimlich maneuver, building models of the digestive system, and creating 3-D printed joint models.

**Grade 7** In the growth and development strand, topics include physical and social-emotional growth and development. This strand also covers human sexuality in its broadest context, including an examination of the emotional and physical changes brought about by sexual development, as well as the cultural and social forces that influence our own self-perceptions. Other topics include reproductive health, feelings, abstinence, and gender roles. In the healthy-eating strand, topics include nutrition, diet, eating disorders, body image, and exercise. The program encourages students to think critically about what it means to be healthy physically, mentally, and socially. Students also learn about the prevention of diseases and the effects of drugs—prescription and non-prescription, tobacco, and alcohol—and the consequences of their use.

**Grade 8** This course thrives on student-centered learning involving individual and group inquiry, collaboration, and critical thinking. Student-chosen topics utilize open-ended questions and discussion formats providing students with the knowledge and subset skills that allow for reflection on and integration of what they have learned. By making health more relevant and applicable, the course enables students to gain a deeper understanding of important topics while acquiring the tools needed for making healthy personal decisions. Topics include:

- the developing teenage brain;
- what it means to be, and our responsibility to be, global citizens in the twenty-first century;
- global human rights;
- stereotypes;
- tolerance and expectations;
- the role the media plays in how we view the world and each other;
- sexual assault and personal responsibility; and
- the effects of alcohol and drug use.

## LIBRARY

The goals of the Upper School library program are to support students' research and to nurture each student's sense of self as a learner, a reader, and a member of a community of learners and readers. Teachers and librarians work together on research units in the library. Students learn about good books through monthly book talks presented by librarians. In between these scheduled times, students are free to visit the library to select books for their own reading or school assignments. Upper School students may have up to five titles checked out at a time.

**Grade 4** students refine their research skills and meet for scheduled library research and technology classes once a cycle. Continuing the process of research, they practice reading informational material for comprehension, developing the skills to identify relevant sections and features of an article or nonfiction book, and recasting the ideas presented into a form that serves their purpose. Grade 4 students also learn about other useful forms of reference, how best to use encyclopedias and online databases for mini-research projects, and more academic databases, such as World Book Online. Students are introduced to monthly book talks with a librarian to find literature that complements their work in language arts and social studies.

In **Grade 5**, students expand their research skills. They continue using print references, encyclopedias, and online databases. They consult more than one source to verify information and cite their sources. Monthly book talks continue to acquaint them with a variety of good books that complement the genre they are studying in their language arts class, including nonfiction.

In **Grades 6, 7, and 8**, students reinforce and consolidate research skills that they learned in Grades 4 and 5. They consult a variety of sources and cite them using proper bibliographic format. Librarians work with teachers to support collaborative research projects in the library and in the classroom. All Grade 6 students participate in Green Star Books, a Newbery Award-style process in which students read books that are noteworthy and eligible for the annual Newbery Award then vote for a winning title at the end of the school year. Grade 6 students also meet every three weeks with a librarian for book talks based on their genre units. Librarians support Grade 6 units of study, research, and inquiry. In Grade 7, students work closely with the librarian on a number of research projects, most notably the Sustainable Cities project that requires academic research, professional interviews, and Washington, D.C. neighborhood visits. Much of the Grade 8 year is spent on the Capstone project, a three-part research project that spans the year. Librarians work closely with the teachers to provide research lessons during classes, work as mentors to students, and provide reference materials for student use.

## TECHNOLOGY

The technology program empowers students to create, communicate, collaborate, and consume critically as they explore the content they learn in math, language arts, science, social studies, and other classes. By the end of Grade 8, all students will have had experiences with technology and digital resources in the following ways. Students will:

- apply engineering and design strategies while creating software and building physical machines, vehicles, and robots;
- write code in a language widely embraced by the adult coding community (usually Javascript or Python);
- select and apply digital tools to collect, organize, and analyze data;
- create three-dimensional models, video games, simulations, movies, digital presentations, and other products to demonstrate understanding in content areas;
- conceptualize and manage individual or group projects using digital planning tools with teacher support;
- evaluate digital resources to determine the credibility of the author and publisher and the timeliness and accuracy of the content;
- organize research and cite sources digitally;
- select and use appropriate digital tools to solve problems;
- use collaborative electronic writing and editing tools to explore ideas from multiple perspectives;
- make responsible and ethical decisions about how to use social media; and
- create limited, positive digital footprints while acting as good digital citizens online.

Performance expectations for technology are based on “Profiles of Technology Literate Students” from the ISTE National Educational Technology Standards for Students and several authorities on science, technology, engineering, and mathematics (STEM) education including Los Alamos National Laboratory, the Capitol Region Education Council, the Massachusetts and Minnesota departments of education, the Next Generation Science Standards, Teaching Tolerance, and Common Sense Media.

Students learn to become advanced users of software to which they were introduced in the Lower School and apply their software skills to enhance their learning. For three-dimensional modeling, students learn to use computer-assisted design (CAD) programs. Students learn to create videos using WeVideo, an online, multiple-track collaborative editing tool. Our schoolwide subscription enables students to access WeVideo’s tools and tutorials from any computer at school or at home. In recent years, student work with coding and video editing has earned awards at regional technology competitions.

## SCIENCE, TECHNOLOGY, ENGINEERING, MATHEMATICS

St. Patrick’s teachers have developed interdisciplinary science, technology, engineering, and mathematics (STEM) units throughout the grade levels. One example of this project-based work in the Grades 7 and 8 program is a STEM class that meets at least once per six-day rotation

and engages students in activities such as SeaPerch, where they learn and apply the concepts and skills necessary to build an underwater robot. Students have been highly successful in regional STEM competitions.

## LEARNING RESOURCES PROGRAM

The aim of the Upper School Learning Resources Program is to provide academic and organizational support to students who demonstrate specific needs. Learning specialists communicate and collaborate with classroom teachers, special-subject teachers, and parents to identify the current strengths and needs of students and to determine the most effective learning strategies and instruction to ensure maximum academic success. While the goal of the program is to meet students' needs primarily in classroom settings, there are times when specialized instruction is necessary to assist students in advancing their academic skills. Beyond whole-group instruction in the classroom, students may work individually or in small groups with a learning specialist to strengthen or expand skills and/or learn specific content at any given time. Recognizing the fluid nature of student learning at the elementary- and middle-school level, the program's structure is flexible in nature. Learning specialists use ongoing observation, work samples (quizzes, tests, projects, written work, etc.) and, at times, informal assessments to make informed decisions about students' instructional needs.

## THE WRITING & LEARNING CENTER

The MacArthur Campus Writing & Learning Center offers students instruction, guidance, and feedback on their evolving student skills and writing needs. Led by the Director of the Writing & Learning Center and supported by the MacArthur Campus learning specialists, the program coordinates a study skills scope and sequence for students in Grades 6 to 8, provides support for students with executive-functioning and organizational challenges, works with teachers to monitor student progress and create and implement individual learning plans, and guides all students through writing work with extra support available either at student request or by teacher direction. In addition, the Writing & Learning Center offers parent programs to help parents navigate the middle-school transition to greater student independence.

## STUDY SKILLS

Based in the work of the Writing & Learning Center, and meeting intensively at the beginning of the year and periodically thereafter, study skills classes taught in the context of academic subjects by the Grades 6, 7, and 8 learning specialists review executive-function skills like organization and long-term planning, as well as note-taking, research skills, and assessment preparation.

## THE ARTS

### Studio Art, Grades 4 and 5

In the Upper School art program, we believe that creative expression is learnable and attainable. Building students' confidence in their artistic ability is central to the curriculum. Students learn to reflect on, critique, and appreciate their own work and that of others. Student artwork enlivens the walls of the school. Activities in the Whitehaven Campus Art Studios develop students' skills of observation and perception while heightening their awareness of the elements of art and principles of design. Students become increasingly familiar with a broad range of materials, tools, and techniques as well as the methods for their appropriate use and further exploration. Art history and a working art vocabulary are integral to all classes. Subject matter is drawn from a variety of sources, including still life, nature, the work of other artists and cultures, classroom themes, stage design, and one's own life. Students expand their understanding of the connections art holds with many disciplines of study through integrated experiences.

The **Grade 4** curriculum further develops students' observational skills, use of the elements of art, and proficiency with tools and materials. It integrates with some classroom units such as geometry and the concept of journal-keeping. Students deepen their understanding of realistic work with a variety of drawing exercises as well as a still-life unit and a unit on drawing geometric forms accurately. Students also study and complete projects related to the work of artists Andy Goldsworthy and Wassily Kandinsky, whose diverse styles and artistic perceptions inform students' understanding of abstract work. Students work with contour, line, proportion, positive/negative space, color mixing, and the use of value to create light, shadow, and volume.

The **Grade 5** curriculum continues to reinforce the development of observational skills while refining students' understanding of the elements of art and principles of design and use of these ideas to achieve personal expression. Projects are completed in a variety of materials with more advanced techniques introduced for each. Students behave like artists, practicing the thorough development of ideas and options for thoughtful execution using paint, ceramics, printmaking, and pen. Many units ask students to discuss and reflect on the compositional decisions artists make and how those decisions can communicate ideas and influence the viewer. Grade 5 students play with the concept of self-portrait, learning how to represent themselves realistically as well as experiment with showing aspects of personality in more abstract pieces. Units also connect with language arts and the Archeological Dig.

## Studio Art, Grades 6 to 8

The scope of learning in Grades 6 to 8 studio art involves exploring a variety of art materials, increasing artistic repertoire and skills, cultivating original self-expression, and developing storytelling ability. By revisiting materials with a new set of cognitive, emotional, and physical faculties, students rediscover distinctive properties of each art medium and develop a new array of visual and plastic repertoire. Progressing from their childhood artistic repertoire, students are challenged to develop more advanced and sophisticated creative language that is more suitable for their new ideas and feelings. The primary subject matter for artistic exploration and creation in studio art is one's unique adolescent life experience. Through art-making, students are encouraged to reflect on and foster a deeper understanding of their own life experiences and those of others around them. Through active individual observations and collective discussions of the works of various artists from diverse cultures and periods, students build a strong art vocabulary and learn to analyze and appreciate the artwork of others as well as their own. Students have the opportunity to explore five major genres—portraiture, still life, landscape, figurative art, and abstract art—in the visual art domain across various cultures and time periods. The program also promotes interdisciplinary learning, connecting art with humanities.

## Music

The music program fosters a lifelong love of music, develops the competencies that enable children to participate fully in the music curriculum, and lays a foundation for participation in music beyond St. Patrick's.

Music instruction occurs twice a rotation within a comprehensive framework stemming from the experiential processes of Orff Schulwerk and Kodály. Children are immersed in skills and concepts that they will build upon through the grade levels in what we describe as a spiraling curriculum. In each grade, classroom music includes experiential instruction in the concepts of pitch, rhythm, dynamics, tempo, form, timbre, texture, and style. Music notation and reading become increasingly challenging with the expectation that, as they transition to middle school, students will be fluent in writing and reading all the notes of the C, F, and G pentatonic scales on the treble staff. Students learn these concepts through listening, movement, speech, singing, creating, and instrumental work. Classroom instruments include Orff instruments—xylophones, metallophones, glockenspiels, unpitched percussion, and recorders—and a variety of world instruments.

Opportunities for performance abound at all grade levels. Whether these performances take place in the classroom, in regular chapels, or for a large audience, they are vital to each child's development as a confident, skilled musician. A schoolwide highlight is the Christmas Pageant.

The **Grade 4** curriculum continues to build on the music concepts of melody, harmony, rhythm, dynamics, tempo, timbre, texture, and form through vocal exploration, instrument-playing, movement, improvisation, notation, and creation of elemental melodies, rhythms, and chants. Students increase their repertoire to include rounds, two-part songs, American folk music, and world music. Soprano recorder instruction continues with an emphasis on music-reading and improvisation. In connection with the social studies curriculum, students learn about the important role music played in eighteenth-century America. Through folk dances, hymn tunes, play parties, song games, and dulcimer-playing, students experience life in colonial times.

The **Grade 5** curriculum continues to build on the music concepts of melody, harmony, rhythm, dynamics, tempo, timbre, texture, and form through vocal exploration, instrument-playing, movement, improvisation, notation, and creation of elemental melodies, rhythms, and chants. Students continue to learn soprano recorder with an emphasis on increasingly difficult music-reading and improvisation. Using traditional drum-circle techniques, students create layered rhythmic patterns through rote learning as they respond to each other as an ensemble. The Winter Trimester encompasses musical and dramatic skills, collaborative work, and community-building skills as students create a full grade-level performance opportunity to be shared on stage. The students are responsible for making decisions about choreography, script, ensemble work, music arrangement, and staging. The final product is an arts-integrated performance accomplished with the support of their music, art, and homeroom teachers.

## Music Matters: Grades 6 to 8

The purpose of the general music program in Grades 6 to 8 is to continue to develop the students' knowledge and perception of music. Students become actively involved as listeners, creators, and performers while they explore the world of music. Their understanding of the structure and aesthetics of music increases as their musical skills strengthen. Students learn to express their knowledge and to communicate musically with others.

Through the use of a variety of music and musical experiences, students continue to gain greater knowledge and understanding of music; increased perception of the structural and expressive dimensions of music; an awareness of the relationship of other art forms with music; independent performance and group-participation skills; and the ability to use their knowledge, perception, and skill to refine their understanding and to facilitate communication with others.

Students examine the elements of melody, rhythm, harmony, texture, tone color, dynamics, and form through guided activities in listening, performing, creating, reading,

and notating, with an emphasis on experiential learning. Listening materials come from a variety of cultural, historical, and stylistic examples. Classroom instruments include drums and percussion instruments from around the world, keyboards, ukuleles, guitars, and a synthesizer/sequencer. Students become versed in the computer programs NoteFlight and Audacity as they write and edit their own music. Classroom activities include group and improvisational drumming ensembles, ukulele and guitar ensembles, and songwriting work incorporating a variety of electric and acoustic instruments.

**Grade 6** units of study include exploring the Greek modes in melody-writing, understanding Gregorian chant and the development of Western European music, and studying the dance rhythms of Latin America. The **Grade 7** research focus includes a GRAMMY unit study and a unit on a musician. The latter results in a student-created podcast that includes research, a short script, representative music, and a final project that has students editing voice and music together. Students also study West African singing and dancing and share their songs and dance with Grade 1 students. **Grade 8** focuses on exploring and researching early American music from the period of Reconstruction through the advent of Blues, jazz, country, and American popular song. Grade 8 students also create and perform a short opera adapted from a folk tale, complete with libretto, costumes, staging, simple melodies, and accompaniments. Their compositions are realized by performing for the Nursery School students.

### Arts Exploration, Spring Trimester, Grade 8

Grade 8 students choose a studio art or musical theatre elective during the Spring Trimester. At the MacArthur Campus Performing & Studio Arts Night in May, students present their work, either a theatre performance or studio artwork, to the broader school community.

### Studio Art Elective

The studio art elective course is designed to offer students a more in-depth opportunity to explore the visual art forms. Recognizing art as essentially a form of self-expression, students reflect on their own life experiences, which are part of the fabric of humanity, and represent them in their own individual ways. Throughout the course, students independently make a series of creative decisions—from choosing a subject matter to selecting an art medium, method, size, and style, to name a few—and produce a body of artwork (minimum three) that manifests their distinctive artistic visions. Students are required to write artist statements that describe their artistic intentions and the processes behind their creations.

### Musical Theatre Elective

This elective is for students who are interested in theatre performance. After the musical has been selected, students audition for parts. As part of the process of auditioning, students explore elements of acting through games and character development. After the musical is cast, students work on proper singing techniques, learn and assist with blocking, learn choreography, and practice acting skills as they work to memorize the script. Students also assist with set design and construction, program cover design, writing short biographies, and creating a playbill for the show. The culminating activity is the stage performance at Performing & Studio Arts Night in May.

### Performing Ensembles

The performing ensemble program offers both instrumental and choral opportunities for students in Grades 4 to 8. These ensembles provide instruction in advanced musical techniques, develop self-confidence through performance, and reinforce cooperative skills within an ensemble.

### Grades 4 and 5: Orff Ensemble

The Orff Ensemble, open to students in Grades 4 and 5, develops necessary ensemble skills such as playing independent parts, appropriate mallet technique, and the ability to listen. Orff Schulwerk, as envisioned by composer Carl Orff, is a way to teach and learn music through singing, movement, and playing instruments. Our Orff Ensemble, which has grown out of this process, uses a variety of pitched and unpitched percussion instruments, including body percussion, xylophones, metallophones, glockenspiel, drums, and bass tubes. Performances for this ensemble include special Chapels and all scheduled school concerts.

### Grades 5 and 6: Young Singers

The Young Singers of St. Patrick's consists of all Grade 5 students and Grade 6 students on an elective basis. Choir members are expected to make a commitment to attending all rehearsals, which occur during school hours, and to singing at all performances, several of which are outside school hours. Membership in the choir provides an exciting opportunity for students to develop good vocal techniques (sight-reading, ensemble, and choral literature skills), self-confidence through performance, friendships, and leadership skills.

### **Grades 6 to 8: Handbells/Handchimes**

The handbell program, which begins in Grade 6, features three ensembles. In Grade 6, students can choose to participate in the fall or spring. In Grades 7 and 8, participants can ring year-round. Being a member of handbells provides an opportunity for a small number of students to continue to participate in an instrumental ensemble begun in the earlier grades with the Orff Ensemble. Ringers develop strong rhythm and counting skills as they learn how each individual bell part fits together to create a whole. Rehearsals are normally scheduled before or after school. Performances for these ensembles include all scheduled school concerts. Individual groups also perform for special Chapels for Grandparents & Special Friends Visiting Day, the Christmas Pageant, St. Patrick's Day, and Easter and for Admission Parent Programs throughout the year.

### **Grades 7 and 8: MacArthur Campus Choir**

The MacArthur Campus Choir, which follows a structure similar to that of the Grades 5 and 6 Young Singers, is open to all Grades 7 and 8 students who choose to join and participate in rehearsals and performances both during and outside school hours. This non-auditioned group is featured at the Holiday Concert and the Spring Concert.

### **Grades 7 and 8: Chamber Singers**

The Chamber Singers, a unique leadership opportunity available to select students in Grades 7 and 8, comprises a small group of auditioned singers from the choir who have shown exceptional commitment to singing during their St. Patrick's careers. In addition to performing in concerts, these students lead singing in Chapels as needed, sing for special school events, and travel to local venues to perform during the school year.

Every March, St. Patrick's hosts a Middle School Choral Festival that includes several area independent schools. At other times, the choirs participate in special events around the city.

## **PHYSICAL EDUCATION AND ATHLETICS**

Physical education classes are part of the regular program in Grades 4 to 6. Grades 7 and 8 students are required to participate in a sport. The goal of the physical education program is to help children develop a love of and respect for physical movement and fitness. Within that goal is a continual emphasis on individual effort, team cooperation, and social awareness. Ultimately, students establish patterns and habits that allow each of them to have a physically active, healthy, and enjoyable lifestyle.

Upper School physical education classes develop the five concentration areas of the Lower School (body awareness, spatial awareness, locomotion skills, manipulative skills, and social interaction), often using similar, yet more advanced, movements. In addition, students take part in more formalized games and other activities that develop cardiovascular fitness, strength, and flexibility. Examples include field games such as football, soccer, and lacrosse; advanced manipulative skills such as juggling and intermediate gymnastics; and cardiovascular exercise such as running, jumping rope, and aerobics.

### **After-School Sports Program**

Athletic activity is an integral part of St. Patrick's effort to nurture the mind, body, and spirit. Competitive interscholastic sports enable students to practice and understand the values of teamwork, commitment, and sportsmanship and to develop a positive work ethic. Sports are an opportunity for our students to learn how to work with others for a common goal, to discipline themselves mentally and physically, and to gain confidence in their abilities.

St. Patrick's is a member of the Capital Athletic Conference. The conference, which comprises like-configured independent schools in Maryland, Virginia, and the District, provides a safe and compatible level of competition among its members. St. Patrick's also plays non-conference schools, and our teams have faced every major school in the area that sponsors competition for Grades 5 and 6.

All students in Grades 5 and 6 are encouraged to try out for a team sport. The school offers soccer, cross country, basketball, lacrosse, and track and field as competitive sports.

In addition to interscholastic competition, St. Patrick's offers students the chance to participate in seasonal instructional clinics and intramural team sports, including developmental lacrosse, soccer, and basketball, which are available to students in Grades 3 to 6.

### **Varsity Athletics**

Athletic activity is an integral part of St. Patrick's effort to nurture the mind, body, and spirit. Competitive interscholastic sports and other physical activities in which Grades 7 and 8 students participate enable them to understand and practice the values of teamwork, commitment, and sportsmanship and to develop a positive work ethic. Sports and other physical activities provide an opportunity for students to work with others toward a common goal, to discipline themselves mentally and

physically, and to gain confidence in their abilities. Rather than take a physical education class during the school day, students in Grades 7 and 8 participate in required athletics at the end of the academic day, four days a week. St. Patrick's uses its own gymnasium and playing fields on the Whitehaven Campus and the Foxhall Campus for practices and games.

St. Patrick's plays in the Capital Athletic Conference (CAC) at the varsity level for Grades 7 and 8. The conference, made up of like-configured independent schools in Maryland, Virginia, and the District, provides a safe and compatible level of competition among its members. St. Patrick's teams also compete against schools that are not in the CAC.

The Grades 7 and 8 athletic offerings for the fall season are soccer and cross country. Basketball and conditioning are the winter options. In the spring, students may choose lacrosse or track and field. In any given season, a small number of students may participate in an off-campus athletic activity that meets St. Patrick's requirements.

## Other Opportunities

### Clubs

Grades 6 to 8 students meet once during a six-day rotation to explore structured extracurricular activities in areas of interest to them. These include Literary Magazine, Battle of the Books, Yearbook, Design Club, Robotics Club, Debate Club, Chapel Council, and Community Service Clubs.

### Student Leadership Council

The goals of the Student Leadership Council (SLC) include serving the school and its students, serving the greater Washington, D.C. community, and acting as leaders in the St. Patrick's community by setting a good example for others. The SLC comprises representatives from each homeroom in Grades 4 and 5 and two representatives each from Grades 6, 7, and 8. In Grades 7 and 8, student leaders are elected to the SLC by their peers after candidates submit applications, which are screened by faculty. Grades 7 and 8 SLC members hold leadership roles intended to help them promote and model leadership and honor at St. Patrick's and also take on additional duties. Serving on the SLC is the highest student office at St. Patrick's. Being a good member of the SLC involves time, commitment, energy, cooperation, good judgment, and a willingness to work for the benefit of St. Patrick's.