



Gateway School's Curriculum Guide, Upper Division Grades 5-8th

	5 th	6 th	7 th	8 th
<p>January 2008. While basic concepts remain the same, some aspects of the curriculum evolve in response to experience and need. The Curriculum Guide is current as of stated date.</p> <p>Units of study in social studies and science provide a context for much of the writing, reading and math activities in Gateway's integrated curriculum.</p> <p>* An asterisk indicates a course taught by consultants.</p>	<p><i>Fifth graders challenge their patterns of thinking in new and varied ways. Students work cooperatively and independently on projects, discussions and seatwork. Teachers structure the day with open information seeking, guided discussions, projects and demonstrations. The classroom community plays an integral role in recognizing students' individual accomplishments.</i></p>	<p><i>In sixth grade, students restructure their physical, cognitive and social frameworks. In this time of uncertainty the students will question and push boundaries. Teachers construct a learning environment where students safely stretch their cognitive skills using projects, relevant literature, personal writing and guided discussions on real issues and in-depth topics as well as through artistic expression.</i></p>	<p><i>As middle school students grapple with their identity as child/not child, rapid physical changes increase the need for food, sleep and exercise. Schoolwork takes on a more purposeful tone with current events, environmental issues, scientific experiments, and theatre productions. Community service provides the opportunity to take pride and accomplishment in being role models. Calm, clear and fair expectations of the teachers offer a safe environment for students to pursue their academic and social learning. Class meetings and student council leadership help give students a voice in their education and encourage responsible social behavior.</i></p>	
<p>Social Studies</p> <p>The Social Studies program develops an understanding and practice of age-appropriate skills, incorporates community awareness and participation, as well as local and global cultural awareness and understanding. Students in every grade study geography and peoples of other cultures in age appropriate ways. Historical understanding is built upon every year in addition to the study of current world issues in middle school. Each class utilizes class meetings and a Conflict Resolution program that allows for students and teachers to address social issues. All grades contribute to building and caring for the school community, and in middle school, all students undertake community service projects.</p>	<p><i>Social & Inter/Intra Personal Relationships</i> Kidpower – Making Wise Choices <i>Community Awareness & Understanding</i> Class based community service <i>Geographical, Cultural, & Historical Understanding</i> Expanding Horizons Peopling of the Americas Native American Culture Areas Age of Exploration Colonization Revolutionary War</p>	<p><i>Social & Inter/Intra Personal Relationships</i> Kidpower – Knowing Your Rights <i>Community Awareness & Understanding</i> Class based community service <i>Geographical, Cultural, & Historical Understanding</i> Exploration of human cultures prior to 500CE—studied through lens of cultural universals-values & ethics, economics, food/shelter/clothing, political organization, family & kin, religious beliefs & practices, communications, arts & aesthetic values, recreation. <i>History of Early Humans:</i> development of culture, hunter/gatherers, development of farming, development of cities <i>Rise of Early Civilization:</i> Middle East & Africa: Mesopotamia, Egypt Asia: India, China Foundation of Western Ideas: Greece</p>	<p><i>Social & Inter/Intra Personal Relationships</i> Kidpower – Taking charge of your safety <i>Community Awareness & Understanding</i> Independent school/community service <i>Geographical, Cultural, & Historical Understanding</i> World Cultures 500BCE through 1500CE—studied through lens of cultural universals-values & ethics, economics, food/shelter/clothing, political organization, family & kin, religious beliefs & practices, communications, arts & aesthetic values, recreation; emphasis on parallels between ancient & modern worlds Seven Wonders of the Ancient World Ancient Greece: development of democracy & democratic principles Rise & Fall of Ancient Rome The Growth of Islam Rise of Civilizations Ancient China Ancient Japan Mongol/Ottoman/Mughal Empires European Feudalism and the Church The Crusades Renaissance, Reformation, Age of Exploration Geographic study of ancient and medieval worlds Examining diverse historical perspectives Examining historical link to current events</p>	<p><i>Social & Inter/Intra Personal Relationships</i> Kidpower – Taking charge of your safety <i>Community Awareness & Understanding</i> Independent community service Leadership of school-wide assemblies & projects <i>Geographical, Cultural, & Historical Understanding</i> U.S. development from 1776 to 1877 Rebellion & revolution New nation and constitution Westward expansion Slavery and division Civil War and reconstruction Historic and modern U.S. geography Examining primary resources Examining diverse historical perspectives Examining historical link to current events</p>
<p>Language Arts</p> <p><i>Reading/Literature:</i> Students at all ages are exposed to a depth of literature from many genre, engaging students in active listening and discussions that bring to light the richness of the works. The Upper grades continue this literature-rich environment with the goal of developing capable, reflective, thoughtful and passionate readers. Students read independently, with partners, in small groups and structured literature circles. Students engage in discussions, reflect through writing, develop through personal relevance to a wide range of literature.</p> <p><i>Writing:</i> At Gateway we see writing as one of the important ways in which we communicate all aspects of our life and learning. Writing in its various forms occurs across the curriculum. Students gain an understanding of the writing process and while we emphasize excellence in the final product, we believe that the process of writing is equally important. Through the progressive introduction of grammar, spelling, and punctuation skills coupled with the development of purpose, style and voice students gain competence in the flexibility and power of the written word. With increasing complexity and subtlety students learn to share their personal expression and the results of increasingly sophisticated and thorough research.</p>	<p><i>Reading</i> Literal reading comprehension across genres Literary response, analysis & criticism Book report</p> <p><i>Writing</i> Extensive use of detail & description Organizes & clearly expresses ideas Creates effective transitions Demonstrates self-editing skills Uses appropriate mechanics & grammar Expanded application of spelling strategies Vocabulary expansion Journal writing</p>	<p><i>Reading</i> Reading comprehension across genres including short stories & myths Literary response, analysis & criticism Literary themes Character analysis Book reviews</p> <p><i>Writing</i> Writes with detail & description Organizes & clearly expresses ideas Creates effective transitions Demonstrates self-editing skills Uses appropriate mechanics & grammar Applies spelling strategies Spelling & vocabulary expansion Defends a point of view Expresses personal opinions</p>	<p><i>Reading</i> Reading comprehension across genres Study of figurative meaning & language Literary response, analysis and criticism in different genres Themes, characterization, symbolism, mood, conflict Poetic terms Reading of literature contemporary to the periods examined in social studies Traditional literary forms</p> <p><i>Writing</i> Writes using standard conventions of English grammar Development of effective short essay Awareness of audience and purpose & rhetorical strategy Research-based writing Reading journals Creative writing with historical analysis Spelling & vocabulary expansion</p>	<p><i>Oral:</i> debates, mock trials, persuasive, informational and ceremonial speeches; analysis of political speeches</p> <p><i>Reading</i> Vocabulary development: w/ word origins; historical, literary context clues, specialized vocabulary, idioms, analogies, metaphors, figurative meanings Literary analysis: subplots, parallel episodes, climax, plot development, comparative analysis, recurring themes, symbolism Daily journal and discussion Essays Book Reviews Book Projects</p> <p><i>Writing</i> Writing domains: journal, biography, persuasive, expository, research, literary response, creative Clear, reasoned essays w/ focus, thesis driven examples; transitional phrases, varied sentence structure, integration of quotations, opinions and analogies Research projects: effective research skills and annotation, paraphrasing, note-taking skills, content organization and outlining Poetry: word selection and placement, attention to meter and form Spelling & vocabulary expansion</p>
<p>Math</p> <p>Everyday Mathematics (K-6) provides a strong conceptual foundation with a hands-on focus and problem solving orientation. It emphasizes the application of mathematics to real world situations. Numbers, skills and mathematical concepts are linked to situations and contexts that are relevant to everyday lives. The curriculum provides numerous opportunities for incorporating mathematics into daily classroom routines and other subject areas. Activities balance teacher-directed instruction with opportunities for open-ended, hands-on explorations, long-term projects and on-going practice. It provides numerous methods for basic skills practice and review. Students are encouraged to explain and discuss their mathematical thinking, in their own words and drawings which gives them the chance to clarify their thinking and gain insights from others. The Impact Program, used in grades 7-8, moves students carefully and thoroughly forward in mathematics and algebra. Connections among number, measurement, algebra, geometry, probability and statistics strands are emphasized throughout. Students are introduced to important mathematical ideas informally. Topics are revisited in increasingly more formal and focused ways, ensuring that students develop skills and conceptual understanding.</p>	<p>Identify & explore properties of square numbers Introduce scientific notation & convert to standard & number & word notation Estimate & calculate the answers to multi-digit & decimal addition, subtraction, multiplication & division problems Introduce rules of order for operations Solve percent & multiplication problems w/ fractions & mixed numbers Sort geometric shapes according to attributes & solve attribute puzzles Introduce, write & solve algebraic expressions Construct & copy figures using compass & straightedge Sort, describe & compare solids using standard solid geometry language Use the rectangle method for finding the area of triangles & parallelograms Measure to find the sum of the angles in a polygon Use ratios to examine trends in data Interpret data: line plot, stem & leaf plot; frequency table</p>	<p>Equivalent fractions, decimals, percents Add, subtract, multiply and divide decimals Write algebraic expressions; write & solve algebraic equations Use of scientific notation & conversion between scientific and standard notation Distributive property for numerical and algebraic expressions Evaluate algebraic expression by substituting numerical values for variables Relation of congruence to isometry transformations Use formulas to find perimeter, circumference, area Calculate probabilities and provide estimates Calculate probabilities for equally likely situations</p>	<p>Pre-Algebra Understanding expressions Geometry in three dimensions Exploring exponents Working with signed numbers Looking at linear relationships Solving equations Similarity Ratio and proportion Interpreting graphs Data and probability</p>	<p>Algebra Linear relationships Quadratic and inverse relationships Exponents and exponential variation Solving equations Transformational geometry Working with expressions Quadratic Equations Functions and their graphs Investigating probability Modeling with data</p>
<p>Science</p> <p>Students have opportunities to use the scientific method of open inquiry and become familiar with the language and philosophy of science. They actively investigate questions and phenomena. They develop the scientific skills of observing, comparing, measuring, questioning, hypothesizing and inferring while studying facts, unifying concepts and theories. Through investigation, collaboration & discussion, students gain an understanding of the objects and systems that surround us in our daily lives. The program utilizes the rich natural environments surrounding the school - the ocean, Lighthouse Field and local coastal ranch land - as the laboratory to learn the principles of the earth, life and physical sciences. Curriculum includes the MARE program (Marine Activities, Resources & Education), and our award-winning Life Lab program.</p>	<p><i>Marine Science (MARE):</i> Open Ocean Seasons, Weather patterns, Currents, Properties of sea water, Natural selection, Food pyramids, Marine debris <i>Life Lab Science:</i> Change Over Time: Microhabitats and the pressures that produce adaptations of seeds, plants and animals, pizza feast <i>Scientific Method</i> through exploration of several fields <i>Other Units</i> Science Fair Project w/ partner Family life unit* Drug/Alcohol education* Ocean Week</p> <p>*taught by consultants</p>	<p><i>Marine Science (MARE):</i> Islands Tides - Plate tectonics & volcanism, Evolution of sand, Bathymetry, Colonization & succession, Biodiversity & adaptation & speciation, Life cycles, Habitat loss & conservation <i>Biology:</i> Human biology & adaptation <i>Other Units:</i> Science Fair Project Family life unit* Drug & alcohol education* Ocean Week</p> <p>*taught by consultants</p>	<p><i>7th & 8th grade are taught the following units over a period of two years</i> <i>Marine Science (MARE):</i> Coral Reefs Tropical biology, invertebrate zoology, use of microscopes, biological adaptation, biology & chemistry of coral reef formation, symbiosis, and habitat preservation <i>Astronomy:</i> Solar system, origin of planetary systems, relative sizes & distances, search for extraterrestrial intelligence, physics of planetary motion, chemistry of stars & planets <i>Earth Force Physics I:</i> Wind, Volcanoes and Earthquakes <i>Earth Force Physics II:</i> Waves, Surfing and Tsunamis: physical features of waves, types of waves, ocean wave generation, energy, speed, refraction, reflection, bathymetry, plate tectonics, earthquakes <i>Forensic Science:</i> Crime Lab Chemistry <i>Venomous Creatures:</i> Biomedical Science, including human nervous system structure and function, action of neurotoxins, animal defense, comparative biology of venomous creatures worldwide <i>Marine Science (MARE):</i> Polar Seas Ocean currents, temperature, salinity, density, biological adaptation, marine mammals, ice formation, global warming; <i>Mad Cow Disease and the Human Brain:</i> brain anatomy & function, teenage brain development, cell structure & function; DNA structure and function; agents of human disease; bacteria, viruses & prions, history & biology of Mad Cow Disease. <i>Chemistry & Physics of Fireworks:</i> Newton's law of motion, types of energy, energy conversion, exothermic and endothermic chemical reactions, pressure, combustion, light, color, introduction to periodic table, metal salts, firework construction & design, history of fireworks. <i>From Wolves to Dogs: Evolutionary Biology and Genetics:</i> Principles of evolution applied to the divergences of dogs from wolves, variation, adaptation, natural selection, phylogenetic trees, comparative biology, mendelian genetics, behavior, hereditary diseases in dogs. <i>Other Units</i> Science Fair Project, Ocean Week, Family life unit*, Drug/Alcohol education* (*taught by consultants)</p>	

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<p>Spanish</p> <p><i>The focus of Spanish classes at all grade levels is to impart a love of the Spanish language and an appreciation for Hispanic cultures. If children can hear, see and experience the sounds, gestures and feelings for a foreign language, they will develop an ear, not only for Spanish but also for other foreign languages and for language acquisition in general. Students develop early language skills through a multi-faceted approach of songs, poetry, stories, art, drama, rhythm, conversation, visual aids, vocabulary building and oral and written exercises. In the upper grades more emphasis is placed on grammar and the written word.</i></p>	<p>5 units from textbook series: qué tal?, select Spanish readings Dictionary skills Numbers 1-1,000 with math problems in Spanish Vocabulary: classroom items, houses, commands, animals, clothing, colors, adjectives, numbers, sports, food and body parts Respond to questions –affirmative & negative in written & oral sentences Introduction to interrogatives Expand vocabulary through individual & group work Oral presentations: me poster, weather reports, dream house w/ written report & art project Film – Muzzy II, parts 1-3 Basic “AR” verbs & conjugation – written & oral New chants, songs, games, videos Basic geography Latin American countries Cortes, Aztecs</p>	<p>Review of previous year w/ greater depth & attention to grammar, verbs & writing Nouns w/ definite & indefinite articles, subject pronouns, AR verbs & conjugation, intro. of “ER” and “IR” verbs & conjugation, irregular “IR” verb & conjugation Ask & respond to questions w/ interrogatives Reading dialogue and paragraphs w/ comprehension & pronunciation Intro. of SER vs. ESTAR to study forms Extensive study of sound/symbol connection for spelling & fluency in reading. Introduction TPR storytelling Use of DIME series</p>	<p>TPR Storytelling Curriculum “Cuentos de Ensalada” Part I of “high school” equivalency curriculum – Voces y Vistas, chapters 1-8 Guided writings Formatted self-expression Cultural project research Grammar/vocabulary proficiency building Pen pals/interpersonal communications Various project based lessons Films/videos</p>	<p>Culmination of “Cuentos de Ensalada” curriculum with dramatic culmination Part II of “high school” equivalency curriculum, Voces y Vistas, chapters 9-16 Written composition Original self-expression Cultural project research in immersion format Hispanic country report – research, writing, presentation Novellette – “Casi se Muere” Extended grammar/vocabulary proficiency Guest speakers, field trips, films</p>
<p>The Arts</p> <p><i>Visual Arts: Students learn how to perceive the world in an artistic way by refining their sensory perceptions of works of art, objects in nature, events & the environment. They identify elements & principles of design. Art projects are planned to complement the themes of study.</i></p> <p><i>Theater Arts & Oral Communication: Theater is a collaborative art that teaches the elements of presentation and enhances communication through acting, direction, script writing, media, design or production. Students build their communication skills through storytelling, puppetry, pantomime, improvisation, and formal acting, while assessing their progress on the way. Communication skills are necessary throughout one’s life. The ability to speak clearly, eloquently and effectively has been the mark of a successful person since ancient times. Effective communication involves speaking, listening, thinking and writing.</i></p> <p><i>Music: This K-5 program is based upon the Orff-Schulwerk approach which weaves together speech & poetry, movement & dance, drama & song and improvisation and playing musical instruments. Direct experience with sound and movement precedes theoretical study. Cooperative ensemble work is encouraged over competitive individual virtuosity.</i></p>	<p><i>Visual Arts</i> Pen and ink; self-portrait in three values; visual interpretation of poetry; Alexander Calder’s circus; ocean animal mask with prey, conveying mood through color, value or line quality; oceanscape print; life drawing of seated figures</p> <p><i>Theater Arts & Oral Communication:</i> Expanded Theater arts skills w/ focus on character development & skill building through scene work, stories using concepts of protagonist, conflict, beginning, middle and end, Presentation of stories through improvisation</p> <p>Scene Showcase of curriculum related projects developed by students and teachers</p> <p><i>Music</i> <i>Vocal:</i> Continued harmony singing and correct technique <i>Rhythmic:</i> More complex body percussion & barred instrument pieces, focus on complementary rhythms in composing <i>Movement:</i> Dances of medium complexity, using elemental shapes, movements and Laban efforts to create original dances to music <i>Instrumental:</i> Four-to-six part arrangements for barred instruments and recorders, diatonic scale-based music <i>Composition:</i> Composing group instrumental and dance pieces to illustrate mood of stories, use of diatonic scales and melody</p>	<p><i>Theater Arts & Oral Communication</i> <i>6th Grade:</i> Scene Showcase of curriculum related projects from social studies or literature. Students will gain expanded theater arts skills with focus on creating well-defined characters, and situations developed in relation to curriculum studies.</p> <p><i>7th Grade:</i> Focus on individual performances through a Storytelling Showcase using the art of storytelling. Stories come from History study. Focus is on the stories themselves as well as performance skills. Students will develop polished communication skills: clear articulation, voice projection, use of inflection, creation of tone, dramatic pause, active listening, acting with one’s voice.</p> <p><i>8th Grade:</i> Graduation Speech Development</p> <p><i>Visual Arts</i> are optional through the elective program</p>		
<p>Elective Program (for 6th-7th-8th grades only) <i>This program gives students exposure, experience and knowledge in high interest topics in the general areas of arts, sports and technology</i></p>		<p>Middle School students participate in an elective program on Wednesdays and Fridays (two per trimester) which includes arts, sports and general options. Elective offerings are based upon student interest and vary each year. Past offerings have included:</p> <ul style="list-style-type: none"> Visual Arts: drawing, painting, printmaking and Flash animation, Theater Arts: Acting on Camera, Improvisation, Stand up Comedy, and Middle School Play Sports: yoga, Salsa dance, Hip hop dance, spirit squad, table tennis, biking, climbing, bowling, beach volleyball General: yearbook, French, medicinal herbs, Robotics 		
<p>Technology</p> <p><i>Technology is an important tool that supports instructional goals and that provides an alternate learning medium for students with different learning styles. Students learn to use software applications and Internet resources to communicate ideas, research and collect information, solve problems and make informed decisions.</i></p>	<p>Computer ethics Multimedia presentation w/ PowerPoint Word processing skills: insert pictures/word art, page setup, edit, thesaurus, Excel - graphing and tables Keyboarding – 25 wpm Downloading graphics and screen captures Programming basics Creating Web Pages with Composer or in HTML Computer animation Web searches for reports</p>	<p>Simple multi-media project w/animation & sound Word processing skills: print preview, bullets/numbering PowerPoint project Excel spreadsheet practice & graphing Create web pages using HTML & Composer Using email for school projects. Using school on-line library resources Photoshop Networking basics Computer animation Robotics</p>	<p>Academic web research w/ internet citation & proper attribution Internet civics Harvey – web-based publishing and discussion forum Using school on-line library resources</p>	<p>Academic web research w/ internet citation & proper attribution Harvey – web-based publishing and discussion forum Using school on-line library resources</p>
<p>Library</p> <p><i>No scheduled library time. To meet the needs of our students’, educational printed materials are provided in conjunction with their teachers’ classroom assignments. These library materials are used to supplement the classroom resources.</i></p>	<p>Access to library resources Independent use of electronic catalogue</p>	<p>Independent use of electronic catalogue Access to library resources Lobby Displays-In conjunction with the classroom teacher’s book review assignment</p>	<p>Access to library resources Independent use of electronic catalogue Middle School Library Extension located in eighth grad classroom</p>	<p>Library resources Independent use of electronic catalogue Middle School Library Extension located in eighth grad classroom</p>
<p>Physical Education</p> <p><i>Recognizing that motor development and game skills are important to a well-rounded education, activities are designed to develop movement skills & knowledge, improve personal & social development and to promote health & fitness.</i></p>	<p>Cooperative ball games Team games - skills & strategies Personal fitness assessment Understands benefit of personal/group challenges Emphasis on good sportsmanship and team effort</p>	<p>Warm Up Drills Team Games - flag football, basketball, volleyball, Lacrosse, etc... Individual Activities -archery, badminton, table tennis, etc Personal fitness Responsibility of physical activity Rules of Game & Respect for others</p>		
<p>Special Projects/and Field Trips</p> <p><i>Acknowledging that students have different learning styles, each class provides opportunities for in-depth study & creative presentations. A wide range of community resources is used to enhance the classroom material. Overnight trips are an important part of the grade 4-8 curriculum.</i></p>	<p><i>Social Studies related field trips:</i> Tall ship voyage <i>Science related field trips:</i> Outdoor education at Point Bonita Monterey Bay Aquarium Discovery Lab at Seymour Long Marine Lab Tech Museum <i>Special Projects:</i> Santa Cruz Symphony State report</p>	<p><i>Social Studies related field trips:</i> DIG Project – archeological dig simulation Rosicrucian Museum in San Jose Academy of Science in San Francisco SF Asian Art Museum <i>Science related field trips/projects:</i> Exploratorium MARE: Island Habitat Construction SC City Museum of Natural History Seacliff Beach Fossil Walk Week Study of Redwood and other habitats <i>Special Projects:</i> Spanish storytelling projects</p>	<p><i>Science related field trips:</i> The Tech Museum of San Jose <i>Special Projects/Trips:</i> Camping/rafting trip Formal debate Groundhog/Job shadow day Independent school/community service Evening of storytelling Spanish cultural projects Math oriented research project Attendance of a series of professional theater plays</p>	<p><i>Social Studies related field trips/projects:</i> Washington D.C. & Colonial Williamsburg UCSC Library research <i>Science related field trips:</i> California Academy of Sciences-Planetarium New Brighton State Park Astronomy overnight to Fremont Peak Observatory <i>Special Projects:</i> US Presidential election simulation Formal debate Independent community service Personal graduation speeches Spanish cultural & art projects Math oriented research project Study skills & organization unit</p>