

**BUCKINGHAM BROWNE & NICHOLS
LOWER SCHOOL**



**CURRICULUM OVERVIEW
GRADE SIX
2020-2021**

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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, and 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. Through examination of primary documents and secondary sources, readings, reflections, and discussion students investigate American history and the direct connection to its shaping of our present society.

Social Studies (continued)

The class studies topics including Indigenous peoples, European colonization, slavery, nation-building, abolition, suffrage, Reconstruction, the Jim Crow Era, and the Civil Rights Movement. While students learn dominant culture histories, the class also places emphasis on underrepresented narratives, such as the experience of Indigenous Nations in the founding of the country or the importance of women in the Revolutionary United States. As we consider these complex periods, students are encouraged to explore the implications of race, power, gender, national origin and socioeconomic class both in history and today. Students regularly consider current events in class and for homework, making connections among past events and today's world.

As the year continues, students begin to reflect on questions of social change through studying various historical events, change makers, and resistance movements. An initial study engages students in an exploration of primary sources from periods and events we consider in class. Students research a chosen historical event, develop an overview, and prepare a summary of a present-day connection for display at a human rights gallery walk. Students then shift their focus to specific protesters or movements who stood up for something that they believed important. The class completes a research project that culminates in a lesson where students teach the class about their change makers. 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 grows children's fluency with numbers and is rich in numbers-based experiences. 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.

Grade Six sets the stage for the study of Algebra through the study of patterns, introducing the concept of variables. They systematize their work with rational numbers including the division of fractions. They explore the concept of rate and solve problems using unit rates and percents. In sixth grade students extend their understanding of area and perimeter to investigate volume and surface area. The fundamental ideas of data analysis are introduced and students make and interpret various kinds of graphs.

Mathematics (continued)

Sixth Grade uses high quality, research based resources including the *Connected Mathematics Program*. Classes are taught in small groups four times a week, with an interactive student centered approach. Students have math assignments four times a week.

In Sixth Grade students will:

- Use ratio reasoning to solve problems
- Add, subtract, multiply, and divide rational numbers including fractions, decimals, and percents
- Represent and solve problems using percents
- Graph, compare, and find absolute value of rational numbers
- Write and evaluate simple expressions
- Solve problems involving volume and surface area
- Describe patterns of change in words, data tables, graphs, and equations
- Describe center, spread, and shape of data

Science

The science program is a survey course in elementary human anatomy and physiology. In sixth grade, science classes include lectures, discussions, hands-on activities and labs. Listed below are the units of study and highlights of the content and skills covered.

Cells

- Discuss what it means for something to be alive
- Observe elodea and amoeba cells under a microscope
- Learn how cells carry out the basic processes of life

The Respiratory System

- Investigate how surface area to volume ratios affect oxygen absorption in the lungs
- Dissect sheep lungs
- Collaborate and develop Virtual Reality Tour of Respiratory System with World Languages

The Circulatory System

- Design challenge on building a model circulatory system
- Design and conduct an experiment investigating the relationship between heart rate and exercise
- Learn about the ABO blood typing system
- Dissect sheep hearts

The Digestive System

- Observe how enzymes break down starches into sugars
- Work together in groups to model how peristalsis works using tennis balls and nylon stockings

Science (continued)

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 the male and female reproductive systems
- Get answers to questions about sex and growing up with the help of the school nurse and school counselor

Lower School World Languages

The World Language Department has been working with an exciting new approach to teaching languages over the past two years that focuses on proficiency and communication in a fun and low stress environment. This approach, Teaching with Comprehensible Input, is based on the theories of language acquisition by Dr. Stephen Krashen, and 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. Acquiring a language happens organically through active participation, as opposed to learning a language through explicit instruction. This is akin to the way that babies learn to speak a language, by listening to it rather than formally studying it. Therefore, we aim to spend at least 90% of our classes in the target language focusing on listening and reading (when age appropriate).

Our classes are lively, engaging, and personalized to the students' interests. Lessons are based on unique and engaging stories that capture the interests of students. As part of these lessons we play games, read stories, act, create books, and cook to fully immerse ourselves in the language. Through these stories we introduce basic grammar concepts, including but not limited to verb conjugation and adjective-noun agreement. A variety of brain breaks are incorporated into class in order to maximize attention, focus, and optimal energy levels. Below you will find some examples of our students' work and get a peek inside what happens every day in the BB&N World Language Program.

World Languages in Grades 4-6:

Our Spanish and French classes in Grades 4-6 use the same approach started with our B-3 students. Through the Comprehensible Input approach, we engage the students in language-based projects that allow the students have experiences with a foreign language in a fun, relaxed environment. In order to prepare the students for the challenges of the Middle School, we introduce grammar through reading and writing. We value the importance of students understanding how the language works grammatically, but also have the confidence to speak it.

Sixth Grade: Spanish and French

Sixth graders explore Spanish or French three times a week for 45 minutes. In the Sixth Grade, World Language students at BB&N either enter their third year of

Lower School World Languages (continued)

French or continue their study of Spanish. They continue to build and develop their cultural competence and improve their linguistic skills through both traditional, Comprehensible input and creative means.

The BB&N sixth grade French and Spanish curriculum prepares students for the rigors of Middle School language classes, no matter which language they choose to continue or to explore. They are exposed to high frequency verbs in the present tense, definite and indefinite articles, adjectives and nouns and their agreement of gender and number. Students have access to and utilize a variety of written resources and texts throughout the year.

Students explore Spanish or French culture through music, art, literature, and films. They learn about cultural festivals and artistic traditions through food and craft experiences and with opportunities to engage with authentic cultural materials.

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 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*.

Music (continued)

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 art rotation is to create a drawing portfolio. Emphasis is placed on keen observation and the students' expressive style. This helps students make comparisons of artists and works of art by closely examining their peers' and their own work.

Drawing/Painting materials - paper, colored pencils, pens, pastels, charcoal, acrylics, watercolors

- Discuss/explore values and opportunities of different materials and subject matter, and how many artists work
- Introduce/demonstrate color mixing, palettes, application, and manipulation
- Explore/emphasize composition, contour, proportion, tone, texture, positive/negative space, and light/shadow.

For the other half of the trimester, students use symbolic and realistic imagery as they learn the rules of pencil drawing and cut paper collage. Most importantly, students learn to use their eyes as an effective tool, especially as they become aware of and explore their environment through the artist's eyes. A portfolio of fine drawings culminates their major project, which may include:

- A value chart
- Spheres and ribbons in space
- A natural environmental landscape inspired by Ansel Adams' photography
- A half-face portrait from a reproduction
- A final illustration of any object of their choice

Sculpture Rotation

Sixth graders have a sculpture unit for seven classes during which they design and execute a small, abstract soapstone or alabaster sculpture. They start to form their stone with saws and rasps, and then progress to files and rifflers to develop their shape,

Integrated Arts (continued)

studying, evaluating, and changing it as they progress. Finally, sanding and polishing create an inviting, tactile, surface, and complete the sculpture. Through this process students discover and develop their visual and sculptural skills. Goals for the term are introduced, defined and explored through discussions.

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
- 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 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

Technology (continued)

successful throughout the school year as well as to prepare them for future years. Through technological integration we give our students an introduction to word processing, spreadsheets and graphing, presentation software, three-dimensional design, internet safety and digital citizenship, online research, robotics, and programming. Our teachers create academic environments that facilitate student creativity, innovation, communication, and collaboration with others, while developing students into critical thinkers, problem solvers, and decision makers. Sixth grade students are exposed to various social studies, language arts, science, world languages, art, math, and problem-solving programs and projects that:

- Are developmentally appropriate
- Directly relate to classroom content
- Offer new ways of looking at traditional curriculum
- Encourage thinking and stimulate inquiry
- Foster collaboration, communication and creativity
- Challenge and motivate a wide range of students

Sixth grade students, during their weekly technology classes, are exposed to a variety of new skills and tools as well as continue to develop existing ones. Specifically:

- Google Platform: students gain knowledge and expertise creating Google forms/surveys, Google sheets for collecting and interpreting data, Google documents for word processing, and Google slides for presentations.
- Three-dimensional design: students learn to create and design three dimensional models using the TinkerCAD program. Student designs can potentially come to physical fruition via our 3D printers or by building with various materials.

Students are immersed in the Design Thinking process particularly during the first half of the year. They explore and practice each dynamic part of the Design Thinking process from empathizing with others and defining a problem to identifying and prototyping potential solutions. Students apply their understanding of these processes in multiple contexts such as bridge design and food ethics projects.

Physical Education

The Sixth Grade students are introduced to an intramural athletic experience in a variety of team sports, while focusing on mindfulness and relaxation breathing. The purpose of the curriculum design is to allow students the opportunity to play the sports that will be offered to them as sixth grade students. For many, playing on a team is a new experience but the underlying values of participation, effort, enthusiasm, and individual growth remain the same. Before any games are played, the group has a thorough review of skills, rules, and strategies. Classes are run as a team practice with skill development, drills, and a breakdown of situations and applications for use of the individual skills. Throughout the season the basic skills from fifth grade are reviewed and more advanced skills are introduced.

Physical Education (continued)

The games provide an opportunity for the student to participate on a team that will work for a common goal, something that they have been working toward throughout the Lower School Physical Education Program. The major theme behind the team sports curriculum is the concept that every student plays and contributes to the success of the group.

Sports Offered:

Fall Season	<u>Boys</u> Football X-Country Soccer	<u>Girls</u> Field Hockey X-Country Soccer Volleyball
Winter Season	<u>Boys</u> Basketball Ice Hockey	<u>Girls</u> Basketball Ice Hockey
Spring Season	<u>Boys</u> Lacrosse Baseball Track & Field	<u>Girls</u> Lacrosse Softball Track & Field

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, Lower School Policies and Procedures. Another resource, HOMework - A Guide for Lower School Parents, was first published and distributed to all LS parents in 1999 and is available for parents at Back-to-School Nights.