

**BUCKINGHAM BROWNE & NICHOLS  
LOWER SCHOOL**



**CURRICULUM OVERVIEW  
GRADE SIX  
2026-2027**

## **Grade Six Teachers**

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# **GRADE SIX CURRICULUM OVERVIEW**

## **Language Arts**

The sixth grade curriculum focuses on specific skills for reading, writing, grammar and word study for a deeper understanding of and facility with the written word in a variety of contexts.

In sixth grade, students will:

- Use specific strategies for deeply engaging with literature, including questioning, making connections, summarizing, drawing inferences, identifying evidence from the text to support ideas.
- Identify and examine authors; use of literary techniques, such as figurative language, plot structure, imagery and characterization.
- Engage in meaningful discussions with peers to practice articulating their ideas and opinions in literature circles.
- Learn and practice specific strategies to use before, during and after reading to focus and enrich understanding and critical thinking, as well as to identify stated and implied main ideas, supporting details, and independently use methods of annotation.
- Make comparisons among cultures and genres and apply their conclusions and insights based on their experiences.
- Practice analytical writing through shorter and longer responses that are structured with a thesis statement, textual evidence, and analysis.
- Explore genres of poetry, fiction, nonfiction, and memoir.
- Examine models of good writing in the above genres and identify authors' techniques; practice specific strategies and tools to develop their own writing in these genres.
- Work on writing in various forms, ranging from creative writing, poetry, personal essays, analytical responses.
- Use graphic organizers to plan their writing; create clear thesis statements, supported by evidence from readings, write strong introductions and conclusions, build on word study skills for effective, quality writing.
- Receive guidance and feedback in regular teacher conferences; receive extensive written feedback from teachers to apply future assignments, understand the role of presented expectations or rubrics in planning, evaluating and completing work.
- Receive support as needed in reading, writing, and study skills to meet the goals of the curriculum.

## **Social Studies**

Students begin the year by studying the history of the United States through the lens of human rights. Students examine primary and secondary sources and engage in readings, reflections, and discussion in order to investigate American history and the direct connection to its shaping of our present society.

## **Social Studies (continued)**

The class studies topics including Indigenous nations, European colonization, enslavement and abolition, suffrage, Reconstruction, the Jim Crow laws and segregation, and the Civil Rights Movement. The class places emphasis on underrepresented narratives, such as the experience of Indigenous Nations before, during, and after the founding of the country. As we consider these complex periods, students are encouraged to explore the implications of race, power, gender, and national origin in relationship to events in history and their enduring legacies today. Students regularly consider current events in class and for homework, making connections between past and present-day events.

As the year continues, students reflect on questions about the many ways that social change happens. An initial study engages students in an exploration of primary sources, helping to not only build understanding of a past event but also formulate questions that will guide further research. Students then research their chosen historical event, develop an overview, and prepare a summary of a present-day connection for display at a human and civil rights gallery. Next, students learn about the influence of various change makers and resistance movements, focusing their research on people who stood up for something that they believed important. The class completes a research project that culminates in a presentation where students teach the class about the protesters who they studied. This unit allows students the opportunity to research and better understand the experiences of protesters while discussing their virtues, weakness, setbacks, and accomplishments.

The class concludes with a study of Afghanistan. As a class, students use their learning during the year as a foundation in considering how history has shaped another country's present society. They engage in conversation around moving beyond the headlines to understand the nuance and diversity of experience and thought within a country. In groups, students research and develop a timeline of Afghanistan's history together. Students then uncover the voices of those living in Afghanistan to deepen their understanding of the lives, values, hopes, obstacles, and realities of the human experience in today's Afghanistan.

## **Mathematics**

At BB&N we believe that math should be joyful and engaging. Our program develops children's fluency and flexibility with all types of numbers (including fractions, decimals, and negative numbers) while transitioning to more abstract and algebraic reasoning. We provide opportunities at every level for students to engage in mathematical explorations, to reason mathematically, and to express their ideas. We strive to strike a balance between larger conceptual understandings and specific skills and procedural fluency. We believe that all of our students can and will learn math.

## Mathematics (continued)

Sixth grade math at BB&N utilizes the high quality, research based Grade 6 Accelerated curriculum from Open Up Resources Math. Classes are taught in small groups four times a week, with an interactive student-centered, problem-based approach.

Sixth grade students spend most of their time in class working on carefully crafted and sequenced problems. Teachers help students understand the problems, ask questions to push their thinking, and orchestrate discussions to be sure that the mathematical takeaways are clear. Learners gain a rich and lasting understanding of mathematical concepts and procedures and experience applying this knowledge to new situations. Students reflect and communicate about their reasoning with their classmates—they talk about math, listen to each other's ideas, justify their thinking, and critique the reasoning of others. They gain experience communicating their ideas both verbally and in writing, developing skills that will serve them well throughout their lives.

In sixth grade students will:

- Study area and surface area
- Use a variety of models for arithmetic with rational numbers
- Further explore ratios, rates, and percentages using representations such as number lines, tape diagrams, and tables
- Represent rational numbers as fractions and decimals
- Calculate sums, differences, products, and quotients using both intuitive methods and efficient algorithms
- Solve linear equations in one variable and basic equations involving exponents
- Integrate their knowledge of ratios and rates with their knowledge of equations to study proportional relationships
- Solve percentage problems, including sales tax, tipping, and markup
- Expand arithmetic skills to include negative numbers
- Explore briefly data and statistics, including representations of data and measures of center

## Science

This year in science, sixth graders will study an introduction to biology. They begin the year considering questions related to how living things are similar to each other and how scientists study the natural world. As the fall semester continues, they explore the world of cells to understand complex cellular processes involved in the production and cycling of energy for life. In the spring, the Science program becomes a survey course in elementary human anatomy and physiology. Over the year, they will be introduced to scientific skills and practices, including microscopy and dissection, as well as the appropriate use of technology to make a scientific argument. Our essential questions for the year include:

## Science (continued)

- What does it mean to be alive?
- How do scientists study and organize the natural world?
- How does energy cycle through the human body?
- How is the human body organized to ensure good health?
- How are scientific understandings communicated to people?

In sixth grade, science classes include lectures, discussions, hands-on activities, and labs. In addition to their lab work, sixth graders will practice note-taking and will be responsible for mastering new vocabulary that will help them describe the systems they will be studying throughout the year. When confronted with the challenges of articulating clear explanations, sixth graders refine their thinking. And when presented with information about some of our planet's most extraordinary processes, they put those explanations to the test. There is a special focus on the practices of science literacy - how scientists communicate science through written and digital media. Listed below are the units of study and highlights of the content and skills covered.

### Living Things

- Discuss what it means for something to be alive
- Historical Determination and Spontaneous Generation
- Science Skills and Practices
- Cell Theory
- Classification and Taxonomy
- Science Literacy: Digital Dashboards, Organism Mashups, Scientist Biographies

### Cells and Cell Processes

- Cell Organization and cellular processes
- Observe various cells under a microscope
- Science Literacy: Write a creative story about how cells metabolize food particles in order to produce energy for the cell to function

### Genetics and Evolution

- Mendelian Genetics
- Human Inheritance
- Science Literacy: Genetics Ethics Debate

### Human Body Systems

#### The Respiratory System

- Explore the role of the respiratory system in producing energy throughout the body
- Investigate how breathing rate is affected by exercise
- Investigate the surface area to volume ratio effect on oxygen absorption in the lungs
- Dissect sheep lungs
- Impacts of smoking and vaping on human health
- Science Literacy: Anti-Smoking/Anti-Vaping PSAs

## Science (continued)

### The Circulatory System

- Explore the role of the circulatory system in moving energy throughout the body
- Design Challenge on building a model circulatory system
- Learn about the ABO blood typing system
- Dissect sheep heart

### The Digestive System

- Explore the role of the digestive system in circulating energy throughout the body
- Observe how enzymes break down starches into sugars
- Create a visual model of the digestive system

## Science Literacy for Unit: Podcast project on Body Organs

### The Reproductive System

- Learn about mitosis and meiosis, and how genetic information is divided during cell growth
- Learn the structure, function, and location of the various parts of biologic male and female reproductive systems
- Get answers to questions about puberty, health, and sex with the help of the school nurse and the school counselor

## Key Science Skills and Practices

|                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                     |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"><li>● Comparing and Classifying</li><li>● Creating &amp; Interpreting Graphs</li><li>● Critical Thinking</li><li>● Data Collection &amp; Analysis</li><li>● Dissection</li><li>● Experimental Design</li></ul> | <ul style="list-style-type: none"><li>● Giving and Receiving Feedback</li><li>● Making and Recording Detailed Observations</li><li>● Microscopy</li><li>● Modeling</li><li>● Problem Solving &amp; Collaboration</li><li>● Technology Integration &amp; Skill Development</li></ul> |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## Lower School World Languages

Our goal is to help students to build a foundation for future language learning and to be prepared to communicate as global citizens of an interconnected world. To do this, we want to highlight and embrace student identities and provide an environment where they are comfortable taking risks and applying a growth mindset to language learning.

The Lower School World Language Department uses an approach to teaching languages that focuses on proficiency and communication in an engaging and low stress environment. Teaching with comprehensible input prioritizes the delivery of understandable messages that are personalized, meaningful, interesting, and relevant to our students. The goal of our classes is for students to acquire Spanish or French through communication and active participation. When age appropriate, we aim to spend at least 90% of our classes in the target language focusing on listening and reading to provide input (as opposed to formal vocabulary and grammar instruction).

We also strive to provide opportunities to explore other cultures and to do interdisciplinary work that allows students to connect and expand upon what they are learning in other places.

Sixth graders explore Spanish or French two times a week for 50 minutes each time. Sixth grade classes are a mix of students who are new to BB&N with a variety of backgrounds in language experience and students who have studied French and/or Spanish earlier in the Lower School. In both languages, speaking/listening warm-ups, daily routines and closing activities create predictable structure to support confidence and practice content learned in class. Students are expected to speak the target language in class, and are supported and encouraged to do so with a variety of strategies. Repetition, spiral techniques, and opportunities for personal choice and challenge allow students to build proficiency and overall comfort in the language.

Class content strives to be engaging, focused on high-frequency words, and connected to meaningful content for the student. While traditional grammar instruction is not the focus of our classrooms, there is exposure to how to use a variety of high frequency verbs in the present tense, agreement of gender and number, negation, etc. Classroom communication focuses on comprehensibility and preparing students to know how to set themselves up for success with language learning as they move forward. Sixth graders are challenged throughout the year to work with all three modes of linguistic expression (interpersonal, interpretive, and presentational), as well as to interact with a variety of authentic resources to prepare them for using language skills in real world settings. Typical classroom activities include songs, reading, story listening, drawing, writing, short video clips, projects, role playing, and games.

## Music

Sixth grade students will engage in practicing, performing, improvising, and creating music using their voice, midi keyboards, and the digital music software *SoundTrap*. Students will engage in listening exercises to expand their knowledge of different styles of music and will also explore the historical background and contextual aspects of the

## Music (continued)

repertoire. Students will highlight various popular and electronic genres of music from around the world to inspire their own compositions. Students will be assigned composition projects that focus on different music industries.

### Key Musical Concepts:

- Rhythm
  - Review various rhythmic components explored in grades 3-5.
- Melody and Harmony
  - Create melodic/harmonic phrases on *SoundTrap* using a midi keyboard.
  - Create compositions utilizing various major and minor keys.
  - Explore various chord progressions in major and minor keys using a midi keyboard.
- Form and Composition
  - Listen to, identify, learn, and create multi-part vocal and instrumental electronic pieces.
- Timbre
  - Watch, listen to, discuss, and identify musical instruments using the Western European Classical model (brass, woodwind, percussion, and strings) and the [Hornbostel-Sachs](#) classification system.
  - Explore various combinations of electronic sounds in compositions on *SoundTrap*.

**Chorus/Musical** All students participate in the Brick Building Chorus, a choral ensemble consisting of students in grades 5 and 6. Students perform at the December Winter Concert. Beginning in January, students rehearse in conjunction with the drama teacher towards performing a sixth grade class musical production in the spring.

**Orchestra** Students who study an orchestral instrument are *invited and encouraged* to play in the Lower School Orchestra which provides a valuable experience different from solo practice and lessons. The orchestra plays an important role in many of the school traditions for our community. Orchestra rehearses once a week before school on Friday mornings and performs at Lower School concerts and designated assemblies.

## Integrated Arts

The goal for students in the Arts Rotation is to create a body of work that demonstrates their learning about color theory, composition, principles of design and form. Emphasis is placed on keen observation, symbolism and developing personal expressive style. Students will explore, analyze, and compare the work of contemporary and historical artists within the scope of the visual arts rotation program.

### Essential Questions We Explore Include:

- How can an artist transform the ordinary to the extraordinary?
- How can simple things like numbers and colors represent something about us?

## **Integrated Arts (continued)**

- How are masks used by cultures around the world and throughout time?
- How can we use elements of art to symbolically represent an idea?
- How do artists respond to the moment they live in through the ideas they explore and the materials they choose?

### **Key Content:**

- Painting & Color Theory
- Ceramic Hand-building Methods
- Collage & Layering
- Symbolism & Surrealism
- Principles of Design

Sixth grade students also have the opportunity to choose to focus on a particular art form in our new elective program, which runs from Fall to early Winter. This year we are offering Songwriting, Improvisation, Painting and Printmaking.

## **Drama**

The drama curriculum consists of three skills and goals:

1. Confidence building through improvisation, and group scene work.
2. Performance alone on stage through monologue and small group work.
3. Theater games that develop skills in the following areas: attention, imagination, physical awareness and narrative skills.

In addition, all sixth graders participate in a spring musical, which involves intense acting, singing, dancing and scenic design skills. The music is rehearsed during the school day with two performances for the school to which parents and friends are invited to one.

## **Information Science/Library**

Information Science begins with a review of how to access and use our catalog, reference tools, and the library website and how to borrow materials from the library. Students will learn strategies for using a variety of sources, including web searches, with an emphasis on checking for reliability, critical thinking and problem solving. They will practice note-taking and explore new and recent fiction as well as nonfiction books. They will have opportunities to reflect on their learning style and try different approaches to collecting and organizing information. Skills they will be developing include, but not limited by the ability to:

- Formulate research strategies,
- Use search engines and reference resources to explore topics
- Check reliability and relevance of information
- Practice broadening and narrowing their focus

## Information Science/Library (continued)

- Compare sources
- Evaluate websites and other materials with emphasis on reliability and relevance
- Understand the difference between recreational information and reliable Information
- Prepare a bibliography

## Technology

At the BB&N Lower School, it is our intention to integrate technology into the classroom in meaningful ways, and our goal is to teach students the skills necessary to be successful throughout the school year as well as to prepare them for future years.

Six grade is the “**Own It**” year in BB&N’s three-year Technology and Computer Science arc. Students draw on the foundations introduced in Grade 4 and reinforced in Grade 5 to undertake advanced, inquiry-driven work with greater autonomy. They identify meaningful questions, investigate how technologies and systems operate, choose strategies and tools, manage longer projects.

The curriculum emphasizes transfer rather than mastery of a single platform. Students use accumulated knowledge of programming, digital citizenship, computational thinking, design, debugging, and collaboration to address complex problems that do not have one predetermined answer. The goal is for students to see themselves as responsible designers, critical investigators, capable collaborators, and reflective learners.

## Grade-Level Focus

In Grade 6, students:

- Examine how automated systems collect, process, and use data at scale.
- Evaluate the benefits, limitations, risks, and social effects of emerging technologies and AI.
- Investigate how recommendation systems, interface design, and digital platforms can shape attention, beliefs, and behavior.
- Begin moving from block-based programming toward typed code and more sophisticated program structures.
- Apply abstraction, decomposition, algorithms, pattern recognition, and iterative design to sustained inquiries.
- Design solutions for authentic users and incorporate feedback into multiple revisions.
- Integrate software and physical computing or robotics in an open-ended engineering challenge.
- Present work and findings to an audience beyond the classroom (Celebration of Learning)

## **Technology (continued)**

### **Curriculum Strands**

#### **Staying Safe: Privacy, Security & AI**

Students examine how automated systems gather and combine data, how digital profiles are constructed, and how those systems may affect individuals and communities. They weigh benefits against privacy, security, fairness, and environmental or social concerns. Rather than relying only on fixed safety rules, students learn to ask informed questions about what a system collects, why it needs the information, who benefits, what could go wrong, and what responsible use requires.

#### **Citizenship & Kindness Online**

Students investigate how digital footprints, recommendation feeds, interface choices, and platform incentives shape participation and belief. They evaluate sources and perspectives, recognize that automated recommendations are designed rather than neutral, and consider how design can include, exclude, persuade, or amplify. Students use empathy, integrity, and evidence to decide how they will participate responsibly in digital communities.

#### **Coding & Creating**

Students begin the transition from block-based programming toward typed code while retaining the computational ideas developed in Scratch. They use variables, functions, conditional structures, loops, and nested logic to create a product for an authentic user or purpose. Students read and adapt existing code, document their thinking, test individual components, and explain how program structures work together.

#### **Problem-Solving Habits**

Students apply abstraction and decomposition to longer, cross-disciplinary problems. They define an inquiry, identify relevant information and constraints, break the work into manageable components, notice patterns across problems, and represent an algorithm before implementation. Students compare approaches, make evidence-based decisions, revise plans when new information emerges, and remain productive in ambiguity.

#### **Robotics, STEM & Sharing Work**

Students design an integrated hardware-and-software challenge that builds on earlier sensor calibration and autonomous navigation work. They investigate a need, establish criteria and constraints, prototype, test, troubleshoot methodically, and refine the system through several iterations. Team members assume meaningful and rotating responsibilities while documenting decisions and ensuring that multiple perspectives shape the outcome.

## **Technology (continued)**

Students share the resulting process, product, and findings with an audience outside the immediate classroom. The presentation is designed for the audience and includes the problem, evidence, design decisions, revisions, limitations, and possible next steps.

## **Teaching and Learning**

Grade 6 learning is increasingly inquiry-based. The teacher provides essential instruction, clear success criteria, conferences, feedback, and strategic scaffolds while students take greater responsibility for defining questions, selecting approaches, managing time, locating and evaluating information, testing solutions, and requesting support. Structured checkpoints preserve transparency and accountability without removing productive choice.

BB&N's Framework for Academic Excellence is visible through student agency, meaningful relationships, self reflection and equitable participation.

## **Health and Physical Education**

### **Health**

Grade 6 Health asks students to use these skills in increasingly complex contexts. Students evaluate information, explain connections, communicate their thinking, and make informed choices related to wellbeing, relationships, puberty and reproductive health, safety, and introductory substance-use education.

### **Athletics**

In Grade 6, the Physical Education progression shifts into a team-based athletics program in which students choose a sport for each season and participate on an interscholastic team. The underlying values of participation, effort, enthusiasm, and individual growth remain consistent with the Lower School program. Teams review skills, rules, and strategies before competition and continue to develop more advanced skills through practice and game situations. Every student plays and contributes to the group's success.

**Fall:** Cross-country, field hockey, flag football, soccer, volleyball, and Mind and Movement.

**Winter:** Basketball, fencing, ice hockey, rock climbing, squash, wrestling, and Mind and Movement.

**Spring:** Baseball, crew, golf, lacrosse, softball, tennis, track and field, and Mind and Movement.

## **Responsive Classroom**

The Lower School uses the social curricular practices of The Responsive Classroom. Sixth graders continue to mature their skills of building class and community rules and understand why they must be followed. Students practice affirming, positive community building skills and self-control; develop flexibility in working in different teams, groups and partnerships. This includes inviting new friendships with sensitivity to students seeking inclusion and to positively support and affirm peers with different learning styles or pace. Students are expected to respect all students, faculty and staff. Sixth graders take an active role in class events, morning meeting or discussions with opportunities to strengthen listening skills and wait time for responses, such as speaking assertively and respectfully in morning meetings. The goal is for students to become leaders and role models of the LS community as well as to show good citizenship both at BB&N and the greater Boston area.

## **Homework**

Please refer to the BB&N website, [www.bbns.org/handbook](http://www.bbns.org/handbook), Lower School Policies and Procedures.

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