

**BUCKINGHAM BROWNE & NICHOLS
LOWER SCHOOL**



**CURRICULUM OVERVIEW
GRADE ONE
2020-2021**

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 Lower School Harvest Festival. Listed below are the units of study and highlights of the content and skills covered.

What is a scientist? Practice Observation and Experimentation Skills

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

Change of Seasons

- Explore why leaves change colors in the fall and separating the colors of a leaf by doing paper chromatography.
- Observe weather and changing of seasons – learning about the earth's tilt and its effect on our seasonal cycle.

Science (continued)

Life Cycles

- Make detailed observations on the mealworm life cycle from larva to beetle.
- Experience making multiple drafts and requesting peer feedback to make detailed and accurate observational drawings of the mealworm life cycle.
- Make Mealworm life cycle movies that illustrate the complete life cycle of the mealworm from egg to beetle.
- 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.
- Record and make observations of the life cycle of a chick from the time eggs are in an incubator until the chicks are two weeks old.

Light and colors

- Explore primary and secondary colors by mixing colored liquids, and creating their own formulas.
- Discover the properties of light by investigating centers that focus on reflection, refraction, and colors of light.
- Build color wheel spinners to mix colors of light in an optical illusion.
- Use the acquired knowledge of light and mirrors to understand an important requirement of plant growth.

Scientific Measurements

- Measure and weigh common objects found in the science lab to gain knowledge of grams and centimeters.
- Use their newfound knowledge to measure and collect accurate data while performing an experiment that dehydrates a carrot.

Lower School World Languages

The World Language Department has been working with an exciting new approach teaching languages over the past two year 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 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 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. A variety of brain breaks are incorporated into class in order maximize attention, focus, and optimal energy levels.

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. First graders concentrate in particular on listening and oral expression, but some writing is introduced towards the end of the year. Each unit cumulates in a written/artistic piece that is housed in a notebook that will go home with them at year's end.

Spanish students continue to build upon the program from Kindergarten; they take part in interactive, hands-on activities and lessons in the target language. The skills acquired include:

- Sound recognition and pronunciation
- Greater command of basic greetings and conversational phrases
- Expand vocabulary in connection with classroom content
- Write words and short phrases
- Respond to a variety of questions, both personal and about classroom content

Topics to be covered include, but are not limited to:

- Additional greetings
- Calendar and weather (as part of the class routine)
- Numbers from 1 to 30
- Colors and Sizes
- Foods (likes/dislikes)
- Express feelings
- Body Parts
- Action words
- Family
- Animals
- Describe people, places, and things

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

Music (continued)

- 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
- 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 integrated arts in first grade is to provide opportunities for students to explore their world through Art while developing their own strategies and techniques for expressing an idea. Through Art, children strengthen their ability to problem solve, view something from another perspective while also strengthening their fine motor skills and developing planning habits such as draft making. Integrated Arts is a platform for collaboration between Art, Science, Spanish and Social Studies, Language Arts and each other. This collaboration helps students see the connectivity between subjects and the interconnectivity of our world.

- Observational Drawings: Noticing shapes, textures, and details
- Painting: mixing and creating colors, application methods
- Making collages
- Working with clay

At the start of the school year, students are introduced to the technical aspects of clay, which include wedging, various construction techniques, and glazing. They will create self-portraits in clay, focusing on 3D aspects of the face, proportion, texture, and color. We will collaborate with Spanish in creating Art to celebrate the Day of the Dead. We will collaborate with Science in learning about the Life Cycle of plants. We will collaborate with homeroom classes around family traditions and recipes. Each of these projects will allow children to use their own creativity to explore these subjects through the lens of art. They are not meant to be a “picture” to go along with what they are learning but rather as a means to investigate creatively. The Integrated Arts projects may vary as we collaborate with other specials and their homeroom studies, but the arts curriculum and skills will be woven in through these projects.

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:

- 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.

Physical Education (continued)

- Non-Locomotor Skills: These skills are used in the warm up 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.
- 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.

