

**BUCKINGHAM BROWNE & NICHOLS
LOWER SCHOOL**



**CURRICULUM OVERVIEW
GRADE THREE
2020-2021**

Grade Three Teachers

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

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GRADE THREE CURRICULUM OVERVIEW

Language Arts

The language arts program equips students to develop reading and writing skills as they use a variety of text sources to inform their learning. In third grade, students:

- Gain exposure to a broad selection of literature, including biographies, novels, and informational texts
- Practice inferential thinking
- Read books of their own choosing during Reading Workshop and Academic Choice Time
- Sharpen oral reading skills by building fluency and reading aloud with expression
- Participate in the writing process by prewriting (e.g. generating ideas, planning, researching topics, organizing ideas), drafting (e.g. revising, editing, and conferring), and publishing narrative and expository pieces
- Participate in literature circles designed to promote dialogue about books through the sharing of summaries, predictions, text connections, and visualizations
- Learn to identify main ideas and supporting details
- Use graphic organizers to improve comprehension and written organization
- Learn to consistently apply spelling and grammar conventions
- Learn to spell and read grade-appropriate high frequency words
- Write responses to literature and social studies texts
- Learn lowercase and uppercase cursive and begin touch-typing

Evaluation and informal assessments occur regularly, while standardized assessments occur several times a year. Academic support specialists work with the third grade team to plan consistent, interconnected lessons and to provide additional support for children who need to further develop their language arts skills.

Social Studies

Third graders explore three primary social studies topics over the course of the school year.

The Characteristics of Leadership

Students learn about a variety of influential world leaders – including Sonia Sotomayor, Harvey Milk, and Wangari Maathai – through shared reading experiences and discussions. After reflecting on the biographies read, students consider what qualities effective leaders possess and begin to cultivate those qualities in their own lives. Students also assume leadership roles on campus as they organize the annual Cradles to Crayons clothing drive and enjoy having Beginner buddies during Community Time. Team-building activities, grade-wide conversations, and an interdisciplinary culminating project round out the unit.

Understanding Differences

Students learn about a variety of physical and developmental disabilities, including blindness, limb loss, Down syndrome, and communication disorders. Visitors from Canine Companions for Independence, Perkins School for the Blind, Helping Hands, and Changing Perspectives

Social Studies (continued)

provide students with opportunities to ask thoughtful questions and learn about the experiences of those living with neurological and physical challenges. Children also consider the benefits of assistive technology and accessible architecture during a variety of project-based explorations.

Modern and Ancient Egypt

Students explore the region of the Middle East before turning their attention more specifically to Egypt. By making connections and seeking points of commonality, students reflect on how life in Modern Egypt may be similar to life in the United States as well as how it might be different. Third graders connect directly with students from Cairo American College through web-based communication in order to learn more about life in the capital city. The unit continues with a focus on the Ancient Egyptian theme of “Art as Magic.” Students participate in a number of interactive and hands-on projects designed to bring their learning to life. The unit includes active reading exercises connected to ancient myths and informational texts. Students showcase comprehensive term-end research projects during a gallery exhibit for families and classmates.

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.

Third grade formally introduces multiplication and division. Students consolidate their understanding of addition and subtraction algorithms. Using both new and familiar models such as number lines, arrays, and ratio tables students develop a deep understanding of the concept of equal groups and equal sharing. Students are expected to learn multiplication combinations through 10x10 and to apply their understanding of place value to develop strategies for multiplying multi-digit numbers. Third graders build the foundation of fractions by exploring them in contexts such as time, money, and length.

Third 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. Beginning in third grade students are given math homework twice a week.

In third grade students will:

- Add and subtract numbers with regrouping
- Add numbers with regrouping using the standard algorithm
- Fluently multiply to 10x10

Mathematics (continued)

- Multiply by multiples of 10 and 100
- Know related division facts
- Represent and solve addition, subtraction, and multiplication problems using equations
- Solve problems using addition, subtraction, and multiplication
- Solve whole number area and perimeter problems
- Demonstrate an understanding of fractions as numbers
- Define and classify polygons
- Solve problems with elapsed time and tell time to the nearest minute

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

Electricity

- Discovering a variety of ways to light one bulb using one wire and one battery
- Using bulb and battery holders to create circuits with multiple batteries and bulbs
- Comparing parallel circuits with series circuits
- Testing classroom items to discover which are insulators and which are conductors
- Creating a conductive design using copper wire tape and a LED
- Creating quiz boards; game boards that light up when you connect the question to the correct answer

Geology

- Observing rocks and minerals using a hand lens, streak plates and balances
- Learning about how rocks are formed and becoming familiar with the terms igneous, sedimentary and metamorphic
- Discussing and exploring how the earth changes through processes such as erosion and volcanoes
- Making fossils and learning how they provide information about plants and animals that lived long ago

Eyes

- Learning about the parts of the eye and how the eye and brain work together to allow sight
- Exploring optical illusions and the benefits of binocular vision

The Mysterious Powder

- Examining and comparing four white powders
- Observing and describing the reactions of the powders with water, vinegar, iodine and red cabbage juice

Science (continued)

- Applying the above information to solve a mystery involving a white powder found on the school yard of a fictitious school

Science and Egypt

- Investigating methods to mummify an apple
- Building a “reed boat” out of straws, rubber bands and clay, and then testing the boat on the “Nile” to see how much cargo it holds
- Using a sundial to learn how a shadow changes over the course of the day
- Observing the moon and learning about the phases of the moon
- Making Big Dipper Finders and learning about how constellations change location in the sky during the night

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 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 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

Third graders explore Spanish twice a week for 45 minutes. Third grade Spanish students continue to build basic competency in the Spanish language through games, activities, projects, reading and writing. Students are expected to speak only Spanish in class. Much of our work is story based, utilizing both student and teacher created content that targets high frequency structures and words that are personalized, compelling, and repetitive by design. Classwork is focused around these stories and is varied, including combinations of reading, writing, acting, games, movement, story listening, and drawing, in order to increase their exposure to and use of the Spanish language. Students also spend time every class discussing the date, the weather, personal interests, and daily activities. Students create a book to showcase their class stories that goes home with them at year’s end.

Lower School World Languages (continued)

Skills that are taught include:

- Comprehension/sound recognition
- Pronunciation
- Read short stories, as well as a short novel at year's end
- Vocabulary development
- Respond to a variety of questions, both personal and about meaningful content
- Write paragraphs connected to classroom content

Topics to be covered are student driven, and will include (but not be limited to) the following:

- Greetings
- Ask and answer questions to relay important personal data
- Numbers 0 to 100
- High frequency words and structures
- Weather/seasons/calendar
- Body parts
- Action words
- Describe people, places, and things
- Interrogative words (asking and answering questions)
- Family members
- Describe daily activities and hobbies
- Modes of transportation
- Express needs, wants, likes and dislikes for everyday activities and situations

Information Science/Library

Third graders come to library once a week in half groups to choose books for stories, and for Information Science, where they work on developing research and critical thinking skills using both online sources and print materials. During the course of the year students learn how to:

- Use the online library catalog to find books
- Practice using call numbers to locate books on the library shelves
- Explore and use appropriate research materials such as World Book online
- Use National Geographic Places and Animals online to support Social Studies work
- Create "Book Adds" for their favorite books, using pictures they print or paper and crayons to share and display their comments
- Locate and explore biographies as part of a whole class project
- Understand differences between fact and opinion
- Begin to understand the organization of materials in libraries using Dewey

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

Technology (continued)

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.

Music

Curriculum Statement: Third grade students will engage in practicing, performing, improvising, and creating music using the recorder and other barred Orff and percussion instruments. All concepts listed below will be explored through a diverse repertoire of songs from various music genres. 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.

- Rhythm
 - Demonstrate pulse in different meters
 - Read, write, and identify:
 - Time signatures: 2/4, 3/4, 4/4, 6/8, common-time, and cut-time
 - Quarter, eighth, half, dotted half, whole notes and rests
 - Transition from second grade method to count-based rhythmic reading
- Pitch
 - Read, write, and identify treble clef notes
 - Read, practice, and perform notes on the recorder using proper technique
 - GAB, high CD, low DEF (optional: C, F#, high E)
- Melody and Harmony
 - Identify treble clef notes and the major scale utilizing solfege
 - Identify, create, and improvise melodic patterns
 - Learn basic harmonies and instrumental accompaniments
 - Demonstrate artistic melodic phrasing on voice and various classroom instruments utilizing proper technique
- Form and Composition
 - Identify, recognize, and create various musical forms: sonata, rondo, themes and variation, chorus and verse, call and response, round/canon, ostinato
 - Compose and improvise multi-instrumental arrangements
- Articulation
 - Identify music markings: i.e., repeat, D.C./D.S. al fine/al coda, fermata
 - Identify and perform music with various styles of articulation: i.e., legato, slurs, staccato, accents
- Dynamics
 - Identify, recognize, and perform various musical dynamics
 - forte, piano, fortissimo, pianissimo, mezzo forte/piano
 - crescendo, decrescendo, ritardando
- Tempo
 - Identify, recognize, and perform various musical tempi
 - Allegro, andante, adagio, moderato, lento
 - Accelerando, diminuendo

Music (continued)

- 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 integrated arts in third grade is to help students develop an appreciation of different materials and to begin thinking, seeing, and working both two-dimensionally and three-dimensionally.

Half of the year will be devoted to learning the basics of drawing in color with a special emphasis on drawing portraits. Representational drawing and painting will be emphasized in both detailed and generalized imagery. Students will explore the impact of color in relation to other colors and also the emotional impact of colors. Students in Grade 3 will also have woodworking.

The skills and techniques introduced and developed include:

- Developing a creative approach to design by generating many visual images for each project.
- Following the visual image from an idea, to a working drawing, and then to a finished project.
- Functional design problem-solving, further thorough conversations about the purpose the object is to serve and what students consider visually pleasing.
- Understanding that there are many different solutions to any design problem.
- Proper use of hand tools and a sense of competence working with wood.
- Using gouges and mallets to carve wood, as well as rasps to follow contours in shape three-dimensional form.

Physical Education

Third grade has a more serious approach to the development and application of the various team sports skills. Competition is introduced and taught with a positive approach which emphasizes team effort, cooperation, and participation. Students gain skill development through drills and repetition followed by the application in games.

Team Sports:

- Soccer: Soccer is taught in the fall when basic skills are taught, used in lead-up games, and then applied in small group games. Dribbling, passing, goal-tending scoring, offense and defense strategies are taught.
- Kickball: Base running, pitching, fielding, catching, throwing, positions, and rules are introduced to the class.
- Football: Passing, catching, punting, and running with a football are covered.

Physical Education (continued)

- Basketball: Dribbling, passing, catching, shooting, and offensive/defensive positions are experienced.
- Volleyball: Setting, bumping, serving and rotation are taught.
- Group games: Developing awareness for rules and strategies of various fun games, stressing participation and sportsmanship. Coordination, flexibility, agility, balance, and fitness are improved through these games.
- Floor hockey: Dribbling, passing, shooting and goal tending skills are introduced and applied in lead-up games.
- Rhythmic Activities: Hip-hop, folk dancing, warm-up exercises to music.
- Track and Field: Introduction of running and field events. Track events include dash, team relay, hurdles and long distance run. Field events include modified shot put, discus, javelin, standing and running long jump.
- T-ball/Wiffle ball: Basic fielding skills, hitting skills and rules are taught in preparation for softball in following years.
- Relaxation/Belly Breathing/Mindfulness Activities: In many of our classes, we incorporate quiet, mindful activities as a way to relax and concentrate on our breathing

The Responsive Classroom

The Lower School uses the social curricular practices of *The Responsive Classroom*. Third graders learn to speak clearly and respectfully during Morning Meeting and class discussions. They also learn to focus on the discussion topic and to contribute positively and consistently. Students begin to assume greater responsibility for managing time wisely, setting personal limits, and following limits set by teachers. All children work towards developing greater self-control and using kind, affirming words in both academic and social situations. Students also practice including peers in group games as well as accepting losses or setbacks with resilience.

Homework

- Third grade homework progresses logically and incrementally over the course of the year.
- Reading homework consists of 20 minutes of independent active reading and recording.
- Language Arts homework consists of one double-sided grammar practice page on Mondays and Wednesdays.
- Math homework consists of one double-sided practice page on Tuesdays and Thursdays.
- Spelling homework consists of a rule-based list of twelve words to review throughout the week in preparation for a dictation at the end of the week.

