

# 4th Grade Curriculum Overview

## ENGLISH LANGUAGE ARTS

### Listening

- Listen respectfully to classmates, teachers, guest speakers, and other adults
- Expand attention span for listening
- Listen to and follow directions
- Listen to and enjoy various forms of literature
- Listen to facts and main ideas in discussions and stories

### Speaking

- Expand verbal vocabulary
- Speak in a respectful manner
- Use appropriate gestures and body language in story telling, poetry recitation, and report giving
- Share creative writing and respond to audience feedback
- Express appreciation for others' ideas
- Give tactful, constructive criticism

### Writing

#### **Writing Process:**

- Brainstorm, organize, write, confer, revise, rewrite, share

#### **Genres:**

- Persuasive writing, reports, narratives, animal stories, poetry, letter writing, creative writing

#### **Grammar, Usage, and Mechanics:**

- Learn parts of speech - nouns, verbs, adjectives, adverbs
- Review capitalization rules
- Learn punctuation rules for commas, quotation marks, apostrophes, end punctuation

#### **Spelling:**

- Learn about plurals, contractions, possessives
- Learn ending patterns
- Learn 200 most frequently used words
- Review rules for suffixes and prefixes
- Learn content area vocabulary words

#### **Handwriting:**

- Practice cursive writing to mastery
- Write final drafts in cursive
- Practice reading cursive writing

### Reading

#### **Reading Skills:**

- Review phonological awareness
- Learn about syllable division, syllable types, less common prefixes and suffixes
- 300 most frequently used words
- Improve reading fluency

#### **Reading Comprehension:**

- Read and respond to various forms of literature
- Compare and contrast books
- Expand vocabulary by using context
- Read and follow multi-step directions
- Identify elements of a story (plot, main idea, supporting details, sequence)
- Recognize fact and opinion
- Use comprehension strategies
- Identify cause and effect
- Begin to identify literal and figurative language

### Core Literature Studies

#### **Teacher Read-Aloud Books:**

*Secret of Platform 13; The 13 Clocks; Small Steps; Warriors, Warthogs and Wisdom; Jip; Tuck Everlasting; Midnight Fox*

#### **Genre Studies:**

Biography, realistic animal stories, fantasy, folklore, mythology, poetry

# 4th Grade Curriculum Overview

## MATHEMATICS

### Numbers and Numeration

- Define and use: +, -, x, /, =, <, >
- Introduce sum, difference, product, quotient, fraction
- Read and write numbers to 1,000,000
- Know place value to 1,000,000
- Compare place values and decide the relation symbol (<, >, =) between numerals
- Round to nearest 10, 100, 1000
- Use expanded notation to show regrouping of tens, hundreds, etc.
- Understand the inverse relationship of addition and subtraction, multiplication and division
- Recognize odd, even and prime numbers

### Computation and Estimation

- Know addition, subtraction, multiplication and division facts (up to 10's)
- Add and subtract with regrouping
- Subtract with regrouping with zeros
- Multiply with regrouping, 2-digit by 2-digit numbers
- Divide 4-digit numbers by 2-digit numbers, with remainders
- Use the commutative, associative, distributive and identity properties
- Write, order, add, and subtract fractions with like and unlike denominators
- Find the least common factor and the least common multiple of numbers
- Find a common denominator of fractions
- Add money and decimals up to the thousandths
- Use strategies for mental math

### Measurement

- Use standard and metric measurement for length, mass and temperature
- Apply knowledge of seconds, minutes, hours, weeks, months and years in solving problems
- Understand coin values, make change and solve money problems
- Calculate area, perimeter, and volume

### Geometry

- Review point, line, line segment, ray, angle, parallel, perpendicular, circle, square, rectangle, triangle
- Classify angles
- Identify and construct polygons
- Identify three-dimensional shapes
- Explore congruency and symmetry of shapes
- Use protractor and compass

### Data Analysis, Statistics and Probability

- Collect, organize, represent, and interpret data using lists, tables, bar graphs and line graphs
- Interpret data using the mean, median, mode and range
- Predict, perform, and record simple probability experiments

### Problem Solving

- Translate word problems into number sentences
- Learn to recognize key words and phrases
- Write word problems
- Estimate answers
- Understand and apply appropriate strategies to solving problems

### Patterns, Functions and Algebra

- Identify, describe and extend patterns
- Classify and sort objects using attributes
- Identify and graph points in the coordinate plane
- Use order of operations to solve equations

# 4th Grade Curriculum Overview

## SCIENCE

### Process Skills

- Reinforce all of the K-3 skills plus:
- Investigating, classifying (time, space, patterns, common characteristics), collecting and organizing (information and materials), recognizing patterns, predicting, formulating questions

### Content

#### Physical Science: Properties of Fluids

- Explore and observe characteristics of fluids
- Explore and learn about surface tension

#### Life Science: Wetlands and Pond Habitat

- Understand concepts of habitat and interdependence
- Understand the concept of a wetland as a system
- Observe diversity of species of plants and animals in wetlands/ponds
- Observe and learn about amphibians and fresh water plants
- Collect or draw and classify wetland plants and animals

#### Earth Science: Solar System

- Learn about the members of our solar system: size, distance from earth, characteristics
- Learn about the motion of the sun, planets, and moons
- Use models to demonstrate understanding of the organization of the solar system

#### Health: Circulatory/Respiratory Systems

- Learn the components of the circulatory and respiratory systems
- Learn how those systems function
- Learn what promotes healthy circulatory and respiratory systems

## SOCIAL STUDIES

### Vermont History & Culture

- History
- Government
- Geography

### World History & Culture

- Asia (Japan or China), Africa, Egypt
- Cultural Universals
- History
- Geography

### Geography

- Learn place names in conjunction with studies, e.g., Sahara Desert
- Learn geographic terms in conjunction with studies, e.g., Monadnock
- Read maps to gain information
- Make maps to display information
- Use scale, symbols & grid (number/letter system)

## 4th Grade Curriculum Overview

### SOCIAL SKILLS

#### **Civic and Social Responsibility**

- Be prepared for class
- Be of service to home and school

#### **Communication**

- Give compliments
- Express appreciation

#### **Personal Development**

- Accept differences in others
- Recognize own strengths
- Recognize strengths of others

### INFORMATION TECHNOLOGY

#### **Operations and Productivity**

- Use basic IT vocabulary
- Develop keyboarding skills
- Perform basic file and network management operations
- Use word processing software to create reports
- Use databases

#### **Research and Problem Solving**

- Collect information from various sources
- Use multimedia content from various sources
- Use Logo programming language

#### **Communication**

- Produce writing pieces which have been formatted, spell checked, and revised
- Use presentation software to produce electronic reports
- Create multimedia presentations

#### **Ethics, Human Issues and Social Responsibility**

- Respect the privacy and work of others
- Follow guidelines for safe use of technology and the internet
- Be aware of the safe and comfortable use of equipment
- Understand and respect copyright laws
- Evaluate the accuracy and relevance of electronic information
- Follow Acceptable Use Policy and conventions for using technology at MCS

### LIBRARY SKILLS

#### **Organization of Library Materials**

- Locate books in the fiction and non-fiction collections with assistance
- Locate the Arts and Biography collections

#### **Use of the Library Browser On-Line Catalog**

- Know how to access and use the on-line catalog and how to locate fiction and non-fiction books
- Use the SHOWCARD feature of the library browser to get information about a book

#### **Use of the Dewey Decimal System**

- Understand the purpose of the Dewey Decimal System

- Locate materials using call numbers

#### **Use of the Reference Collection**

- Use encyclopedias to find information
- Know that an atlas is a book of maps

#### **Use of the Biography Collection**

- Define biography
- Locate a volume about a particular individual

#### **Recognition and Use of Periodicals**

- Use periodicals for pleasure reading

#### **Use of Indexes**

- Locate specific information on a subject using an index

#### **Research and Reporting Techniques**

- Research a topic using more than one source
- Know what a bibliography is and compile one with author and title

#### **Parts of a Book**

- Identify the bibliography, glossary, verso, publisher, place of publication, and copyright date

#### **Selection and Evaluation**

- Be acquainted with the Dorothy Canfield Fisher Book Award and the books on the current list
- Distinguish between authentic and fictionalized biography
- Recognize that a well-written biography presents positive and negative traits

#### **Literature Appreciation**

- Recognize characters and authors of favorite books
- Describe characters and plot movement in modern fiction
- Retell folktales

## 4th Grade Curriculum Overview

### FRENCH

**Rationale:** To introduce communication skills in French and to develop an appreciation and understanding of the cultures of the Francophone world

**Goal:** To develop listening and speaking skills

#### **Listening:**

- Follow simple directions
- Take dictation of numbers 1-100 and ABCs
- Understand oral questions
- Understand simple books
- Follow along with introductory tapes and videos

#### **Speaking:**

- Recite poetry
- Sing a variety of traditional French songs
- Memorize and present simple dialogues
- Respond to questions on topics introduced in class

#### **Reading:**

- numbers 1-100
- colors
- proper nouns
- familiar basic vocabulary

#### **Writing:**

- Limited copy work and fill-in-the-blank exercises

#### **Culture:**

- Introduction to the Francophone world, French holidays, French cuisine, traditional songs and poetry, and the life of King Louis XIV

#### **Content areas:**

- prepositions
- place names
- weather
- telling time; age
- greetings
- the house
- classroom objects
- colors
- fruits
- family members
- clothing
- body parts
- cardinal numbers
- animals
- addresses
- directions
- useful expressions
- phone numbers
- days, months, seasons
- continents & geographical terms
- interrogative expressions

## 4th Grade Curriculum Overview

### ART

Fourth graders, like all students at the Marion Cross School, begin the year by working on an all-school collaborative art project that celebrates our time together as a school community. Many of the activities that they work on throughout the rest of the year relate to topics within the fourth grade curriculum. Among the projects are: clay figures (lanterns from Vt. history, animal figures from their China study, Egyptian tomb figures), Kente cloth, African masks, Ukrainian Eggs, sumi-e painting, paper lanterns and fans, LEEEP habitat artbooks (ponds), “stained glass” windows, printmaking, apple drawings, and ArtStart.

### MUSIC

The music program at the Marion Cross School is designed to help students develop the skills needed to realize a rewarding and joyful lifetime musical experience and to realize their own and other’s innate ability and need to create. In fourth grade there is a large emphasis on the study of musical instruments. In the fall, the students bring in “found” instruments and then proceed to design and create their own. In the spring, tied into their African unit, the students study the drum and its many meanings and uses in African and other cultures. Listening to musical styles of many cultures is a component of this year. The students begin to create their own music for recorder and perform it for the class and in concerts. Through this means they continue to learn the symbols and language of music. They have an opportunity to join the 3/4 chorus and we also sing in class with an emphasis on learning ensemble skills and good vocal technique. Students perform in our Holiday and May Festival programs, choral concerts and in “rep.”

### PHYSICAL EDUCATION

The main objective of the physical education program for grade four is to encourage all children to enjoy and participate in physical activities. Fourth graders continue to build on skills learned in the primary grades and begin to work more on game-related skills and rules of basketball, soccer, kickball, volleyball, tennis, baseball/softball, badminton, frisbee, lacrosse and track and field activities. They continue to work on social skills (sportsmanship, respecting others, recognizing other’s skills, sharing their skills, working cooperatively), and knowing and following safety rules (stopping on the whistle, proper dress, working in own space, safe use of equipment). Wellness and fitness information and activities promote and teach healthy lifestyles. Snowshoeing and orienteering are introduced in conjunction with classroom work involving the LEEEP program. Games using locomotor and non-locomotor skills and manipulatives also make up a good part of the third and fourth grade curriculum.

### GUIDANCE

The guidance program is designed to help students learn about themselves and others as well as to help them learn about getting along with others. The guidance counselor uses the Life Skills health/guidance curriculum to teach fourth graders about self-esteem, decision-making, smoking, stress, communication skills, social skills and assertiveness. They use class discussions, role-playing, and writing to express themselves.