Third and Fourth Grade Curriculum Guide 2007-2008

3rd/4th Grade Humanities: A Year
History
The third and fourth grade humanities curriculum focuses on American history during the A year, 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.

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 also learn to identify the role of cause and effect on historical events and practice gathering historical information from a variety of sources. Students learn critical thinking skills as they compare and contrast different cultures and civilizations and find the past's connection to their own lives. Knowledge of American geography is another important aspect of the course, and students develop understanding through the use of maps, puzzles, games, and periodic quizzes.

Before any of these goals may be accomplished, the imagination must first be ignited. Therefore, classes center on the great stories and personalities from American history. Literature, poetry, art, music and other cultural materials related to the course excite children about the past. 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" 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, Ben Franklin, John Adams, Thomas Jefferson, and Abraham 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. Some resources that are used during the course include: *Encounter*, *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 poets such as Whitman, Longfellow, Dickinson and Poe. *The Trail West* helps students *see* U.S. history through art.

Reading
As students read in humanities, they seek answers to such questions as: How does reading benefit my life? What can I learn about myself and the world around me, through 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, individual leveled reading will occur in small groups where instruction will focus on each child's areas of need. Learning station tasks also help students improve their core reading skills. Independent reading is required 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 visits provide opportunities for students to learn research skills, find "free-read" books, and mentor younger students with their reading. Periodic book-talks and the creation of a class "book worm" to celebrate individual reading accomplishments also encourage the development of life-long readers. Materials include: Roald Dahl selections such as *The Witches, Fantastic Mr. Fox,* and *Danny-Champion of the World; Shiloh; The Owl in the Shower;* and *The Phantom Tollbooth*. Also used are selections from the series, *Junior Great Books, Collections for Young Scholars, The Treasury of Read-Aloud Poem,s* and *Lexia* computer software.

Writing

Through frequent writing experiences, students address essential questions, such as: What can writing be used for? What makes good writing? Can writing be fun? 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, and students will use computers to compose final drafts for several assignments.

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 clear rubric to help students improve their writing. Like reading, writing is practiced every day, across the curriculum. Instruction and practice will be conducted in a variety ways, including whole group, small group and individual instruction, and learning stations, to be used during the morning work cycle, 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 accompanied and highlighted through art and/or music projects. Writer's workshop sessions 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 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 include: *Spellwell, Explode the Code, How to Write a Paragraph, Really Writing, Daily Oral Language, 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 *Singapore 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, Singapore Mathematics- Primary Mathematics U.S. Edition textbooks and workbooks, SRA Math Explorations and Applications workbook, T.O.P.S. Techniques of Problem Solving cards, Mia's Math Adventures software and a variety of math games.*

3rd/4th Grade Science: A Year

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, such as *Project Wild*. 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. As in the B year, Earth, life, and physical science topics are covered during the A year. A year topics include a study of the forces that shape our planet, a unit on sound, and an exploration into a variety of life science concepts.

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. Life science units will depend on Project Wild and Project Wild Aquatic: interdisciplinary, supplementary environmental and conservation programs that emphasize wildlife. The goal of Project Wild is to assist learners of any age in developing awareness, knowledge, skills, and commitment to result

in informed decisions, responsible behavior, and constructive actions concerning wildlife and the environment upon which all life depends.

Throughout the year, 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. Inter-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, Project Wild and Project Wild Aquatic.

3rd/4th Grade Spanish

Because children are especially able to learn languages at a young age, Spanish is included across the curriculum as much as possible. The Spanish curriculum seeks to answer the questions of: Why should I learn Spanish? How will it improve my life? How is Hispanic culture different from our own? Daily exposure to Spanish language, as well as regular practice, is a central component in building a solid foundation of Spanish language skill.

Throughout the course, students are introduced to a number of Spanish language components, including: continuation of numbers 1-9000, colors, time of day- hours, half-hours, quarter hours, dates, seasons and weather, a basic introduction to conversational Spanish, greetings and goodbyes, moods and feelings, likes and dislikes, basic vocabulary including foods, classroom objects, body parts, sports, clothing, an introduction to descriptive adjectives, Spanish-language geography, and an introduction to Hispanic culture.

Because the most efficient way to learn Spanish is through immersion, Spanish will be incorporated into daily routine as much as possible. During math, for example, students will practice Spanish by identifying numbers in Spanish, and homeroom time during the beginning of the school day will incorporate Spanish conversation. Learning station tasks will also be designed to support student's Spanish language development. Stories and tales are read periodically in Spanish, and Latin culture will also be a focus of the course, and students will enjoy a taste of related geography, music, foods, dress, celebrations, and art. Other activities include Spanish bingo, charades, picture description, role-playing, and singing. Workbooks and interactive computer software provide regular skills practice.

Resources used to assist in Spanish language learning include: *In Other Words*, a sequential collection of 3-part lessons and activities developed by Alice Renton, a long time bilingual Montessori teacher, a variety of Spanish games including Bingo, Twister, Simon Says, Tic Tac Toe, *Spanish-Elementary* workbook pages, a variety of

children's books in Spanish, Spanish flashcards, *Muzzy* videotapes and computer software.

3rd and 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 and 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.