

**BUCKINGHAM BROWNE & NICHOLS  
LOWER SCHOOL**



**CURRICULUM OVERVIEW  
GRADE FIVE  
2022-2023**

## Grade Five Teachers

phone/voice mail

<b>Homeroom* 5E</b>	<b>Frances Early</b>	<b>800-2498</b>
<b>Homeroom* 5M</b>	<b>Gabrielle Mbeki</b>	<b>800-2416</b>
<b>Learning Specialist</b>	<b>Ryan Magnuson</b>	<b>800-2422</b>
<b>Academic Support Specialist</b>	<b>Sarah Ngo</b>	<b>800-2544</b>
<b>Mathematics</b>	<b>Sandra Rojas</b>	<b>800-2448</b>
<b>Science</b>	<b>Lauren Rader</b>	<b>800-2506</b>
<b>French</b>	<b>Kate Lavalle</b>	<b>800-6211</b>
<b>Spanish</b>	<b>Marisol Martinez</b>	<b>800-2427</b>
<b>Drama</b>	<b>Jenny Lifson</b>	<b>800-2439</b>
<b>Information Science</b>	<b>Heather Lee</b>	<b>800-2462</b>
<b>Technology</b>	<b>John Cumberbatch</b>	<b>800-2442</b>
<b>Music</b>	<b>Jenna Havelin</b>	<b>800-2481</b>
<b>Integrated Arts</b>	<b>Ashley Bartlett</b> <b>Emily Discenza</b>	<b>800-2430</b> <b>800-2479</b>
<b>Physical Education</b>	<b>Ed Bourget</b>	<b>800-2437</b>

**\* Includes Language Arts, Mathematics and Social Studies instruction**

Email addresses for all Faculty and Staff at BB&N follow this format:

First InitialLast name@bbns.org

# GRADE FIVE CURRICULUM OVERVIEW

## Language Arts

In fifth grade language arts, students' exposure to contemporary authors is broadened, and critical and analytical thinking skills are developed and advanced. Student reading comprehension is extended to include more inferential and abstract ideas. The focus of reading is less on literal understanding, and more on the interpretation of characters and theme. Students begin to write in greater detail and with more formal organization. They explore the genres of narrative, expository, and persuasive writing; and develop their ability to use precise vocabulary and figurative language to enliven their work. Language arts lessons are often integrated with social studies, the arts, and other classes.

In fifth grade, students:

- Practice literal comprehension skills by identifying the who, what, when, and where of stories
- Develop interpretive and analytical comprehension by thinking deeply about characters, theme, cause and effect, story structure, and the qualities of different literary genres
- Identify literary elements such as similes, metaphors, personification, and foreshadowing
- Enrich their vocabulary and understanding of etymology through their study of Greek and Latin roots
- Benefit from having opportunities to read aloud, practicing using precise language, and reading with appropriate pace and expression
- Use reading strategies to monitor and deepen comprehension, including making connections, questioning, predicting, inferring, and summarizing
- Read independently and regularly write and share responses to their independent reading
- Compose extensively in the genres of expository, narrative, and persuasive writing
- Learn that good writers improve their craft by focusing on six specific traits of writing: ideas, organization, voice, sentence fluency, word choice, and conventions
- Take notes on a regular basis
- Respond in writing to both literal and interpretive comprehension questions
- Support a written point of view with examples and quotes from the text
- Are held accountable for their spelling and for applying appropriate mechanics, and sentence and paragraph structures
- Examine models of good writing to learn specific strategies and tools they can apply to their own writing
- Receive feedback and guidance about their writing
- Demonstrate command of the conventions of standard English grammar and usage when writing or speaking
- As needed, may work with a learning specialist to receive additional support developing reading and writing skills

## **Social Studies**

In fifth grade, students study how the choices, actions and innovations made by those who came to the Americas have influenced the establishment of the modern world. Through studying year-round the immigration experience - past and present (through the personal experiences of immigrants and refugees) students will be able understand the movement of people, and the importance of identity, and how it attributes to the America of today.

The essential understandings answered through this immigration study include:

- Why do people move?
- What have been the major migration patterns?
- What is the immigration experience?
- What are the effects of immigration? How does it contribute to personal identity?
- And then collective identity, particular of the culture of America?

Specific study skills taught in social studies include:

- Reading for information (historical and current)
- Gathering research material from multiple sources (online, text, personal experience)
- Understand the importance of primary sources and use of artifacts through inquiry
- Presenting findings in a variety of ways
- Note-taking and test-taking

Overall guiding essential questions addressed through social studies investigations include:

- Why is the study of history important?
- How / why do "facts" change over time?
- How / why does one discover the real story?
- What ethical dilemmas are uncovered through the study of history?
- How have historical events impacted the development of world that we know today?
- What does history have to do with me?

## **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, specific skills, and procedural fluency. We believe that all of our students can and will learn math.

## Mathematics (continued)

A major goal of fifth grade math is to explore the connections between different representations of numbers, specifically fractions, decimals, and ratios. Students solidify their understanding of whole number multiplication and division and utilize efficient strategies including standard algorithms. Fraction and decimal operations are developed and percents are introduced.

Fifth grade uses high quality, research-based resources including the *Bridges in Mathematics* curriculum and the *Connected Mathematics Program*. Classes are co-taught by the homeroom teacher and a math specialist with an interactive approach in whole group investigations, small group activities, and individual practice. Students have math assignments four times a week.

In fifth grade students will:

- Identify numbers as prime or composite and find the prime factorization of a number
- Find factors and multiples of whole numbers
- Multiply multi-digit whole numbers using a variety of strategies including the standard algorithm
- Divide whole numbers and express remainders as fractions and decimals
- Use ratio and rate reasoning to solve problems
- Uses efficient strategies to model and solve multi-step problems with all four operations
- Writes simple expressions with whole numbers, fractions, and decimals to represent problems
- Add, subtract, and multiply fractions
- Add and subtract decimals
- Compare and order fractions, decimals, and percents
- Graph numbers on a coordinate plane
- Classify two dimensional figures

## Science

In fifth grade, science classes include lectures, discussions, hands-on activities and labs. Listed below are units of study and highlights of content and skills covered.

### Ecology

- Investigate the biotic and abiotic factors that make up an ecosystem
- Plan experiments to test the effect of different conditions on plant growth
- Study the effects of climate change on weather patterns, climate and their impacts on storms and access to water
- Quantitatively and qualitatively assess the challenges of different marine habitats
- Observe organisms and their physical and behavioral adaptations
- Design and conduct an animal behavior experiment
- Study food webs and their implications for conservation

## **Science (continued)**

- Assess various human impacts on habitats and populations of organisms
- Visit Bluff Point State Park and the Mystic Aquarium in Mystic, CT (or similar location/institution) and survey the Long Island Sound, including seining for animals and measuring water chemistry; compare and contrast endangered ecosystems during aquarium programs; observe marine animals in aquarium setting

## **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.

Fifth graders explore Spanish or French three times per week (2x45 minutes and 1x35 minutes). Spanish students continue to dive deeper and expand their foundational skills and French students continue to build upon the introduction to the language started in 4th grade. 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. Class content strives to be engaging, focused on high-frequency words, and connected to meaningful content for the student. Repetition and spiral techniques allow students to build proficiency and overall comfort in the language. Fifth graders are challenged throughout the year to work with all three modes of linguistic expression: interpersonal, interpretive, and presentational. Typical classroom activities include songs, reading, story listening, drawing, writing, short video clips, projects, role playing, and games.

## Music

Fifth grade students will engage in practicing, performing, improvising, and creating music using their voice and ukulele. All concepts listed below will be explored through a diverse repertoire of songs played on the ukulele in various playing styles. The ukulele will be explored as a melodic-, harmonic- and chordal/accompaniment-based instrument. 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.

Key Musical Concepts:

- Rhythm
  - Learn to strum with a strong sense of beat and subdivision.
  - Learn various beat-driven and syncopated rhythmic strumming patterns.
  - Learn to mute and chuck on the ukulele.
- Melody and Harmony
  - Vocalize with proper technique and learn 2-part+ vocal repertoire.
  - Learn, perform, and improvise melodic/harmonic phrases on the ukulele using proper technique and artistic phrasing.
  - Learn to read and perform music in various major and minor keys.
  - Explore various major-, minor-, +7, +9, and suspension-chords on the ukulele.
  - Explore various chord progressions in major and minor keys on the ukulele.
- Form and Composition
  - Listen to, identify, learn, and perform multi-part vocal and instrumental pieces.
  - Create and improvise lyrics, melody, and harmonic chord progressions utilizing the voice and ukulele.
- 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.

## Integrated Arts

The goal of fifth grade integrated arts is for students to deepen their critical thinking skills, actively collaborate, and persevere through complex artistic challenges. We invite students to reflect and conceptualize their understanding of the world around them through art. As they embark on a study of immigration to the United States, their own personal identities and stories, those stories and voices from the communities around them, we look at those same themes, exploring and understanding them through the lens of art. In fifth grade we weave the awareness of point of view and perspective in all its forms into our work: physical, emotional, as opinion, voices that are heard and unheard, angles that are seen and unseen. Fifth grade integrated arts support students' fine motor skill development and, more broadly, their creative, social, emotional and global understanding.

## **Integrated Arts (continued)**

Goals for the term are introduced, defined and explored through discussions and looking at a wide variety of international art and artists. In fifth grade, students are given more opportunity to design their own projects independently, allowing them to master all steps from creating the concept, to planning, drafting, choosing the materials best suited for the project, and time management skill.

Essential Questions We Explore Include:

- How do images help convey the meaning of words?
- What is craftsmanship?
- How does creating art help us understand ourselves and the time and place we live in?
- How does art help us understand the lives of people of different times, places, and cultures?

Key Content:

- Scientific Drawing
- Illustration & Visual Symbolism
- Graphic Design
- Woodworking
- Photography
- Soft Sculpture

Integrated Arts acts as a platform for collaboration across disciplines. This collaboration helps students see the connectivity between subjects and the interconnectivity of our world. These interdisciplinary connections emerge over the course of our studies, as students explore key questions and ideas through art-making. Our final products will vary from year to year based on the questions and curiosities of our students.

## **Drama**

Fifth grade drama engages each student in improvisation work, small group scene work and a full-length homeroom play. Students learn to create characters, and create dialogues in both small and large groups. Learning to analyze scenes and scenarios and make connections to real life is all a part of the Improv unit. Small group scenes give students the opportunity to direct and be the actor in already created short scripts from age appropriate plays or books. Students learn to listen to each other's idea while getting to be the performers and audience members. The full-length play is presented before spring break and allows for each child to memorize quite a few lines, wear a costume and learn to rehearse towards a large performance in front of an audience.

## **Information Literacy/Library**

Information science in fifth grade will focus on developing critical thinking skills and learning how to choose resources for a variety of research topics for their Social Studies projects in Immigration, and various Science, World Languages and Arts projects. Students also come to the library for help choosing books for independent reading and to discuss and review books.

All students will practice:

- Review using our school library catalog and exploring catalogs for local public libraries
- Exploring topics using pre-selected websites and reference tools including both print and electronic resources
- Creating short collaborative video reviews and trailers, and writing and recording individual book reviews to share
- Storing materials for use in class projects
- Keeping track of their sources
- Introduction to citing sources and creating 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.

### **Coding:**

In the technology lab students are taught coding using the Scratch programming language. In a safe and inclusive classroom setting, students are free to work autonomously on their projects and can work at their own pace, or they can collaborate on projects.

Student work on an e-portfolio of Scratch projects. The portfolio is a collection of projects that are integrated and showcase the student work. Students are encouraged to implement one or more aspects of science, technology, engineering, art or math (STEAM) into each of their Scratch projects. A catalogue of twenty (20) STEAM based project ideas is made available.

Regular project review helps with student executive function, e-portfolio design and implementation strategies best suited for the students' individual needs. Each student approaches the same requirements from different views (top-down, bottom-up or hybrid).

### **Robotics:**

Students are presented with engaging open-ended real-world problems. They work in teams to develop solutions. Students being to formally learn about critical thinking and

## **Technology (continued)**

apply it to lab challenges. Students take turns playing a leadership role as they build knowledge and develop their solutions.

Students continue to:

- Develop their executive function skills
- Develop an e-portfolio application architecture to showcase their work
- Develop critical thinking skills (analysis, communications, creativity, open-mindedness and problem solving)
- Develop the skills required to collaborate on joint projects
- Develop communication skills by sharing project ideas and expressing them non-verbally (storyboarding)

## **Physical Education**

The Fifth 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 fourth grade are reviewed and more advanced skills are introduced.

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

Cross-Country  
Field Hockey  
Flag Football  
Soccer  
Volleyball

#### Winter Season

Basketball  
Floor Hockey

## **Physical Education (continued)**

Gymnastics/Yoga  
Mind and Movement

### Spring Season

Lacrosse  
Baseball/Softball Skills  
Tennis  
Golf  
Track & Field

## **Responsive Classroom**

The Lower School uses the social curricular practices of *The Responsive Classroom*. Fifth graders continue to develop affirming, positive community building skills; as well as develop flexibility in working in different teams, groups and partnerships. As a result, students are encouraged to establish new friendships with sensitivity to students seeking inclusion. They practice respecting all students and faculty/staff. Students take an active role in creating class rules, class events, and morning meeting or discussions. They strengthen their listening skills and wait time for responses, such as practicing self-control and speaking assertively and respectfully in morning meetings. Fifth graders are expected to positively support and affirm peers with different learning styles or pace. They work to show good citizenship both at BB&N and the greater Boston area. The goal students work toward is to become leaders and role models of the Lower School community.

## **Homework**

Please refer to the BB&N website, [www.bbns.org/handout](http://www.bbns.org/handout), 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.