

**BUCKINGHAM BROWNE & NICHOLS  
LOWER SCHOOL**



**CURRICULUM OVERVIEW  
GRADE ONE  
2022-2023**

## Grade One Teachers

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

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# First Grade Curriculum Overview

## Language Arts

First Grade Literacy is designed to meet the needs of each student both as an individual and as a member of the classroom community. Reading and writing are integrated into many aspects of the school day so that students come to see these skills as necessary parts of their everyday lives. First Grade uses *Foundations* to support handwriting, grammar, phonics, phonological/phonemic awareness, and word study.

First Grade students:

- Are taught reading and writing in whole groups, small groups and on an individual basis.
- Participate in Readers Workshop to deepen comprehension skills, build reading strategies, and celebrate their growth as readers.
- Learn to choose books at their appropriate independent reading level from classroom collections.
- Listen to quality literature read aloud and share their ideas during group discussions.
- Practice phonics concepts in a sequential and age appropriate manner. Children are given a variety of opportunities to practice and build on newly learned concepts.
- Continue the word study program by increasing their knowledge and recognition of high-frequency words.
- Through daily practice, begin to understand the relationship between the words they see in print and those they use in their writing.
- Observe teachers modeling various writing techniques and have ample opportunities to practice independent writing and share their work with others.
- Write daily in several structures such as stories, factual accounts, letters, and daily journal entries.
- Improve handwriting skills, practice spacing and adding proper capitals and punctuation to their writing.
- Evaluation is an ongoing process that helps guide classroom instruction. Teachers continuously assess what children can do and build on their strengths.
- Emphasis is placed on learning, reading and writing strategies in meaningful contexts where children begin to gain awareness of the combination of contextual, pictorial and phonetic cues used as they read and write.
- A reading specialist works with the First Grade team to provide additional support for children who are in need of further help in developing reading and language arts skills.

## Social Studies

First grade students engage in social studies curriculum content through project work. The chosen curriculum content reflects the various interests of the students and the teachers. Projects are ideal for integrated learning because they provide opportunities for children to immerse themselves in a wide variety of subject matter. Essential questions lay the foundation of the project work as these questions are used to engage students in a wide array of learning experiences as they work toward a common goal. It is through these experiences that students build on their existing schema to create new knowledge. Projects additionally allow for the integration of curriculum areas such as math, ELA, science, and art, thus exposing students to the real life application of these subjects as they relate to classroom projects.

## 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.

The focus in first grade is addition and subtraction. Students use visual and physical models to develop a conceptual understanding of place value working towards efficient and appropriate strategies to solve problems. Students practice their skills through explorations using measurement tools including rulers and clocks.

First grade uses high quality, research-based resources including the *Bridges in Mathematics* curriculum. Classes are co-taught by the homeroom teacher and a math specialist using a hands-on approach in whole group investigations, small group activities, and individual practice.

In first grade students will:

- Add and subtract within 20 and become fluent with facts within 10
- Add and subtract multiples of 10
- Represent and solve addition and subtraction problems using equations
- Build and break apart two- and three-digit numbers by place value
- Tell time to the nearest half hour
- Measure and compare lengths using non-standard units
- Collect categorical data and make graphs
- Define attributes of regular shapes and partition shapes into fractional parts

## Science

Students use a hands-on inquiry-based program to study science. This approach allows them to develop and use process skills in order to gain a body of scientific knowledge. During first grade, all topics and content relate to plant biology in service of their efforts to grow food for the BB&N and greater Community. Our highly integrated curriculum combines science, social studies, reading, writing and art to create a year-long study on community. Specifically, we focus on the following questions: What are our rights and responsibilities as community members? How are our values reflected in choices made by the community? How do individuals support collective needs? In experiencing and learning through these questions, first graders learn what part of our community is, including the natural world, how to be part of a community and how to act and do our part in making sure the community's needs are met. Connections are drawn between the different subject areas, and students are able to view all the topics through different perspectives, whether it be through the lens of a scientist, a writer, a cook, or a critical thinker.

Listed below are the units of study and highlights of the content and skills covered.

### What is a scientist? Practice Observation and Experimentation Skills using Water

- Make hypotheses and set up experiments to determine how many paper clips can float on water. Understand that surface tension makes water sticky and easy to transport through plant roots and up the stem of a plant.
- Experiment with different paper types to see and observe what types of paper are more absorbent.

## **Science (continued)**

- Experiment with celery or carnations to observe how capillary action moves the water through a stem and into a flower.

### Habitats and Plants

- Make detailed observations on plants to understand each part of the plant and its function.
- Plant, germinate and care for produce in our tower gardens and garden beds.
- Record and make observations of the life cycles of various plants, while planting and working in our garden bed tower gardens.
- Make observations of the life cycle of a chick from the time eggs are in an incubator until the chicks are two weeks old.
- Observe different habitats in our local community to understand the basic needs of all living things.
- Discover how all parts of a habitats are connected and share knowledge of types of habitats with others in the community.

### Light and colors

- Explore primary and secondary colors by mixing colored filtered light.
- Discover the properties of light by investigating reflection, refraction, and colors of light.
- Use the acquired knowledge of light and mirrors to understand an important requirement of plant growth.
- Investigate and explore how shadows are made and can move.

### Scientific Measurements

- Measure common objects found in the science lab as well as parts of the plants to gain knowledge of centimeters.

## **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.

## Lower School World Languages (continued)

### Spanish

First Graders explore Spanish twice a week for 35 minutes. First Grade Spanish students continually work to build competency in the Spanish language through music, games, activities, stories, and small projects. To increase comprehension, vocabulary is introduced in context through a story and/song or game. The Spanish program takes into account that many first graders are building their foundations for reading in English first. First graders are introduced to basic reading skills through reading our daily lesson plan or reading some of the stories as a whole group. At the end of many of the stories, First Graders take a mini-book home to share with their families/caregivers.

The BB&N World Language Program from Beginners through Third Grade follows what is known as a spiral model, where students explore many of the same topics year after year but with different challenges at each grade level that build upon the skills learned in the previous years.

### Music

First graders attend music class twice weekly, in both half and whole-class groups. Music activities center on the children's experience of music through singing, moving, listening, playing instruments, and creating melodies and rhythms. In addition, the first grade curriculum incorporates musical stories as focal points for engaged listening, expressive movement, original composition, and understanding musical form. The overall objective is for students to use a variety of tools to communicate music made by self and others.

#### Rhythm:

- Identify pulse as "Ta" and "TiTi"
- Differentiate between sound/silence
- Identify sound/silence as "rest"
- Analyze and describe rhythmic qualities in the music they hear and produce

#### Melody:

- Demonstrate melodic shape through movement, written symbols, and hand gestures
- Sing songs with a wide range of pitches
- Play pentatonic scales on glockenspiels
- Improvise and invent melodies on pitched instruments

#### Harmony:

- Develop proper mallet technique
- Demonstrate simple bordun (chord) on bar
- Experience ostinato

#### Form:

- Identify phrase
- Identify Introduction

## **Music (continued)**

- Identify repeat sign
- Identify basic musical forms (ABA, Rondo, Variations, and Call-and-Response)

### Timbre:

- Select appropriate timbres to accompany stories, songs, and poems
- Classify unpitched percussion (wood/metal/skin)
- Classify pitched percussion

## **Integrated Arts**

The goal of first grade integrated arts is for learners to practice the work habits and dispositions of an artist. Our primary focus is on the habit of observation. Students are encouraged to notice shape, line, color, and texture in artworks, materials, books, and our environment. We develop a rich artistic vocabulary to help us get specific about what we see; we also “describe” what we see through observational drawing and sculpture.

We also emphasize material exploration and craftsmanship. First graders are invited to play with materials and notice how they behave and interact. They build fine motor skills as they experiment with new tools and develop a repertoire of artistic techniques. Learners also begin to practice strategies like iteration and critique to help them experiment, plan and improve over time.

### Key Content:

- Scientific drawing & close looking
- Illustration & visual communication
- Painting & color mixing
- Collage & assemblage
- Ceramic hand-building techniques

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.

### Interdisciplinary Concepts We May Explore Include:

- Plant science & observation drawing
- Cultural traditions, family & identity
- An artist’s role in the community

## **Library**

Students visit the library once a week as a class, where they listen to stories, select books to take home and begin to develop their library skills. The read aloud time provides an opportunity for students to:

## Library (continued)

- Discover the joy of reading.
- Enrich their vocabulary and develop listening skills.
- Talk about the role of the author and the illustrator.
- Use picture clues to aid in understanding material.

When they sign out books, students are able to choose from a variety of titles and genres as well as learn the responsibility of borrowing and returning a book within a given period of time. As the year progresses, students will learn:

- How the library is arranged by categories.
- What types of books can be found in the library.
- To distinguish between fiction and non-fiction.
- To browse the library to find material of personal interest.

Parents are invited to visit the library and borrow books to read at home.

## 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. 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.

## Physical Education

First grade students are challenged to react to directions and to try to achieve a specific movement pattern. Perceptual motor skills are progressively taught and practiced through repetition and correction. In the spring, the students create and design a music and movement assembly in their music and physical education classes.

- Movement Activities: Animal imitations, structured movement, shapes, acceleration and deceleration, transferring weight, bilateral, unilateral, and cross-lateral movement are introduced.
- Manipulative Skills: Students are exposed to and practice dribbling, kicking or passing an indoor soccer ball. Review of bouncing, rolling, throwing, catching, striking and shooting with different size balls.
- Locomotor Skills: Running, walking, jumping, hopping, leaping, skipping, galloping, and sliding are stressed and perfected.
- Non-Locomotor Skills: These skills are used in the warmup activities and gymnastics.
- Rhythmic Activities: Dance and move to music, hip-hop, as well as square and folk dancing, ball skills, jump rope and interpretative movements to music.

## Physical Education (continued)

- Gymnastics: Mats are used for rolls, animal walks, balance stunts, and cartwheels. Cargo net, ropes, and rope ladder continue to be offered for upper body strength.
- Large Group Games: To develop team awareness, adherence to rules, team spirit, and cooperation. Relay, circle, or line formations are presented in each game. Tagging games are emphasized for fun as well as to develop aerobic fitness and running skills (stop, dodge, change of direction).
- Mindfulness: This practice helps to reduce stress, anxiety, and negative emotions, cool down when temper flares and sharpen concentration skills.

## Responsive Classroom

Responsive Classroom is a school wide program to support the development in each individual of a core of important habits of mind that build the positive social emotional components for positive communication, character development, interpersonal relationships and responsibility to the broader school community. In the First Grade, we focus on the following skills:

- Develop an understanding of how class rules are created and why it is important to follow them.
- Practice and monitor self control during morning meeting and class meeting times.
- Speak assertively and respectfully in morning meetings.
- Learn the art of Sharing: from selecting items or topics, to narrowing the focus of what to say, to asking for questions, to thanking the class.
- Continue to improve behavior during transitions, free choice or unstructured time.
- Make wise, safe choices or seek support from adults as needed.

## Homework

There is no formal, regularly assigned homework for children in B-K-1. Parents are expected to read aloud to their children for a minimum of 15 minutes every day.

