

BNS Turquoise Room Curriculum

Fourth Grade; Emily Stewart

I. Sources of Curriculum:

The Turquoise Room curriculum is derived from several sources: the emerging interests of the students, families, and teachers; the emerging interests and issues of our school, local community, country, and world; the Virginia Standards of Learning; and the BNS master curriculum documents. Some of our major goals in the Turquoise Room include problem solving, analysis of ideas, perspective taking, cooperation, communication, time management, and exploration.

II. Literacy Curriculum:

The literacy curriculum includes word study, reading, writing, grammar, vocabulary, handwriting, and oral communication. This curriculum is integrated throughout other subject areas, and emphasis will be increasingly placed on reading comprehension (narrative texts) and reading for information (expository texts). Literacy objectives will be covered in a variety of methods during reading workshop and writing workshop.

A. Reading Workshop

Reading workshop is comprised of direct instruction, teacher modeling, student-centered novel study groups, and independent reading practice.

- 1. Teacher modeling** happens primarily through our shared reading. The teacher selects books to read aloud to the entire class. During the read aloud, the teacher models think-aloud comprehension strategies. Students also work as a group with teacher support to analyze and write literature responses to the shared text.
- 2. Monitored independent reading** allows students to practice selecting their own books according to their individual interests and reading levels. Students write literature responses to these books weekly, and the teacher gives feedback and support as needed.
- 3. Novel study** books are assigned to small groups of students. Students work together to set reading goals weekly, and each student completes written comprehension work to share with his/her group at weekly meetings. Students lead discussions about the books, and the teacher facilitates as needed.

B. Writing Workshop

Writing workshop includes handwriting, spelling, grammar, direct instruction, teacher modeling, independent writing, and writing conferencing. Grammar and handwriting are primarily addressed individually with students in the context of their daily writing. Whole group lessons are taught as needed. Students are placed in spelling groups to help them strengthen specific writing skills and spelling patterns according to individual needs. Spelling groups are formed based on formal assessments and informal observations. The groups are fluid to respond to student growth and changing needs. Writing lessons will include expository, narrative, and persuasive skills and strategies.

Reading and Writing goals that will be emphasized for fourth grade students:

- Use active listening skills

- Participate in group discussions
- Use specific vocabulary and vivid word choice to enhance oral communication
- Use grammatically correct language
- Make oral presentations and reports
- Use context to understand meaning of unfamiliar words
- Read familiar text with fluency and expression
- Describe how the choice of language, setting, and information contributes to the author's purpose
- Explain the purpose of the author, e.g., entertain, inform, or persuade
- Use text organizers to predict and categorize information
- Identify sensory words that describe sights, sounds, smells, and tastes, and how they make the reader feel
- Identify major events and supporting details
- Compare the use of fact and fantasy in historical fiction with other forms of literature
- Make inferences and draw conclusions, using information from the text
- Identify cause and effect relationships
- Use commas in series, dates, and addresses
- Edit writing for correct spelling, grammar, punctuation, and sentence structure
- Write several related paragraphs on the same topic
- Write a narrative story for Authors' Tea
- Create a plan and organize thoughts to convey a central idea before writing
- Use available technology to gather information and to aid in writing
- Write rhymed and unrhymed poetry and patterned poetry such as limerick, haiku, and cinquain

III. Math Curriculum:

The students will use a math curriculum entitled Everyday Mathematics, developed by the University of Chicago. This curriculum promotes conceptual thinking, discovery-based learning, and real-world connections. I will be supplementing this curriculum as needed to provide the students with opportunities to practice and strengthen their math foundation with basic facts and algorithms.

Math goals that will be emphasized for fourth grade students:

Number Sense:

- Identify place value for each digit in a whole number expressed through millions
- Compare two whole numbers expressed through millions, using symbols ($>$, $<$, or $=$)
- Round whole numbers expressed through millions to the nearest thousand, ten thousand, and hundred thousand.
- Compare and order fractions and mixed numbers
- Represent equivalent fractions and relate fractions to decimals
- Identify the division statement that represents a fraction
- Read, write, represent, and identify decimals expressed through thousandths
- Round decimals to the nearest whole number, tenth, and hundredth
- Compare and order decimals; and
- Given a model, write the decimal and fraction equivalents

Computation and Estimation:

- Estimate sums, differences, products, and quotients of whole numbers
- Add, subtract, and multiply whole numbers
- Divide whole numbers, finding quotients with and without remainders
- Solve single-step and multistep addition, subtraction, and multiplication problems with whole numbers
- Determine common multiples and factors
- Add and subtract fractions having like and unlike denominators
- Add and subtract with decimals
- Solve single-step and multistep practical problems involving addition and subtraction with fractions

and with decimals.

Measurement:

- Estimate and measure weight/mass and describe the results in U.S. Customary and metric units as appropriate
- Identify equivalent measurements between units within the U.S. Customary system (ounces, pounds, and tons) and between units within the metric system (grams and kilograms).
- Estimate and measure length, and describe the result in both metric and U.S. Customary units
- Identify equivalent measurements between units within the U.S. Customary system (inches and feet; feet and yards; inches and yards; yards and miles) and between units within the metric system (millimeters and centimeters; centimeters and meters; and millimeters and meters)
- Estimate and measure liquid volume and describe the results in U.S. Customary units
- Identify equivalent measurements between units within the U.S. Customary system (cups, pints, quarts, and gallons).
- Determine elapsed time in hours and minutes within a 12-hour period.

Geometry:

- Identify and describe representations of points, lines, line segments, rays, and angles, including endpoints and vertices
- Identify representations of lines that illustrate intersection, parallelism, and perpendicularity
- Investigate congruence of plane figures after geometric transformations, such as reflection, translation, and rotation, using mirrors, paper folding, and tracing
- Recognize the images of figures resulting from geometric transformations, such as translation, reflection, and rotation.
- Define *polygon*
- Identify polygons with 10 or fewer sides.

Probability and Statistics:

- Predict the likelihood of an outcome of a simple event
- Represent probability as a number between 0 and 1, inclusive
- Collect, organize, display, and interpret data from a variety of graphs
- Determine landmarks of a data set (median, mode, range, maximum, minimum, mean)

Patterns, Functions and Algebra:

- Recognize, create, and extend numerical and geometric patterns
- Recognize and demonstrate the meaning of equality in an equation

IV. Social Studies Curriculum:

The social studies curriculum will be designed and implemented to help children make connections between people, places, and events. Students analyze how events came about, and they will work to understand how people relate and respond to each other. We will aim to develop respect and understanding for different viewpoints and cultural beliefs.

Social Studies themes that will be explored this year:

September: Native Americans
October: Native Americans
November: Early Explorers
December: Colonial Times
January: Virginia's Geography
February: French and Indian War
March: American Revolution
April: American Revolution
May: American Revolution

V. Science Curriculum:

The purpose of science education is to help children acquire the skills necessary to investigate more thoroughly and systematically. Students will approach instruction through an inquiry-based method. They will be expected to develop questions and hypotheses linked to previous learning experiences.

All fourth graders will participate in the annual BNS Elementary Science Fair, and will be expected to apply the scientific method and to communicate their ideas.

Science themes that will be explored this year:

September:	Force, Motion, and Simple and Complex Machines
October:	Sound and Light Energy
November:	Electricity
December:	Scientific Method
January:	Virginia's Natural Resources
February:	Space Exploration
March:	Insects
April:	Plants
May:	Weather

VI. Art, Music, Spanish, and Physical Education:

Students receive regular instruction in Art, Music, Spanish, and Physical Education. These subjects are taught by specialists who are employed by BNS. Curricula information for these subjects is available on the BNS website: <http://www.new-school.org>.

VII. Assessment:

- Writing: peer/self editing, writing samples, observation records, rubric evaluation, student-teacher conferencing
- Word Study and Spelling: formal spelling inventory, observations, demonstration of skills in writing, weekly homework practice, weekly spelling tests
- Reading: Qualitative Reading Inventory (QRI) twice during the year; observation records, projects and independent work related to readings; comprehension questions about science and social studies texts
- Math: formal assessments from teacher and publisher created materials, daily practice, homework performance, application of skills in whole group lessons and small group problem solving
- Science and Social Studies: projects, observations, class discussions, in-class activities, written assessments, rubric evaluation, research papers, presentations

Completed projects will be displayed in the school and kept on file in the students' portfolios.

Parent-teacher conferences are held three times during the school year to review students' progress and to discuss continuing goals.