

# *Third and Fourth Grade Curriculum Guide*

## **3rd/4th Grade Humanities**

**History:** Following a two-year progression of study, third and fourth graders engage in their first chronological study of American and European history, with an emphasis on developing a sense of historic time and change over time. Through their studies, students become aware of eras and what distinguishes them, and begin to place periods and events on a historical timeline. Students also learn to identify the role of cause and effect on historical events, practice gathering historical information from a variety of sources, and learn critical thinking skills as they compare and contrast different cultures and civilizations and find the past's connection to their own lives.

Before any of these goals may be accomplished, the imagination must first be ignited. Therefore, classes in both years will center around the great *stories* and *personalities* from history. Literature, mythology, art, music and other cultural materials related to the course excite children about the past and help give context to different periods and places.

**A Year:** The third and fourth grade humanities curriculum focuses on American history, and students examine the topics of Native Americans, European discovery of the New World, colonial life, the American struggle for independence, westward expansion, slavery, the Civil War, and immigration. Students also study the geography of the Americas, with a particular emphasis on the United States. The class reflects upon the guiding questions: What do we know about our nation's past and how do we know it? What drives change? How has our country's past shaped our nation as we know it today? Through their studies, students become aware of the myriad influences that encompass the "melting pot" that has shaped American culture. Students engage in a variety of cross-curricular activities, such as creating their own national flags, assembling colonial dioramas, making and eating a soldier's hardtack lunch, writing personal interpretations of the Constitution and the Bill of Rights, writing "imagined" slave narratives and diary entries from the viewpoint of Revolutionary and Civil War soldiers, writing biographies, and exploring the mathematical and scientific applications of Lewis and Clark's famous expedition. In addition, they learn about great people from the past, including Columbus, Thomas Jefferson, Ben Franklin, John Adams, and Lincoln as they read and discuss short biographies by authors such as D'Aulaire, Fritz, and Harness. Students also practice their research and composition skills in a variety of short reports on related, student-chosen topics.

**B Year:** Students examine the topics of Celts and Vikings, European kings and queens, the Renaissance, the Age of Exploration, and the Age of Ideas. Knowledge of European geography also is an important aspect of the course, and students develop understanding through the use of maps, games, and periodic quizzes. The class reflects upon the guiding questions: What do we know about the past and how do we know it? What drives change? How has the past shaped the world as we know it today? Students engage in a variety of cross-curricular activities, such as assembling a medieval castle, writing

ballads and myths, creating Celtic knots, floating Viking longboat replicas in a river, assembling a dynamic historical timeline, and exploring the mathematical and scientific applications of naval exploration, the art and artists of the Renaissance and the scientific breakthroughs of the Age of Ideas. In addition, they learn about great people from the past, including Newton, Galileo, Bach, DaVinci, Queen Elizabeth, and Shakespeare as they read and discuss short biographies by authors such as Diane Stanley. Students also practice their research and composition skills in a variety of short reports on related, student-chosen topics.

Some resources that are used during the course include: **A Year:** *Encounter, Columbus, Bears on Hemlock Mountain, Liberty or Death, A More Perfect Union: The Story of our Constitution, How We Crossed the West, Seamen's Journal, Pink and Say, Immigrant Kids*, and *In the Year of the Boar and Jackie Robinson*. In addition, *Poetry for Young People* will introduce students to American writers such as Whitman, Longfellow, Dickinson and Poe. *The Trail West* helps students see U.S. history through art.

**B Year:** *D'Aulaires' Book of Norse Myths, Passager*, from *The Young Merlin Trilogy* by Jane Yolen, *Usborne Encyclopedia of World History, Castle* by David Macaulay, *The Door in the Wall*, *D'Angeli, Around the World in One Hundred Years*, Jean Fritz, adaptations of Shakespeare's *Macbeth* and *Midsummer Night's Dream* by Bruce Coville, numerous short biographies, and a variety of interactive web sites.

## **Reading**

The primary goals of the reading curriculum are to inspire students to read and develop lifelong readers. With an emphasis on general reading comprehension, students practice and apply a wide variety of skills throughout the year, including vocabulary use, use of contextual cues and other reading strategies, oral fluency, and the identification of main ideas and supporting details. Perhaps most importantly, instruction highlights the immense pleasure that can be derived from reading. In order to achieve these goals, students read daily in every area of study, across the curriculum. Instruction approaches include whole class, small group, individual, and peer-guided structures. Additionally, the teacher reads aloud daily and exposes students to more challenging material, including short novels and poetry selections. Students also practice reading aloud and silently daily. While humanities topics are covered together as a class, individually leveled reading will occur in small groups where instruction will focus on each child's areas of need. Independent reading is assigned nightly, and time is dedicated throughout the week for this vital practice in class. Periodic oral and written quizzes also help students to practice comprehension and vocabulary skills. Library visitations provide opportunities for students to learn research skills, find "free-read" books, and mentor younger students with their reading. Periodic book-talks and book logs with reader recommendations celebrate individual reading accomplishments also encourage the development of life-long readers. Materials include: Roald Dahl selections such as *The Witches, The Fantastic Mr. Fox*, and *Danny-Champion of the World*; *Shiloh*; *The Owl in the Shower*, and *The Phantom Tollbooth*.

## **Writing**

It is the aim of the course to allow students to apply their imagination and creativity in writing assignments, and to teach students to write for a variety of purposes and audiences. Tapping into personal interests, enjoying the writing process, and refining fundamental skills and mechanics are primary goals of the curriculum. During the course of the year, students explore a wide array of writing skills and concepts. These skills include the identification of parts of speech, grammar, paragraph creation, paraphrasing, summarizing, spelling, and vocabulary. Cursive handwriting is also a focus of the course, and students work to produce neat, legible cursive by the completion of the fourth grade year. Basic word processing skills are also taught though most final products will be completed in cursive handwriting through the fourth grade.

Students practice research and report writing, as well as creative writing. *6+1 Writing Traits* are taught and used throughout the year to provide a practical rubric to help students discuss, analyze and improve their writing. Like reading, writing is practiced every day, across the curriculum. Instruction and practice are conducted in a variety of ways, including whole group, small group and individual instruction, and learning stations, to be used during the morning work cycle, are designed to allow students to practice writing in various forms. During the year, students compose short stories, poetry, journal entries, letters, essays, plays, and other writing genres, often to be accompanied and highlighted through art and/or music projects. Writer's workshop sessions will be held to improve student writing, and students practice applying the six traits to all writing assignments. Editing skills are reinforced daily through teacher-led group-editing sessions and weekly practice in workbooks. Oral and written quizzes help to determine individual areas of need and to assess student progress. Writing instruction culminates with the creation of an immersion project. For this project, students choose a topic related to Experiential Learning trips, conduct research, organize information, craft an essay, create a visual aid, and present their learning for peers and parents. Materials used throughout the course may include: *Spellwell* or *Wordly Wise*, *GUM Grammar workbooks*, *Cursive Handwriting* and *Editor-in-Chief* workbooks.

## **3rd/4th Grade Mathematics**

The goal of the third and fourth grade math curriculum is for students to engage with mathematics in a variety of ways and applications and feel comfortable and confident in the world of math. The guiding questions for third and fourth grade math are: How does mathematics help me in my own life? How has mathematics influenced the world around me? In terms of skills, the primary goals of the third and fourth grade math program are to develop and refine student's ability to execute the four basic math operations of addition, subtraction, multiplication and division, to apply problem solving strategies; to communicate mathematically; to work independently; and to work cooperatively with classmates.

The third and fourth grade curriculum covers operations with whole numbers, decimals and fractions, data representation, basic geometry, and various problem-solving

strategies. These topics are explored with a varying depth of study and degree of expected mastery based on grade level and individual ability. Morning work cycles allow students to progress through the math curriculum at their own pace and to be assessed on their individual progress throughout the year, thus offering each student an appropriate level of challenge. A combination of *Everyday Math* and Montessori materials provide the foundation of the classroom. Montessori materials are designed to be multi-sensory, sequential, and self-correcting. They are beautiful to the eye and precise in their exactitude. These materials are designed to lead children from concrete thinking to abstraction, where manipulatives are no longer necessary. In a multi-age classroom, younger students benefit from exposure to more challenging material and the tutelage of older classmates. Older students benefit from the opportunity to mentor younger students, which demands a complete and thorough understanding of concepts. Each student is encouraged to achieve at his/her highest level of mathematical ability, regardless of age.

Math classes typically begin with whole group problem solving, a teacher-led review of solutions and a review of homework assignments. Instruction on new concepts is given to both grade levels, while grade-specific instruction is given to small groups when appropriate. Hands-on manipulatives, whenever possible, are used to introduce more abstract concepts, and also when students struggle with more challenging operations. Students engage in discussions and activities designed to introduce new concepts, or to review and reinforce previously learned concepts. While one level is engaged in small group lessons, the other students work independently on level-appropriate workbook assignments, activities, or projects. Small group instruction allows students with similar levels of understanding to progress together, creating better opportunities for peer support in the classroom. Materials used throughout the course are: *Montessori math materials*, *Everyday Math textbooks and work books*, *Mia's Math Adventures software* and a variety of math games.

### **3rd/4th Grade Science**

Children are fascinated by the world and enjoy opportunities to explore it. Students acquire science concepts and skills by means of an inquiry-based, hands-on approach that focuses on the process and techniques of discovery. As they observe, question, and test basic scientific concepts, students satisfy their innate curiosity. The majority of lessons are taught through experimentation through Delta Science Modules and other materials. Delta Science Modules are designed to engage, challenge, and enlighten students through inquiry and hands-on activities. Lessons learned through experimentation are reinforced by Delta Science Readers, and scientific vocabulary is introduced as student knowledge of the subject grows. The driving questions for this course are: Why? How? It is a goal of the course to nurture the student's innate sense of wonder and curiosity about the world while providing opportunities for genuine understanding. In both the A and B years, Earth, life, and physical science topics are covered.

**B Year:** Topics include food chains and webs, the watershed, desert ecosystems, and an exploration of magnetism and electricity. In the unit on magnets and electricity, students discover the Law of Magnetic Attraction. They experiment with magnets of various sizes and shapes, even our planet-sized magnet, find out which materials are attracted to magnets, demonstrate magnetic fields and polarity and make compasses. They build open and closed electric circuits, investigate and compile data on the conductivity of different substances, and explore the relationship between electricity and magnetism. The study of the watershed is conducted in conjunction with the Telluride Institute, and students work in and out of the classroom to learn about our watershed. Field trips include visits to sources of the San Miguel, to the Trout Lake Dam, and to the Ames Power Plant to learn about hydroelectric power. In their study of food chains, students build terrariums with rye grass, crickets, earthworms, and anoles, and watch what happens. Students are soon able to classify each animal as a primary, secondary, or tertiary consumer, or decomposer, based on what it eats. By the end of the unit, students can apply their knowledge of specific plant and animal relationships to the understanding of food webs in nature. The studies on the watershed, desert ecosystems, and food chains and webs lead directly to an exciting Experiential Learning trip in the spring that features rafting the Colorado River with the Canyonlands Field Institute, a visit to Island in the Sky to observe delicately balanced desert ecosystems and the impacts of erosion in the Colorado River watershed, and hiking in Arches National Park to witness the effect that water has on desert geology in the form of fins, goblins, and arches.

**A Year:** Topics include a study of the forces that shape our planet, a unit on sound, and an exploration into food and nutrition. In Earth movements, students explore the massive movements that are constantly shaping Earth: volcanoes erupting, trenches creeping open, continental plates colliding and sending mountain ranges skyward. Students learn how rocks provide clues to Earth's history, structure, and geological activity. They build Earth cross-sections to compare ocean and continental crusts. Students investigate Earth processes that lend support to the theories of continental drift and plate tectonics. They model ocean floor-spreading, plate subduction, magma convection currents, volcanism, and earthquakes at plate boundaries. As a result, students learn to think of the Earth as a geological mosaic, constantly being refitted. For the unit on sound, students explore how sounds are produced and how the sense of hearing detects and interprets sounds. Sound surrounds us- in fact, students will discover that they cannot create silence. They use tuning forks to see and feel the vibrations that are sound waves. Next, students make ear trumpets to catch and amplify sounds just as ears do. They experiment with echoes to see which surfaces absorb or reflect sound waves. Students model percussion, stringed, and wind instruments as they create sounds by striking, plucking, and blowing. They learn to vary pitch and volume by varying string thickness and tension. For a concluding concert, students tune an orchestra of original instruments. In the unit on food and nutrition students learn through a variety of hands-on activities how to observe and investigate the properties of food. The goal is to teach students to become informed consumers, able to gather information about food products.

Throughout the two-year cycle, students learn to apply the scientific method as they ask questions, make predictions, create hypotheses, collect data, conduct research, and present findings. They also use skills from across the curriculum. Students apply math skills through comparison, measurement, and computation, and reading and writing skills

as they read related materials and complete lab reports. Cross-curricular science extensions also include creative writing assignments, math challenges, art projects, and independent research opportunities. Students' curiosity is encouraged and many lessons involve active and outdoor exercises. Materials used throughout the course include: Delta Science Modules, Delta Science Readers, and Telluride Institute Projects.

### **3rd/4th Grade Spanish**

Children have an innate capacity to absorb language if it exists in their environment. For this reason Spanish is incorporated across the curriculum as much as possible. To build confidence and a solid foundation of language skills, Spanish is used daily in the classroom as students make basic requests and the classroom teacher gives simple directions in Spanish. In addition, the students participate in twice weekly instruction with a Spanish language specialist. The vocabulary introduced in these sessions is reinforced with activities in the class. Students learn basic conversation and simple sentences, including language for greetings and goodbyes, moods and feelings, likes and dislikes, weather and seasons, classroom vocabulary, body parts, sports, clothing and descriptive adjectives. Students also review vocabulary for numbers, colors, time, dates, and family. Students also evaluate the benefits of adding a second language and increase their awareness of the larger world by discussing Spanish speaking cultures.

Resources used to assist in Spanish language learning include a variety of Spanish games, including *Bingo*, *Twister*, *Simón dice*, *Tic Tac Toe*, Children's books in Spanish, Spanish flashcards, elementary Spanish worksheets, the BBC language course *Muzzy* level 1, *In Other Words* materials and language progression developed by Montessori instructor Alice Renton.

### **3rd/4th Grade Visual Art**

Third and fourth grade art offers a creative, academically based program that encourages students to become aware of their personal growth and ability as artistic individuals. Art projects support both a curricular content from the humanities and technical and conceptual skills. Building on previous experience, daily rituals and constant observation of the world around them, students develop their technical skills through a variety of media. Drawing, painting and printmaking are the main two-dimensional media, but equally important are the elements of three-dimensional design achieved through the use of clay, cardboard and the combination of any other 3-D materials. Following specific directions and possibly working outside their comfort zones, students explore and express to their own ability.

### **3rd/ 4th Grade Music**

Third and fourth graders experience both structured and semi-structured musical learning environments. Through learning to sing and perform traditional and popular songs students experience the joy of accomplishing musical tasks, learn to recognize pitch and

blend voices musically. Students explore music fundamentals – rhythm, melody, harmony and timbre – through song development on the drums, guitar, keyboard and percussion instruments. Students form bands, allowing them to apply newly learned skills as well as to engage in musical problem solving. Students are then encouraged to perform and to view these performances as unique opportunities to share their work and to inspire others. Developing listening skills, a love of creativity, physical competency on an instrument and performance skills are primary goals for this group.

### **Physical Education**

The goal of the third and fourth grade physical education program is to provide students with physically enhancing and rewarding experiences outdoors that contribute to a lifetime of healthy and active endeavors. Students apply locomotor movement, spatial awareness, and rhythm to athletic games with heightened work ethic and sportsmanship. Third and fourth graders continue work on coordination and body awareness through throwing, catching, kicking, and running activities. Students use the skills and concepts of heart rate monitoring, student-led yoga and stretching, breathing, warm-up and cool-down, and endurance to enhance their athleticism and encourage the synthesis of mind and body. Students begin training for winter sports that includes agility and strength exercises. Classes take place on the Lawson Hill field throughout the school year and in classrooms when weather dictates. Like all disciplines at the Telluride Mountain School, students are expected to uphold the core values of responsibility, respect, integrity, and love of learning.