

THIRD GRADE CURRICULUM

The third grade year centers on our theme, the Silk Routes, which integrates most of the elements of the third grade curriculum – social studies, language arts, science, math, art, and music. Our thematic unit provides a meaningful context within which students develop skills concentrating on cooperation and communication through various group projects and individual studies. These moments provide opportunities to increase independence and shape emergent executive functioning skills, such as organization of work and materials as well as time management. Third grade is a significant age of transition in the classroom, where each child moves from learning how to read to reading and exploring to learn. The Silk Routes through southern Asia and Europe, with a focus on the exchange of ideas and goods and how these practices shaped the world we live in both then and now, provide a mirrored blueprint for the growth and development of our third graders.

LANGUAGE ARTS

Language Arts is integrated into all areas of the curriculum and includes reading, writing, listening and speaking.

READING

The third grade reading program is literature-based. One important goal of this program is to instill a love and appreciation of literature. The reading selections are based upon general themes such as travel and adventure, and personal change and growth. Some of the reading selections relate directly to the cultures studied this year. Third grade students work to develop personal connections to the texts and apply their knowledge to the world around them. Responses to texts are both through discussion and writing to show understanding.

Skills

- Develop vocabulary
- Read aloud with fluency and expression
- Develop reading strategies such as asking questions, making connections, inferring, visualizing
- Develop higher-level comprehension skills
- Supporting the main idea with evidence from the text

- Use of BrainFrames © to analyze story elements
- Compare and contrast
- Analyze character actions and traits
- Sequence events
- Predict events in a story
- Draw conclusions
- Summarize a passage

Examples of literature choices that may be used to support our reading and thematic learning:

Stuart Little
Where the Mountain Meets the Moon
The Turtle of Oman
Chengli and the Silk Road Caravan
Tales of the Arabian Nights
Yang the Youngest and His Terrible Ear
Red Means Good Fortune
Year of the Panda

WRITING

Focusing on the writing process, children write from personal experience and create original, imaginative stories. They work to develop topics, understand story structure, and learn the importance of fluent writing. We use the Lucy Caulkins "Writer's Workshop" method. The students draft, revise, edit, and proofread their stories. Children use a concrete and systematic approach to construct complete sentences and to enhance those sentences. They also write in journals and learn to write letters, poetry, and a short research report.

Skil<u>ls</u>

Composition

- Brainstorm
- Write complete and complex sentences
- Elaborate with description
- Use similes and metaphors
- Organize ideas into paragraphs
- Draft, revise, edit
- Use dictionary effectively; use guidewords to locate words
- Learn to use a thesaurus
- Compare and contrast; Summary; and Narrative organization
- Proofread
- Conference (with peer and teacher)

Conventions (Grammar and Mechanics)

- Recognize phonetic patterns
- Memorize non-phonetic words, spelling rules, high frequency words, and sight words
- Master skills of capitalization and punctuation
- Recognize nouns, verbs, adjectives
- Understand prefixes, suffixes, synonyms, homonyms, and antonyms

Spelling

- Comprehensive word-study program
- Weekly instruction & practice studying selected words based on spelling pattern/phonetic pattern
- Weekly review to reinforce spelling skills and serve as evaluative tool

MATHEMATICS

The goal of the third grade math program is to help children perceive mathematical relationships and build confidence as mathematicians. Students learn to move from concrete to abstract problem solving. Real life scenarios help students practice and apply learned skills. Children use manipulatives and technology to help build concepts in all areas of mathematics.

Skills

Numeration

- Understand place value
- Sequence numbers
- Determine highest or lowest number in a series
- Understand and apply number patterns

Computation

- Align numerals for an operation
- Form addition, subtraction, multiplication and division equations
- Add, subtract multi-digit numbers with regrouping
- Add with missing addends
- Multiply using number lines, equal groups, and arrays
- Identify square numbers
- Understand division as inverse of multiplication

Logical Reasoning and Relationships

- Solve attribute and logic problems
- Perceive patterns
- Graph data/interpret graphs

- Create and extend number and shape patterns
- Use symbols for equalities, inequalities in equations
- Understand fractions as parts of a whole
- Estimate

Measurement

- Money: Add, subtract, find equivalent sums of money
- Time: Tell time to minute; calculate elapsed time
- Calendar: Know number of days in week, month, year
- Linear: Measure to nearest inch, foot, yard, millimeter, centimeter, meter
- Measure perimeter and area using standard and non-standard units

Geometry

- Understand symmetry and asymmetry
- Identify and compare 2-dimensional figures and shapes

SOCIAL STUDIES

Traveling the Silk Routes is the focus of our thematic study integrating all subject areas. Third graders journey from Venice, Italy through the Middle East, India, and on to China. We explore the geography and cultures of these regions. Children learn that trade was not only of goods, but also an exchange of ideas, inventions, customs, beliefs, and the arts. Through research, third graders organize, collaborate, and present their findings in unique and personalized ways. In our travels over the Silk Routes, students have opportunities to engage in hands-on activities that focus on different aspects of the cultures and peoples that we study. Over the course of the year we find that children make strong connections between various cultures, and further their understanding of themselves as global citizens.

Skills

- Using a table of contents and index
- Note taking
- Using graphic organizers
- Presenting ideas and information
- Reading and labeling maps
- Using a key, scale, and compass rose on a map
- Analyzing non-fiction text structures

Field trips may include

- Isabella Stewart Gardner Museum
- Glassblowing demonstration at Mill City Glassworks
- Making pasta with Kids Cooking Green and Italian feast
- Dover Rug
- Islamic Academy of New England

- Islamic Society of Boston Cultural Center
- Classes on Chinese life and culture at the Chinese Cultural Center
- Peabody Essex Museum

SCIENCE

Our science program enables students to learn about the scientific process through a hands-on program. Students learn how to collaborate, communicate, and develop critical thinking skills through age-appropriate experiments and activities that allow them to work together, discuss and predict, and make connections.

Units include

- Introduction to the Scientific Method
 Scientific observations, scientific sketching, testable questions, patterns in nature
- Air transportation properties of air how do hot air balloons work? How do airplanes work?
- Water transportation properties of water how do boats float?
- Science of Sound in collaboration with Music class Junk Band study
 How sound travels through solids, liquids, and gasses
- Vertebrate animals and their classifications
 5 classes of vertebrates
 Animal adaptations
- Life Cycle of a Silkworm
 - Raising silkworms, measuring growth and development, recording observations with words & sketches, Incomplete vs. Complete metamorphosis,

Compare and contrast Cicada life cycle (incomplete) vs. Silkworm life cycle (complete)

How to tell a moth vs. a butterfly

Monarch butterfly research

Analyzing silkworm survival data & how temperature affects survival rate

- Wetland Study
 - What is a vernal pool?
 - Life cycles of frogs and salamanders and vernal pools as "nurseries"
 - Egg mass count

Skills

- Observation
- Making predictions
- Defining problems that can be tested
- Use of Models to describe or predict phenomena, test cause & effect
- Classification
- Measurement

- Comparison
- Recording data
- Organization of data
- Interpretation of data
- Perceiving relationships

WORLD LANGUAGE

We recognize that the grammar of Romance Languages uses a binary gender system. While we strive to maintain the integrity of the history and culture of these languages, we also seek to create inclusive learning environments for all students.

In third grade, students begin to experience the French language and Francophone cultures through food-related vocabulary, songs and cooking. While the majority of experiences are with listening and speaking in the target language, some familiarity with written language and conventions is also introduced. Vocabulary is tied to traditional recipes of French-speaking countries like France, Sénégal, Haiti, and the Canadian Province of Québec. Lessons continually refer back to travel and the importance of geography and climate on each country's culture. This allows for relevant connections to the class theme of travel along the Silk Routes. Students build their knowledge of French and world cultures through food, music, games and art. They learn several food-related terms (ingredients, utensils and actions), how to introduce themselves, and discuss their food preferences.

ART

Third grade art is a sequential program integrating the life of a student and thematic studies with an in-depth study of studio art. Students complete projects such as Venetian stained-glass windows and Chinese brush gesture paintings to connect to the classroom theme of the Silk Routes.

Shapes, Marks, and Lines

- Self-portrait drawings
- Observational landscape drawings
- Stained glass window collage
- Full body self-portrait painting (quality of line to capture a pose/stance)

Color

- Mixing flesh tones in self-portrait clay masks
- Balancing color in stained-glass window collage
- Mixing and balancing complementary colors in rug designs
- Exploring color and mood in Carnival Masks

Pattern and Design

- Geometric and arabesque patterns in rug designs (focus on positive/negative space)
- Symmetrical designs using letters in a stained glass window collage

Relief and 3-D Form

Plaster carnival masks

MUSIC

In third grade, students will learn to sing with a full, relaxed tone, and learn to blend with the group while singing rounds. Third graders will study the recorder and glockenspiel, and continue to learn to read and write standard notation. Students will compose and notate pieces, learning the basics of what makes a singable melody. The classroom theme provides opportunities for an exploration of music from many cultures. Students are exposed to folk and classical styles of Italy, India and China through listening and experimentation with movement, traditional instruments, and vocal styles.

Singing

- Develop a full, relaxed vocal tone
- Sing in unison and two parts

Movement

- Participate in Eurhythmics exercises, folk dance, rhythm stick games, and expressive movement
- Dancing based on traditional Chinese dancing with ribbons, fans, and/or chopsticks

Instrumental

- Play non-pitched and pitched instruments of different timbres
- Create rhythmic and melodic patterns on xylophones
- Play the recorder (at least five notes)
- Play glockenspiels and xylophones

Music theory

- Rhythmic theory to include quarter, eighth, sixteenth, half and whole note values and rests
- Introduction to reading and writing music notation in treble clef
- Recognize musical symbols, i.e. time signature, measure lines, repeat marks, and relationship of pitch and notes on the staff

TECHNOLOGY

The technology program at CRS starts with the why – why should we teach technology at all? The answer is we don't teach "technology;" we teach self-reflection, empathy, and problem solving (know themselves, understand others, and shape the future). The medium we work within to accomplish this is digital tools, and we teach students both existing skills and how to learn new technology on their own. While the process of learning new tools is inherently valuable (growth mindset, exploration, logic, sequential thinking, curiosity), ultimately we teach technology because of the opportunities it can provide for students to improve themselves and make a positive impact on the world.

We approach this through focusing on four main curricular categories that spiral throughout all grades (PreK - 8):

- Engineering & Design Thinking
- Multimedia Production
- Programming & Robotics
- Digital Citizenship

In third grade, the focus is on introducing new computer science topics (variables, function calls), basic video editing, voice-over narration, home-row keyboarding, animation, building and programming robotics, graphic design, online safety, and building circuits. Examples include building circuits to highlight information on a physical map, creating animated stories, creating and narrating architectural videos, and programming Lego Mindstorm robots to respond to sensor input.

PHYSICAL EDUCATION

The Physical Education program is developmental and skill-based. In grade three, children develop their skill levels and learn to work together as a team. They strive toward greater awareness of others and receive an introduction to sports skills.

Skills

- Throw and catch
- Develop balance, coordination
- Run, hop, skip, jump, dribble, kick, volley
- Develop social skills and positive self-concept
- Develop cooperation, teamwork, and sportsmanship
- Develop body and spatial awareness
- Develop sense of rhythm

Activities

Soccer, field hockey, kickball, pilo-polo, t-ball, obstacle course, stations, relays, basketball, Frisbee, badminton, fitness exercises, group initiatives, track and field, rhythmic movement, traversing wall activities, McWHIPIT (lacrosse), cooperative games, football

LIBRARY

In third grade, students are encouraged to become more independent in their use of library resources and are given formal instruction on using the online library catalog database. Students are also introduced to the Dewey Decimal System and practice locating both fiction and nonfiction books in the library. During weekly readalouds, students continue to work on active listening and critical thinking skills as we look at more sophisticated plot lines, character development, and comparative literature.

Literature Appreciation Skills

- Active listening
- Comprehension Skills: Analysis of plot, characters, storylines
- Evaluate new books for content, illustrations, subject appeal
- Read independently
- Demonstrate awareness of literature from various cultures
- Demonstrate awareness of literature from different genres

<u>Information Literacy Skills</u>

- Browse and choose books
- Independently check books out
- Identify parts of books (e.g. title page, table of contents, index, bibliography, etc., and the function of each)
- Continue to work on alphabetization
- Use online computer card catalog
- Locate a book by author's name and by Dewey Decimal classification