

<b>BIG QUESTION #1: WHO AM I?</b>		<b>AUGUST 29 THROUGH SEPTEMBER 24</b>
<b>Content</b>	<b>Common CORE or CA Content Standards</b>	<b>Projects/Ideas/Materials/Resources/Trips</b>
<p><b>Math</b></p>	<p><b>Algebra &amp; Functions</b>                      5.OA.1 – Use parentheses and brackets or braces in numerical expressions and evaluate expressions with these symbols.                      5.OA.2 – Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them.                      5.OA.3 – Generate two numerical patterns using two different rules. Identify apparent relationships between corresponding terms. Form ordered pairs corresponding to terms from the two patterns and graph the ordered pairs on a coordinate plane.  <b>Geometry</b>                      5.G.1 – Use a pair of perpendicular lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and given point in the plane located by using an ordered pair of numbers called coordinates. Understand that the first number indicates how far to travel from the origin in the directions of one axis, and the second number indicates how far to travel in the directions of the second axis, with the convention that the names of the two axes and the coordinates correspond (x, y axes and coordinates)  <b>Computation</b>                      Add: Review + - x ÷ of whole numbers with emphasis on rapid recall of x and ÷ facts</p>	<p>MATH RELATED</p> <ul style="list-style-type: none"> <li>• Pond study – collect real time data, organize and chart data, make predictions about year-long observation of the area</li> <li>▪ Teach graphing and grid systems, quadrants</li> <li>▪ Teach <b>Excel/Numbers</b> spreadsheet application</li> <li>▪ Practice Open Response Problem Solving</li> </ul> <p>DESIGN THINKING/CLASSROOM ORGANIZATION</p> <ul style="list-style-type: none"> <li>▪ Teach design thinking process</li> <li>▪ Practice <i>empathy</i>. Stimulate creative confidence.</li> <li>• Teach 7 21<sup>st</sup> Century Competencies</li> <li>▪ Teach Assessment Cycle</li> <li>• Begin PATHBRITE portfolio</li> <li>• Teach process of shared inquiry (<i>Comprehension &amp; Collaboration</i> Stephanie Harvey &amp; Harvey Daniels lessons)</li> <li>• Design the perfect person, learning space, location</li> </ul>
<p><b>Language Arts</b></p> <ul style="list-style-type: none"> <li>• <i>Jr. Great Books</i> – shared inquiry</li> <li>• <i>Sign of the Beaver</i> (Avi)</li> <li>• <i>Island of the Blue Dolphin</i> (O’Dell)</li> <li>• Picture Books</li> <li>• Plant, insect, mammal, reptile &amp; amphibian identification books</li> </ul>	<p><b>Reading Informational Texts</b>                      RI 5.7 – Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently.  <b>Reading Foundations</b>                      RF 5.3 – Know and apply grade level phonics and word analysis in decoding words. Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (roots, affixes) to read accurately unfamiliar multi-syllabic words in context and out of context.                      RF 5.4 – Read with sufficient accuracy and fluency to support comprehension:  <ul style="list-style-type: none"> <li>• Read grade level text with purpose and understanding.</li> <li>• Read grade-level prose and poetry with accuracy, appropriate rate, and expression.</li> <li>• Use context to confirm or self-correct word recognition and understanding, rereading as necessary</li> </ul> <b>Writing</b>                      W 5.4 - Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience.                      W 5.5 – With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.                      W 5.6 With some guidance and support from adults, use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of two pages in a single sitting.                      W 5.10 – Write routinely over extended time frames and shorter time frames for a range of discipline specific tasks, purposes, and audiences.  <b>Speaking &amp; Listening</b>                      SL 5.1 Engage effectively in a range of collaborative discussions (in differing grouping configurations) with diverse partners, building on other’s ideas and expressing them clearly.  <ul style="list-style-type: none"> <li>• Come to the discussion prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion. (Be ready to defend ideas with facts&gt;)</li> <li>• Follow agreed-upon rules for discussions and carry out assigned roles.</li> <li>• Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others.</li> <li>• Review (paraphrase/summarize) the key ideas expressed and draw conclusions in light of information and</li> </ul> </p>	<p>BIG QUESTION SPECIFIC RESEARCH</p> <ul style="list-style-type: none"> <li>• Teach learning styles</li> <li>• Teach typology</li> <li>• Teach: Why it is important to include different talents in groups? CAROLINE PSYCHOLOGIST</li> <li>• Design Challenge: <i>Who am I?</i> poster project</li> <li>• What do we need to be able to work comfortably together? Cooperative Learning</li> <li>• How can we sustain a workable classroom environment?</li> <li>• What is interdependence?</li> <li>• Cooking class and sharing a meal (evening with parents)</li> <li>• Interpersonal Skills Development</li> <li>• Spin off into Who Are We? (See Service Learning)</li> </ul> <p>SOCIAL STUDIES SPECIFIC</p> <ul style="list-style-type: none"> <li>• The Americas Landforms (salt-map project)</li> <li>• Design Challenge - Native American artifact</li> <li>• Primitive Societies (cave painting, petroglyphs)</li> <li>• Rise &amp; Fall of Ancient Civilizations</li> </ul> <p>SCIENCE SPECIFIC</p> <ul style="list-style-type: none"> <li>• Hands-on science (variables and experimentation)</li> <li>• Brain chemistry</li> <li>• Learning differences (dyslexia, processing speeds)</li> <li>• Eco-systems (Weather/climate, Local botany, Life cycles, Local wetland study)</li> <li>• Astronomy</li> </ul> <p>MUSIC</p> <ul style="list-style-type: none"> <li>• How do artists and musicians impact their generations’</li> </ul>

<p><b>Language Arts</b></p> <ul style="list-style-type: none"> <li>• <i>Jr. Great Books</i> – shared inquiry</li> <li>• <u><i>Sign of the Beaver</i></u> (Avi)</li> <li>• <u><i>Island of the Blue Dolphin</i></u> (O’Dell)</li> <li>• Picture Books</li> <li>• Plant, insect, mammal, reptile &amp; amphibian identification books</li> </ul>	<p>knowledge gained from the discussions. Engage in ACTIVE listening.</p> <p>SL 5.5 – Include multi-media components and visual displays in presentations when appropriate to enhance the development of main ideas or themes.</p> <p>SL 5.6 – Adapt speech to a variety of contexts and tasks, using formal English when appropriate to task and situation.</p> <p><b>English Language Skills</b></p> <p>L 5.1.2 – Form and use the perfect verb tenses.</p> <p>L 5.1.3 – Use verb tense to convey various times, states, and situations.</p> <p>L 5.1.4 – Recognize and correct inappropriate shifts in verb tense.</p> <p>L 5.1.5 - Use correlative conjunctions (either/or, neither/nor).</p> <p>L 5.2 – Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling in all writing.</p> <ul style="list-style-type: none"> <li>• Use punctuation to separate items in a series.</li> <li>• Use a comma to separate an introductory element from the rest of the sentence.</li> <li>• Use a comma to set off the words <i>yes</i> and <i>no</i>, to set off a tag question from the rest of the sentence, or to indicate direct address.</li> <li>• Use underlining, quotation marks, and italics to indicate titles of works.</li> <li>• Spell grade appropriate words correctly, consulting references as needed. (Spell check is OK!)</li> </ul> <p>L 5.3 - Use knowledge of language and its conventions when writing, speaking, reading, or listening.</p> <ul style="list-style-type: none"> <li>• Expand, combine and reduce sentences for meaning, reader or listener interest, and style.</li> </ul> <p>L 5.4 – Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade level reading and content, choosing flexibly from a range of strategies:</p> <ul style="list-style-type: none"> <li>• Use context as a clue to the meaning of a word or phrase.</li> <li>• Use common grade-appropriate Greek or Latin affixes or roots as clues to the meaning of a word.</li> <li>• Consult reference materials both print and digital to find pronunciation and determine or clarify the precise meaning of key words and phrases.</li> </ul>	<p>attitudes toward sustainable planet?</p> <ul style="list-style-type: none"> <li>• How powerful can that message be?</li> <li>• Gustave Holtz (Planets)</li> <li>• Indian Musicians &amp; Artisans</li> <li>• Use recorders and pentatonic scale</li> </ul> <p>ART</p> <ul style="list-style-type: none"> <li>• Weaving patterns (coordinate geometry tie-in)</li> <li>• Field Trip: Cantor Center Native American Art / African Art through 10/14</li> <li>• Pre-Colombian artifact: sculpture in clay (pit fired?)</li> <li>• Design challenge: make something to carry water from materials found in nature.</li> <li>• (Literature tie-in: Island of the Blue Dolphins)</li> <li>• Field Trip: Cindy Sherman exhibit, SFMOMA through 10/8</li> <li>• Unconventional self-portrait: diorama, photo collage, etc.</li> </ul> <p>FIELD TRIPS</p> <ul style="list-style-type: none"> <li>• d.school = August 30, 2012 (9:30 – 2:00)</li> <li>• Jasper Ridge (1 of 3) September</li> <li>• Stanford DIG October</li> <li>• Lawrence Hall of Science (Amazing Brain &amp; Structural Engineering)</li> </ul> <p>ACADEMIC OVERVIEW</p> <p>Reading</p> <ul style="list-style-type: none"> <li>• Locate information</li> </ul>
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<p><b>Social Studies</b></p>	<p><b>5.1 Pre-Columbian settlements in the Americas</b>                  - 5.1.1 describe how geography and climate influenced culture of native civilizations                  - 5.1.2 describe customs and folklore                  - 5.1.3 explain economy and system of government</p>	<ul style="list-style-type: none"> <li>• Scanning</li> <li>• Extrapolate Data</li> </ul> <p>Reading Foundations</p> <ul style="list-style-type: none"> <li>• Phonics</li> <li>• Fluency</li> <li>• Accuracy</li> <li>• Comprehension</li> </ul> <p>Writing</p> <ul style="list-style-type: none"> <li>• Organization</li> <li>• Writing Process</li> <li>• Technology Use</li> <li>• Purpose &amp; Audience</li> </ul> <p>Speaking &amp; Listening</p> <ul style="list-style-type: none"> <li>• Collaboration</li> <li>• Communication</li> <li>• Presentation</li> </ul> <p>Standard English</p> <p>English</p> <ul style="list-style-type: none"> <li>• Nouns</li> <li>• Verbs &amp; Tenses</li> <li>• Plurals</li> <li>• Comma Use</li> <li>• Vocabulary Development</li> <li>• Word Attack Skills</li> <li>• Sentence structure</li> <li>• Combining sentences</li> <li>• Standard Conventions</li> </ul>
<p><b>Science</b> Experimental Design Brain &amp; Learning</p>	<p><b>3.0 Earth Sciences</b>                  - 3.1 <i>Water on Earth moves between the oceans and land through processes of evaporation and condensation:</i>                  Earth's water is salt water in oceans, water cycle, water quantity is finite, origin of local water supply</p> <p><b>4.0 Earth Sciences</b>                  - 4.1 <i>Energy from the Sun heats Earth unevenly, causing air movements that result in changing weather patterns:</i>                  convection currents, effect of ocean on weather, severe weather, use maps and data to predict local weather, Earth's atmosphere exerts pressure that is exerted equally in all directions that decreases as altitude above Earth's surface increases</p> <p><b>5.0 Earth Sciences</b>                  - 5.1 <i>The solar system consists of planets and other bodies that orbit the Sun in predictable paths:</i> composition and properties of Sun, names of the planets and major satellites, gravitational attraction provides orbit/path</p>	<p>ACADEMIES</p> <ul style="list-style-type: none"> <li>• Entrepreneurship Academy (Jess Munro 9-6 to 9-13)</li> <li>• Artistic Eye (9-27 to 11-1)</li> </ul> <p>SERVICE LEARNING</p> <ul style="list-style-type: none"> <li>• We are members of a larger community.</li> <li>• Independently developed</li> <li>• Introduction letters to Sequoia's or other agency</li> </ul>

<b>BIG QUESTION #2: WHAT MAKES A SUSTAINABLE ENVIRONMENT?</b>		<b>SEPTEMBER 24 THROUGH NOVEMBER 1</b>
<b>Content</b>	<b>Common CORE &amp; CA Content Standards</b>	<b>Projects/Ideas/Materials/Resources/Trips</b>
<p><b>Math</b></p>	<p><b>Number Operations Base 10</b>                      5.NBT.1 – Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to the right and 1/10<sup>th</sup> of what it represents in the place to the left.                      5.NBT.2 - Explain number patterns in the number of zeros of the product when multiplying a number by powers of ten, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by powers of 10. Use whole number exponents to denote powers of 10.                      5.NBT.3.1 – Read, write, and compare decimals to thousandths. Read and write decimals to thousandths using base-ten numerals, number names, and expanded form.                      5.NBT.3.2 – Compare two decimals to thousandths based on meanings of digits in each place using &gt;, &lt;, and = symbols to record the results of comparisons.                      5.NBT.4 – Use place value understanding to round decimals to any place.                      5.NBT.5 - Fluently multiply multi-digit whole numbers using the standard algorithm.                      5.NBT.6 – Find whole number quotients of whole numbers with up to four digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.                      5.NBT.7 – Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.</p> <p><b>Measurement &amp; Data</b>                      5.MD.1 – Convert among different-sized measurement units within a given measurement system (5cm = .05 m) and use these conversions in solving multi-step, real world problems.                      5.MD.2 - Make a line plot to display a data set of measurements in fractions of a unit (1/2, ¼, 1/3, 1/8). Use operations on fractions to solve problems involving information presented in line plots. (e.g. liquid in identical beakers is different; How much would be in beaker if liquid were redistributed equally?)                      ••Add: Data landmarks (maximum, minimum, range, mode, median, mean, outlier)</p> <p><b>Number Operations with Fractions</b>                      5.NF.3 – Interpret a fraction as division of the numerator by the denominator. Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers (e.g. <math>\frac{3}{4} = 3 \div 4</math>, <math>\frac{3}{4} \times 4 = 3</math>, <math>3 \div 4 = \frac{3}{4}</math>)</p>	<p>MATH SPECIFIC</p> <ul style="list-style-type: none"> <li>Pond study – collect real time data, organize and chart data, make predictions about year-long observation of the area</li> <li>Practice Multi-step Open response problems (decimals)</li> </ul> <p>DESIGN THINKING</p> <ul style="list-style-type: none"> <li>Process for Interpersonal Skills Development</li> <li>Assessment Cycle</li> <li>Cooperative Learning &amp; Interdependence</li> <li>Design a creature that lives in an alien environment.</li> <li>Design a better way to save energy.</li> </ul> <p>BIG QUESTION RESEARCH</p> <ul style="list-style-type: none"> <li>Research project environmental impact of some current activity, or other “green” issue</li> <li>What is the importance of failure?</li> <li>What is self-reflection and why is it important?</li> <li>Is being first and best in everything a sustainable attitude?</li> <li>First GLOWS &amp; GROWS Exhibition</li> </ul> <p>SOCIAL STUDIES SPECIFIC</p> <ul style="list-style-type: none"> <li>Primitive Societies (cave painting, petroglyphs)</li> <li>Rise &amp; Fall of Ancient Civilizations</li> </ul> <p>SCIENCE SPECIFIC</p> <ul style="list-style-type: none"> <li>Hands on science - measuring and redistribution of liquids</li> <li>Eco-systems</li> <li>Weather/climate</li> <li>Local botany</li> <li>Local wetland study</li> <li>Astronomy (Reasons for seasons)</li> </ul>
<p><b>Language Arts</b></p> <ul style="list-style-type: none"> <li><i>Jr. Great Books</i> – shared inquiry</li> <li><i>Sign of the Beaver (Avi)</i>, <i>Witch of Blackbird Pond (Spear)</i></li> <li><i>The Story of Us (Vol. 1 &amp; 2)</i> (Hakim)</li> </ul>	<p><b>Reading Informational Text</b>                      RI 5.1 – Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.                      RI 5.2 – Determine two or more main ideas of a text and explain how they are supported by key details. Summarize the text.                      RI 5.4 – Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a 5<sup>th</sup> grade topic or subject area.                      RI 5.9 – Integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably.</p> <p><b>Reading Foundations</b>                      RF 5.3 – Know and apply grade level phonics and word analysis in decoding words. Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (roots, affixes) to read accurately unfamiliar multi-syllabic words in context and out of context.                      RF 5.4 – Read with sufficient accuracy and fluency to support comprehension:</p> <ul style="list-style-type: none"> <li>Read grade level text with purpose and understanding.</li> <li>Read grade-level prose and poetry with accuracy, appropriate rate, and expression.</li> </ul>	<p>MUSIC</p> <ul style="list-style-type: none"> <li>How can artists and musicians impact their generations’ attitudes toward sustainable planet?</li> <li>How powerful can that message be?</li> <li>Phillip Glass</li> <li>Gustave Holtz</li> <li>Native American Musicians</li> </ul> <p>ART</p> <ul style="list-style-type: none"> <li>Great Pacific Plastic Island Videos (tie-in with ocean current study)</li> <li>Upcycled plastic creations (crochet with plastic bag yarn, building with plastic bottles, bottle cap mosaic, toys made from repurposed trash)</li> <li>Art Activism - crochet corral reef, guerilla art.</li> </ul>

<p><b>Language Arts</b></p> <ul style="list-style-type: none"> <li>Jr. Great Books – shared inquiry</li> <li><u>Sign of the Beaver (Avi)</u>, <u>Witch of Blackbird Pond (Speare)</u></li> <li><u>The Story of Us (Vol. 1 &amp; 2)</u> (Hakim)</li> </ul>	<ul style="list-style-type: none"> <li>Use context to confirm or self-correct word recognition and understanding, rereading as necessary</li> </ul> <p><b>Writing</b></p> <p>W 5.1 – Write opinion pieces on topics or texts, supporting the point of view with reasons and information.</p> <ul style="list-style-type: none"> <li>Introduce a topic or text clearly, state an opinion, and create an organizational structure in which ideas are logically grouped to support the writer’s purpose.</li> <li>Provide logically ordered reasons that are supported by details and facts.</li> <li>Link opinion and reasons using words, phrases, and clauses.</li> <li>Provide a concluding statement or section related to the opinion presented.</li> </ul> <p>W 5.4 - Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience.</p> <p>W 5.5 – With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.</p> <p>W 5.6 With some guidance and support from adults, use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of two pages in a single sitting.</p> <p>W 5.7 – Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.</p> <p>W 5.10 – Write routinely over extended time frames and shorter time frames for a range of discipline specific tasks, purposes, and audiences.</p> <p><b>Speaking &amp; Listening</b></p> <p>SL 5.1 Engage effectively in a range of collaborative discussions (in differing grouping configurations) with diverse partners, building on other’s ideas and expressing them clearly.</p> <ul style="list-style-type: none"> <li>Come to the discussion prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion. (Be ready to defend ideas with facts&gt;)</li> <li>Follow agreed-upon rules for discussions and carry out assigned roles.</li> <li>Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others.</li> <li>Review (paraphrase/summarize) the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions. Engage in ACTIVE listening.</li> </ul> <p>SL 5.2 - Summarize written text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.</p> <p>SL 5.5 – Include multi-media components and visual displays in presentations when appropriate to enhance the development of main ideas or themes.</p> <p>SL 5.6 – Adapt speech to a variety of contexts and tasks, using formal English when appropriate to task and situation.</p> <p><b>English Language</b></p> <p>L 5.1 – Demonstrate command of the conventions of English grammar and usage when writing or speaking.</p> <ul style="list-style-type: none"> <li>Explain the function of conjunctions, prepositions, and interjections in general and their function in particular sentences.</li> <li>Use the relationship between particular words (e.g. synonyms, antonyms, homonyms) to better understand each of the words.</li> </ul> <p>L 5.2 – Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling in all writing.</p> <ul style="list-style-type: none"> <li>Use punctuation to separate items in a series.</li> <li>Use a comma to separate an introductory element from the rest of the sentence.</li> <li>Use a comma to set off the words <i>yes</i> and <i>no</i>, to set off a tag question from the rest of the sentence, or to indicate direct address.</li> <li>Use underlining, quotation marks, and italics to indicate titles of works.</li> <li>Spell grade appropriate words correctly, consulting references as needed. (Spell check is OK!)</li> </ul>	<ul style="list-style-type: none"> <li>Aboriginal Art - "dreaming" aerial art, dot painting, bark painting.</li> <li>Field trip: Papua New Guinea sculpture garden at Stanford.</li> <li>Making paint from found materials.</li> <li>Art Critique - self-assessment, giving constructive feedback, dealing with failure.</li> <li>Land Art: Goldsworthy. Making art from nature.</li> </ul> <p><b>FIELD TRIPS</b></p> <ul style="list-style-type: none"> <li>Sail the <i>Lady Washington</i></li> <li>Astronomy (Star Lab) overnight</li> <li>Halloween visit to Sequoia’s</li> <li>Tide Pools (Richardson Bay, Tiburon (SF BAY), Fitzgerald Preserve, Montara, and/or Princeton, Half Moon Bay (OCEAN)</li> <li>See <i>The Lion King</i> in SF &amp; have formal lunch in the city</li> </ul> <p><b>ACADEMIC OVERVIEW</b></p> <p><b>Reading</b></p> <ul style="list-style-type: none"> <li>Quotations</li> <li>Draw Inferences</li> <li>Main Idea</li> <li>Vocabulary Development</li> <li>Synthesize Information</li> </ul> <p><b>Reading Foundations</b></p> <ul style="list-style-type: none"> <li>Phonics</li> <li>Fluency, Accuracy</li> <li>Expression</li> <li>Self Correction</li> </ul> <p><b>Writing</b></p> <ul style="list-style-type: none"> <li>Opinion</li> <li>Audience &amp; Purpose</li> <li>Logical Organization</li> <li>Provide Evidence</li> <li>Develop Conclusion</li> <li>Writing Process</li> <li>Use technology</li> <li>Research</li> </ul> <p><b>Speaking &amp; Listening</b></p> <ul style="list-style-type: none"> <li>Collaboration</li> <li>Focus on Salient Discussion</li> <li>Summarize Oral Information</li> <li>Include Appropriate Multi-media</li> <li>Use Standard English</li> </ul> <p><b>English</b></p> <ul style="list-style-type: none"> <li>Standard Conventions</li> <li>Conjunctions</li> <li>Prepositions</li> <li>Interjections</li> <li>Capitalization</li> </ul>
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<p><b>Math</b></p>	<p><b>Number Operations Base 10</b>                      5.NBT.1 – Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to the right and 1/10<sup>th</sup> of what it represents in the place to the left.                      5.NBT.2 - Explain number patterns in the number of zeros of the product when multiplying a number by powers of ten, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by powers of 10. Use whole number exponents to denote powers of 10.                      5.NBT.3.1 – Read, write, and compare decimals to thousandths. Read and write decimals to thousandths using base-ten numerals, number names, and expanded form.                      5.NBT.3.2 – Compare two decimals to thousandths based on meanings of digits in each place using &gt;, &lt;, and = symbols to record the results of comparisons.                      5.NBT.4 – Use place value understanding to round decimals to any place.                      5.NBT.5 - Fluently multiply multi-digit whole numbers using the standard algorithm.                      5.NBT.6 – Find whole number quotients of whole numbers with up to four digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.                      5.NBT.7 – Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.</p> <p><b>Measurement &amp; Data</b>                      5.MD.1 – Convert among different-sized measurement units within a given measurement system (5cm = .05 m) and use these conversions in solving multi-step, real world problems.                      5.MD.2 - Make a line plot to display a data set of measurements in fractions of a unit (1/2, ¼, 1/3, 1/8). Use operations on fractions to solve problems involving information presented in line plots. (e.g. liquid in identical beakers is different; How much would be in beaker if liquid were redistributed equally?)                      ••Add: Data landmarks (maximum, minimum, range, mode, median, mean, outlier)</p> <p><b>Number Operations with Fractions</b></p>	<p>MATH SPECIFIC</p> <ul style="list-style-type: none"> <li>• Pond study – collect real time data, organize and chart data, make predictions about year-long observation of the area</li> <li>• Practice Multi-step Open response problems (decimals)</li> </ul> <p>DESIGN THINKING</p> <ul style="list-style-type: none"> <li>• Process for Interpersonal Skills Development</li> <li>• Assessment Cycle</li> <li>• Cooperative Learning &amp; Interdependence</li> <li>• Design a creature that lives in an alien environment.</li> <li>• Design a better way to save energy.</li> </ul> <p>BIG QUESTION RESEARCH</p> <ul style="list-style-type: none"> <li>▪ Research project environmental impact of some current activity, or other “green” issue</li> <li>• What is the importance of failure?</li> <li>• What is self-reflection and why is it important?</li> <li>▪ Is being first and best in everything a sustainable attitude?</li> <li>▪ First GLOWS &amp; GROWS Exhibition</li> </ul> <p>SOCIAL STUDIES SPECIFIC</p> <ul style="list-style-type: none"> <li>• Primitive Societies (cave painting, petroglyphs)</li> <li>▪ Rise &amp; Fall of Ancient Civilizations</li> </ul> <p>SCIENCE SPECIFIC</p> <ul style="list-style-type: none"> <li>▪ Hands on science - measuring and redistribution of liquids</li> <li>• Eco-systems</li> <li>• Weather/climate</li> </ul>
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<b>BIG QUESTION #3: DOES EXPLORATION LEAD TO INNOVATION?</b>		<b>NOVEMBER 1 THROUGH JANUARY 20</b>
<b>Content</b>	<b>Common CORE &amp; CA Content Standards</b>	<b>Projects/Ideas/Materials/Resources/Trips</b>
<p><b>Math</b></p>	<p><b>Number Operations with Fractions</b>                      5.NF.1 – Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators.                      5.NF.2.1 – Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators (use visual fraction models or equations to represent the problem). Use benchmark fractions and number sense fractions to estimate mentally and assess the reasonableness of answers.                      5.NF.2.2 - Explain why multiplying a given number by a fraction greater than one results in a product greater than the given number. Explain why multiplying a given number by a fraction less than one results in a product smaller than the given number. Relate the principle of fraction equivalence and the “giant 1.”                      5.NF.4.1 – Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction. Interpret the product <math>2/3 \times 4 = 8/3</math> and simplify.                      5.NF.5 – Interpret multiplication as scaling (resizing) by comparing the size of the product to the size of one factor on the basis of the size of the other factor, without performing the multiplication (i.e. estimate reasonableness using mental math).                      5.NF.6 – Solve real world problems involving multiplication of fractions and mixed numbers by using visual models or equations to represent the problem.</p> <p><b>Concept Building</b>                      Add: Review of GCF, LCD, equivalent fractions</p>	<p>MATH SPECIFIC</p> <ul style="list-style-type: none"> <li>Multi-step Open Response problems using fractions</li> </ul> <p>DESIGN THINKING</p> <ul style="list-style-type: none"> <li>Design challenge – construct a seaworthy sailing vessel using 16<sup>th</sup> century materials</li> </ul> <p>BIG QUESTION RESEARCH</p> <ul style="list-style-type: none"> <li>Research on an invention</li> <li>Second Public EXHIBITION (Glows &amp; Grows)</li> </ul> <p>SOCIAL STUDIES SPECIFIC</p> <ul style="list-style-type: none"> <li>Slavery/Diversity</li> <li>Government Structure</li> <li>Democracy</li> <li>Cyber Rights</li> <li>Global Populations</li> <li>Diaspora</li> <li>Ancestral Records</li> </ul> <p>SCIENCE SPECIFIC</p> <ul style="list-style-type: none"> <li>What is particle physics and why is it important?</li> <li>What is the ‘big bang?’</li> <li>Student questions lead inquiry.</li> <li>You Tube – DIY Science (Yannai Kashtan)</li> <li>Oceans &amp; Atmosphere</li> <li>Astronomy</li> <li>Chemistry</li> <li>Internet- Internet ethics, cyber-etiquette</li> </ul> <p>MUSIC</p> <ul style="list-style-type: none"> <li>Copeland</li> <li>Electronic Music</li> <li>Hip Hop</li> </ul> <p>ART</p> <ul style="list-style-type: none"> <li>Age of Discovery, Renaissance, Humanism, Perspective, Scientific Discovery, Printing Press. DaVinci, Michelangelo, Shakespeare, Darwin, Franklin.</li> <li>Perspective study - architectural drawing - line and value.</li> <li>Inventions: design a machine. How Things Work.</li> <li>Linoleum block prints.</li> <li>Letterboxing / geocaching.</li> </ul>
<p><b>Language Arts</b></p> <ul style="list-style-type: none"> <li><i>The Witch of Blackbird Pond</i> (Sphere),</li> <li><i>Ben &amp; Me</i> (Lawson)</li> <li><i>Fighting Ground</i> (Avi)</li> <li><i>The Story of Us (Vol. 2 &amp; 3)</i> (Hakim)</li> <li><i>Jr. Great Books</i> – shared inquiry</li> <li>Biographies</li> </ul>	<p><b>Reading Informational Texts</b>                      RI 5.3 Explain the relationships on interactions between two or more individuals, events, ideas, or concepts in historical, scientific, or technical text based on information in the text.                      RI 5.8 – Explain how an author uses reasons and evidence to support particular points in the text, identifying which reasons and evidence support which point(s).</p> <p><b>Reading Foundations</b>                      RF 5.3 – Know and apply grade level phonics and word analysis in decoding words. Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (roots, affixes) to read accurately unfamiliar multi-syllabic words in context and out of context.                      RF 5.4 – Read with sufficient accuracy and fluency to support comprehension:</p> <ul style="list-style-type: none"> <li>Read grade level text with purpose and understanding.</li> <li>Read grade-level prose and poetry with accuracy, appropriate rate, and expression.</li> <li>Use context to confirm or self-correct word recognition and understanding, rereading as necessary</li> </ul> <p><b>Writing</b>                      W 5.2 – Write informative/explanatory texts to examine a topic and convey ideas and information.</p> <ul style="list-style-type: none"> <li>Introduce a topic clearly, provide a general observation and focus, and group related information logically; include formatting (headings) illustrations, and multi-media when useful in aiding comprehension.</li> <li>Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic.</li> <li>Link ideas within and across categories of information using words, phrases, and clauses.</li> <li>Use precise language and domain-specific vocabulary to inform about or explain the topic.</li> <li>Provide a concluding statement or section related to the information or explanation presented.</li> </ul>	

<p><b>Language Arts</b></p> <ul style="list-style-type: none"> <li>• <u><i>The Witch of Blackbird Pond</i></u> (Sphere),</li> <li>• <u><i>Ben &amp; Me</i></u> (Lawson)</li> <li>• <u><i>Fighting Ground</i></u> (Avi)</li> <li>• <u><i>The Story of Us</i></u> (Vol. 2 &amp; 3) (Hakim)</li> <li>• <i>Jr. Great Books</i> – shared inquiry</li> <li>• Biographies</li> </ul>	<p>W 5.4 - Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience. W 5.5 – With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach. W 5.6 With some guidance and support from adults, use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of two pages in a single sitting. W. 5.8 – Recall relevant information from experiences or gather relevant information from print and digital sources. Summarize or paraphrase information in notes and finished work. Provide a list or reference sources. W 5.10 – Write routinely over extended time frames and shorter time frames for a range of discipline specific tasks, purposes, and audiences.</p> <p><b>Speaking &amp; Listening</b> SL 5.1 Engage effectively in a range of collaborative discussions (in differing grouping configurations) with diverse partners, building on other’s ideas and expressing them clearly.</p> <ul style="list-style-type: none"> <li>• Come to the discussion prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion. (Be ready to defend ideas with facts&gt;)</li> <li>• Follow agreed-upon rules for discussions and carry out assigned roles.</li> <li>• Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others.</li> <li>• Review (paraphrase/summarize) the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions. Engage in ACTIVE listening.</li> </ul> <p>SL 5.3 – Summarize the points a speaker makes and explain how each claim is supported by reasons and evidence. SL 5.5 – Include multi-media components and visual displays in presentations when appropriate to enhance the development of main ideas or themes. SL 5.6 – Adapt speech to a variety of contexts and tasks, using formal English when appropriate to task and situation.</p> <p><b>English Language Skills</b> L 5.2 – Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling in all writing.</p> <ul style="list-style-type: none"> <li>• Use punctuation to separate items in a series.</li> <li>• Use a comma to separate an introductory element from the rest of the sentence.</li> <li>• Use a comma to set off the words <i>yes</i> and <i>no</i>, to set off a tag question from the rest of the sentence, or to indicate direct address.</li> <li>• Use underlining, quotation marks, and italics to indicate titles of works.</li> <li>• Spell grade appropriate words correctly, consulting references as needed. (Spell check is OK!)</li> </ul> <p>L 5.3.1 – Use knowledge of language and its conventions when writing, speaking, reading, or listening. L 5.3.2 – Expand, combine and reduce sentences for meaning, reader or listener interest, and style. L 5.4 – Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade level reading and content, choosing flexibly from a range of strategies:</p> <ul style="list-style-type: none"> <li>• Use context as a clue to the meaning of a word or phrase.</li> <li>• Use common grade-appropriate Greek or Latin affixes or roots as clues to the meaning of a word.</li> </ul> <p>Consult reference materials both print and digital to find pronunciation and determine or clarify the precise meaning of key words and phrases.</p>	<ul style="list-style-type: none"> <li>• Drawing from nature. Contour drawing. Audubon. Tie-in with science unit.</li> <li>• Field Trip: Honore Daumier Caricatures at Cantor Arts through 11/11</li> <li>• Mail Art: reciprocal exchange with another school--India</li> </ul> <p>FIELD TRIPS</p> <ul style="list-style-type: none"> <li>• The Tech San Jose (chemistry class and iMax)</li> <li>• Cal Academy (Planetarium)</li> <li>• Computer HISTORY Museum Santa Clara (Innovation)</li> <li>• <a href="#">San Francisco Symphony Youth Concert (2013 Feb 19, 20, 22)</a></li> <li>• Jasper Ridge (2 of 3)</li> <li>• SLAC, Tesla, or other innovative company</li> </ul> <p>ACADEMIC OVERVIEW</p> <p>Reading</p> <ul style="list-style-type: none"> <li>• Compare &amp; Contrast</li> <li>• Author’s Purpose</li> </ul> <p>Reading Foundations</p> <ul style="list-style-type: none"> <li>• Phonics</li> <li>• Syllables</li> <li>• Comprehension</li> <li>• Accuracy, Expression, Fluency</li> </ul> <p>Writing</p> <ul style="list-style-type: none"> <li>• Information/Explanatory</li> <li>• Introduction</li> <li>• Focus</li> <li>• Logical Development</li> <li>• Facts &amp; Definitions</li> <li>• Precise Vocabulary</li> <li>• Conclusion</li> <li>• Writing Process</li> <li>• Use Technology</li> <li>• Gather information (note-taking)</li> <li>• Summarize information</li> <li>• Purpose and Audience</li> </ul> <p>Speaking &amp; Listening</p> <ul style="list-style-type: none"> <li>• Collaborate</li> <li>• Summarize</li> <li>• Use Multi-Media</li> <li>• Adapt speech to Suit Purpose</li> </ul> <p>English</p> <ul style="list-style-type: none"> <li>• Standard Conventions</li> <li>• Vocabulary Development (use context, reference materials)</li> </ul>
<p><b>Social Studies</b></p>	<p><b>5.2 Trace the routes of early explorers and describe the early explorations of the Americas</b> - 5.2.1 describe entrepreneurial characteristics of explorers and the technological developments that made sea exploration by longitude &amp; latitude possible (compass, sextant, astrolabe, seaworthy ships, chronometers, gunpowder)</p>	



<p><b>Social Studies</b></p>	<p>- 5.2.2 explain aims, obstacles, and accomplishments of explorers, sponsors, and leaders of key European expeditions and the reasons Europeans chose to explore and colonize the world</p> <p>- 5.2.3 trace the routs of major land explorers of the U.S., the distances traveled by explorers, and the Atlantic trade routs that linked Africa, the West Indies, the British Colonies, and Europe</p> <p>- 5.2.4 locate on maps of North and South America land claimed by Spain, France, England, Portugal,, the Netherlands, Sweden, and Russia</p> <p><b>5.7 Describe the people and events associated with the development of the U.S. Constitution and analyze the Constitution’s significance as the foundation of the American Republic</b></p> <p>- 5.7.1 List the short comings of the Articles of Confederation</p> <p>- 5.7.2 explain the significance of the 1787 Constitution, including the struggles over its ratification and the reasons for adding the Bill of Rights</p> <p>- 5.7.3 understand the fundamental principles of American democracy, including how the government derives its power from the people and the primacy of individual liberty</p> <p>- 5.7.4 understand how the Constitution is designed to secure our liberty by empowering and limiting central government and compare the powers granted to citizens, Congress, the president, and the Supreme Court with those reserved to the states</p> <p>- 5.7.5 discuss the meaning of the American Creed that calls on citizens to safeguard the liberty of individual Americans within a unified nation, to respect the rule of law, and to preserve the Constitution</p> <p>- 5.7.6 know the songs that express American ideals</p>	<p>ACADEMIES                  Small Group Rotation ONE 11-15 to 12-20                  Small Group Rotation TWO 1-10 to 2-14                  Rotations = Robotics/STEM, Woodworking, Poetry Song-writing</p> <p>SERVICE LEARNING                  • Self-directed</p>
<p><b>Science</b></p>	<p><b>1.0 Physical Sciences</b></p> <p>- 1.1 Elements and their combinations account for all the varied types of matter in the world;</p> <ul style="list-style-type: none"> <li>• chemical reactions form products with different properties,</li> <li>• matter is made of atoms &amp; atoms combine to form molecules,</li> <li>• metals have common properties,</li> <li>• some metals are pure while others are composed of combinations of metals, periodic table,</li> <li>• atomic structure,</li> <li>• differences in properties are used to identify compounds,</li> <li>• know chemical formula for common elements and molecules,</li> <li>• living organisms are composed of few elements,</li> <li>• common molecules have common properties</li> </ul>	

<b>BIG QUESTION #4: WHAT'S IN A STORY?</b>		<b>JANUARY 22 THROUGH MARCH 23</b>
<b>Content</b>	<b>Common CORE &amp; CA Content Standard</b>	<b>Projects/Ideas/Materials/Resources/Trips</b>
<p><b>Math</b></p>	<p><b>Number Operations With Fractions</b>                      5.NF.4.2 – Find the AREA of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths and show that the area is the same as would be found by multiplying the side lengths. Multiply unit side lengths to find areas of rectangles, and represent fraction products as rectangular areas.                      5.NF.7.1 – Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions. Interpret division of a unit fraction by a non-zero whole number and compute such quotients (e.g. <math>1/3 \div 4 = 1/12</math> and <math>1/12 \times 4 = 1/3</math>)                      5.NF.7.2 – Interpret division of a whole number by a unit fraction, and compute such quotients (i.e. use inverse relationship between multiplication and division; <math>4 \div 1/5 = 20</math>, <math>20 \times 1/5 = 4</math>)                      5.NF.7.3 – Solve real world problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions (e.g. How many <math>1/3</math> cup servings are in 2 cups of raisins?)</p>	<p>MATH SPECIFIC</p> <ul style="list-style-type: none"> <li>• Printing technologies/the meaning of pixels</li> <li>• Computer Programming</li> <li>• Computer Applications</li> </ul> <p>DESIGN THINKING</p> <ul style="list-style-type: none"> <li>• Colonization Unit/models</li> </ul> <p>BIG QUESTION RESEARCH</p> <ul style="list-style-type: none"> <li>• Naomi Kinsman Poetry/Songwriting/Beatnick night</li> <li>• Literary elements</li> <li>• Novel writing</li> <li>• Visit by Peter Lourie</li> <li>• Enter poetry contest</li> <li>• Visualization exercises</li> <li>• Author studies</li> <li>• Book Reading &amp; Author Tea (Exhibition)</li> </ul>
<p><b>Language Arts</b></p> <p>PV Poetry Contest</p> <ul style="list-style-type: none"> <li>• <u><i>The Fighting Ground</i></u> (Avi)</li> <li>• <u><i>The Story of Us</i></u> (Vol. 3 &amp; 4) (Hakim)</li> <li>• <i>Jr. Great Books</i> – shared inquiry</li> <li>• Biographies</li> </ul>	<p><b>Reading Literature Texts</b>                      RL 5.1 – Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.                      RL 5.2 - Determine a theme of a story, drama, or poem from details in the text, including how characters in a story or drama respond to challenges or how a speaker in a poem reflects upon a topic. Summarize the text.                      RL 5.3 - Compare and contrast two or more characters, settings, or events in a story or drama, drawing on specific details in the text (i.e. what a character says or does).                      RL 5.4 – Determine the meaning of words and phrases as they are used in a text, including figurative language such as metaphors and similes.                      RL 5.5 – Explain how a series of chapters, scenes, or stanzas fits together to provide the overall structure of a particular story, drama, or poem.                      RL 5.7 – Analyze how visual and multimedia elements contribute to the meaning, tone, or beauty of a text (e.g. graphic novel, folktale, myth, poem, multimedia presentation of fiction).                      RL 5.9 – Compare and contrast stories in the same genre on their approaches to similar themes and topics.                      RL 5.10 – By the end of the year, read and comprehend - with independence and proficiency - literature, including stories, dramas, and poetry at the high end of grades 4/5 text complexity band.</p> <p><b>Reading Foundations</b>                      RF 5.3 – Know and apply grade level phonics and word analysis in decoding words. Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (roots, affixes) to read accurately unfamiliar multi-syllabic words in context and out of context.                      RF 5.4 – Read with sufficient accuracy and fluency to support comprehension:</p> <ul style="list-style-type: none"> <li>• Read grade level text with purpose and understanding.</li> <li>• Read grade-level prose and poetry with accuracy, appropriate rate, and expression.</li> <li>• Use context to confirm or self-correct word recognition and understanding, rereading as necessary</li> </ul> <p><b>Writing</b>                      W 5.3 – Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.</p> <ul style="list-style-type: none"> <li>• Orient the reader by establishing a situation and introducing a narrator and/or characters. Organize an event sequence that unfolds naturally.</li> <li>• Use narrative techniques such as dialogue, description, and pacing, to develop experiences and events or show the responses of characters to situations.</li> <li>• Use a variety of transitional words, phrases, and clauses to manage the sequence of events.</li> </ul>	<p>SOCIAL STUDIES SPECIFIC</p> <ul style="list-style-type: none"> <li>• Colonial Theme Day</li> <li>• Colonial Crafts reports</li> <li>• Write and perform play about the Constitution (e.g. <i>Jemmy's Journey</i>)</li> <li>• Commercials/Commercialism</li> <li>• Propaganda</li> <li>• What was different about thinking during the Renaissance period?</li> <li>• What was the Age of Enlightenment?</li> <li>• How does geography affect colonization?</li> <li>• Why did people risk everything to settle in the New World?</li> <li>• Is communication important?</li> <li>• World Languages</li> <li>• Sign Language</li> </ul> <p>SCIENCE SPECIFIC</p> <ul style="list-style-type: none"> <li>• Compose Molecule Story</li> <li>• Water Quality Testing upper Corte Madera Creek</li> <li>• Species Predation Game</li> <li>• Science fair (?) project</li> <li>• Environmental Mystery of Gray Bay</li> <li>• Water Cycle and contaminants</li> </ul> <p>MUSIC</p>

<p><b>Language Arts</b></p> <p>PV Poetry Contest</p> <ul style="list-style-type: none"> <li>• <i>The Fighting Ground</i> (Avi)</li> <li>• <i>The Story of Us</i> (Vol. 3 &amp; 4) (Hakim)</li> <li>• <i>Jr. Great Books</i> – shared inquiry</li> <li>• Biographies</li> </ul>	<ul style="list-style-type: none"> <li>• Use concrete words and sensory details to convey experiences and events precisely.</li> <li>• Provide a conclusion that follows from the narrated experiences or events.</li> </ul> <p>W 5.4 - Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience.</p> <p>W 5.5 – With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.</p> <p>W 5.6 With some guidance and support from adults, use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of two pages in a single sitting.</p> <p>W 5.9 – Draw evidence from literary or informational texts to support analysis, reflection, and research.</p> <ul style="list-style-type: none"> <li>• Apply all grade 5 reading standards to literature.</li> </ul> <p>W 5.10 – Write routinely over extended time frames and shorter time frames for a range of discipline specific tasks, purposes, and audiences.</p> <p><b>Speaking &amp; Listening</b></p> <p>SL 5.1 Engage effectively in a range of collaborative discussions (in differing grouping configurations) with diverse partners, building on other’s ideas and expressing them clearly.</p> <ul style="list-style-type: none"> <li>• Come to the discussion prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion. (Be ready to defend ideas with facts&gt;)</li> <li>• Follow agreed-upon rules for discussions and carry out assigned roles.</li> <li>• Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others.</li> <li>• Review (paraphrase/summarize) the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions. Engage in ACTIVE listening.</li> </ul> <p>SL 5.5 – Include multi-media components and visual displays in presentations when appropriate to enhance the development of main ideas or themes.</p> <p>SL 5.6 – Adapt speech to a variety of contexts and tasks, using formal English when appropriate to task and situation.</p> <p><b>English Language Skills</b></p> <p>L 5.2 – Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling in all writing.</p> <ul style="list-style-type: none"> <li>• Use punctuation to separate items in a series.</li> <li>• Use a comma to separate an introductory element from the rest of the sentence.</li> <li>• Use a comma to set off the words <i>yes</i> and <i>no</i>, to set off a tag question from the rest of the sentence, or to indicate direct address.</li> <li>• Use underlining, quotation marks, and italics to indicate titles of works.</li> <li>• Spell grade appropriate words correctly, consulting references as needed. (Spell check is OK!)</li> </ul> <p>L 5.3 – Use knowledge of language and its conventions when writing, speaking, reading, or listening.</p> <ul style="list-style-type: none"> <li>• Expand, combine and reduce sentences for meaning, reader or listener interest, and style.</li> <li>• L 5.3 - Compare and contrast the varieties of English (e.g. dialects) used in stories, dramas, and poems.</li> </ul> <p>L 5.4 – Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade level reading and content, choosing flexibly from a range of strategies:</p> <ul style="list-style-type: none"> <li>• Use context as a clue to the meaning of a word or phrase.</li> <li>• Use common grade-appropriate Greek or Latin affixes or roots as clues to the meaning of a word.</li> <li>• Consult reference materials both print and digital to find pronunciation and determine or clarify the precise meaning of key words and phrases.</li> </ul>	<p>ART</p> <ul style="list-style-type: none"> <li>• Colonial portraiture. Drawn &amp; painted formal self-portrait.</li> <li>• Cartooning, character and story development.</li> <li>• Political caricature/satire.</li> <li>• Explorer art: George Caitlin. Hudson River School .</li> <li>• Watercolor: Landscape painting.</li> <li>• Field Trip: Rembrandt's Century, De Young Museum.</li> <li>• Pen and ink drawing.</li> <li>• Art Journals, book making.</li> </ul> <p>FIELD TRIPS</p> <ul style="list-style-type: none"> <li>• Student Recital/music performance</li> <li>• Exploratorium &amp; Tactile Dome</li> <li>• <i>Get Smart with Art</i> deYoung</li> <li>• Save the Bay (restoration)</li> </ul> <p>ACADEMIC OVERVIEW</p> <p>Reading</p> <ul style="list-style-type: none"> <li>• Quotations</li> <li>• Theme</li> <li>• Compare &amp; Contrast</li> <li>• Words in Context</li> <li>• Story Elements</li> <li>• Analyze Multi-media</li> <li>• Comprehension</li> </ul> <p>Reading Foundations</p> <ul style="list-style-type: none"> <li>• Phonics &amp; Word Attack</li> <li>• Accuracy</li> <li>• Fluency</li> <li>• Poetry</li> </ul> <p>Writing</p> <ul style="list-style-type: none"> <li>• Narrative</li> <li>• Dialogue</li> <li>• Setting</li> <li>• Characterization</li> <li>• Sequence/Transitional Words</li> <li>• Logical Conclusion</li> <li>• Clarity</li> <li>• Writing Process</li> <li>• Keyboarding</li> <li>• Analysis</li> <li>• Reflection</li> </ul> <p>Listening &amp; Speaking</p> <ul style="list-style-type: none"> <li>• Collaborate</li> <li>• Rules for Discussion</li> <li>• Questioning Techniques</li> </ul>
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<p><b>Language Arts</b></p> <p>PV Poetry Contest</p> <ul style="list-style-type: none"> <li>• <i>The Fighting Ground</i> (Avi)</li> <li>• <i>The Story of Us (Vol. 3 &amp; 4)</i> (Hakim)</li> <li>• <i>Jr. Great Books</i> – shared inquiry</li> <li>• Biographies</li> </ul>	<p>L 5.5 – Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.</p> <ul style="list-style-type: none"> <li>• Interpret figurative language, including similes and metaphors, in context.</li> <li>• Recognize and explain the meaning of common idioms, adages, and proverbs.</li> </ul>	<ul style="list-style-type: none"> <li>• Paraphrase</li> <li>• Multimedia (propaganda)</li> <li>• Adapt speech</li> </ul> <p>English</p> <ul style="list-style-type: none"> <li>• Standard Conventions</li> <li>• Dialects</li> <li>• Figurative Language</li> <li>• Idioms, Adages, Proverbs</li> </ul> <p>ACADEMIES</p> <ul style="list-style-type: none"> <li>• Small Group Rotation THREE (2-28 to 4-11)</li> </ul> <p>Rotations = Robotics/STEM, Woodworking, Poetry Song-writing</p>
<p><b>Social Studies</b></p>	<p><b>5.3 Students describe the cooperation and conflict that existed among the American Indians and between the Indian nations and the new settlers:</b></p> <ul style="list-style-type: none"> <li>- 5.3.1 describe the competition among the English, French, Spanish, Dutch, and Indian nations for control of North America</li> <li>- 5.3.2 describe the cooperation that existed between the colonists and Indians during the 1600s and 1700s (e.g., in agriculture, the fur trade, military alliances, treaties, cultural interchanges)</li> <li>- 5.3.3 examine the conflicts before the Revolutionary War (e.g., the Pequot and King Philip’s Wars in New England, the Powhatan Wars in Virginia, the French and Indian War)</li> <li>- 5.3.4 discuss the role of broken treaties and massacres and the factors that led to the Indians’ defeat, including the resistance of Indian nations to encroachments and assimilation (e.g., the story of the Trail of Tears).</li> <li>- 5.3.5 describe the internecine Indian conflicts, including the competing claims for control of lands (e.g., actions of the Iroquois, Huron, Lakota [Sioux]).</li> <li>- 5.3.6 explain the influence and achievements of significant leaders of the time (e.g., John Marshall, Andrew Jackson, Chief Tecumseh, Chief Logan, Chief John Ross, Sequoyah).</li> </ul> <p><b>5.4 Students understand the political, religious, social, and economic institutions that evolved in the colonial era</b></p> <ul style="list-style-type: none"> <li>- 5.4.1 understand the influence of location and physical setting on the founding of the original 13 colonies, and identify on a map the locations of the colonies and of the American Indian nations already inhabiting these areas</li> <li>- 5.4.2 identify the major individuals and groups responsible for the founding of the various colonies and the reasons for their founding (e.g., John Smith, Virginia; Roger Williams, Rhode Island; William Penn, Pennsylvania; Lord Baltimore, Maryland; William Bradford, Plymouth; John Winthrop, Massachusetts)</li> <li>- 5.4.3 describe the religious aspects of the earliest colonies (e.g., Puritanism in Massachusetts, Anglicanism in Virginia, Catholicism in Maryland, Quakerism in Pennsylvania)</li> <li>- 5.4.4 identify the significance and leaders of the First Great Awakening, which marked a shift in religious ideas, practices, and allegiances in the colonial period, the growth of religious toleration, and free exercise of religion</li> <li>- 5.4.5 understand how the British colonial period created the basis for the development of political self-government and a free-market economic system and the differences between the British, Spanish, and French colonial systems</li> <li>- 5.4.6 describe the introduction of slavery into America, the responses of slave families to their condition, the ongoing struggle between proponents and opponents of slavery, and the gradual institutionalization of slavery in the South</li> <li>- 5.4.7 explain the early democratic ideas and practices that emerged during the colonial period, including the</li> </ul>	<p>SERVICE LEARNING</p> <ul style="list-style-type: none"> <li>• Self-directed</li> </ul>

	<p>significance of representative assemblies and town meetings</p> <p><b>5.5 Students explain the causes of the American Revolution:</b></p> <ul style="list-style-type: none"> <li>- 5.5.1 understand how political, religious, and economic ideas and interests brought about the Revolution (e.g., resistance to imperial policy, the Stamp Act, the Townshend Acts, taxes on tea, Coercive Acts)</li> <li>- 5.5.2 know the significance of the first and second Continental Congresses and of the Committees of Correspondence</li> <li>- 5.5.3 understand the people and events associated with the drafting and signing of the Declaration of Independence and the document’s significance, including the key political concepts it embodies, the origins of those concepts, and its role in severing ties with Great Britain</li> <li>- 5.5.4 describe the views, lives, and impact of key individuals during this period (e.g., King George III, Patrick Henry, Thomas Jefferson, George Washington, Benjamin Franklin, John Adams)</li> </ul>	
<p><b>Science</b></p>	<p><b>6.0 Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and addressing the content in the other three strands, students should develop their own questions and perform investigations</b></p> <ul style="list-style-type: none"> <li>- 6.1 classify objects (e.g., rocks, plants, leaves) in accordance with appropriate criteria.</li> <li>- 6.2 develop a testable question</li> <li>- 6.3 plan and conduct a simple investigation based on a student-developed question and write instructions others can follow to carry out the procedure</li> <li>- 6.4 identify the dependent and controlled variables in an investigation</li> <li>- 6.5 identify a single independent variable in a scientific investigation and explain how this variable can be used to collect information to answer a question about the results of the experiment</li> <li>- 6.6 select appropriate tools (e.g., thermometers, meter sticks, balances, and graduated cylinders) and make quantitative observations</li> <li>- 6.7 record data by using appropriate graphic representations (including charts, graphs, and labeled diagrams) and make inferences based on those data</li> <li>- 6.8 draw conclusions from scientific evidence and indicate whether further information is needed to support a specific conclusion</li> <li>- 6.9 write a report of an investigation that includes conducting tests, collecting data or examining evidence, and drawing conclusions</li> </ul> <p><b>4.0 Earth Science</b></p> <ul style="list-style-type: none"> <li>- 4.4 use weather maps and data to predict local weather and know that weather forecasts depend on many variables</li> </ul>	

<b>BIG QUESTION #5: ARE YOU A HERO? WILL YOU TAKE A STAND?</b>		<b>MARCH 25 THROUGH JUNE 7</b>
<b>Content</b>	<b>Common CORE &amp; CA Content Standard</b>	<b>Projects/Ideas/Materials/Resources/Trips</b>
<p><b>Math</b></p>	<p><b>Geometry</b> 5.G.3 - Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category. (e.g. all rectangles have 4 right angles; squares are rectangles so they have 4 right angles) 5.G.4 – Classify two-dimensional figures in a hierarchy based on properties.</p> <p><b>Measurement of Data</b> 5.MD.3.1 – Recognize volume as an attribute of solid figures and understand concepts of volume measurement. 5.MD.3.2 – A cube with a length of 1 unit, called a “unit cube,” is said to have “one cubic unit” of volume and can be used to measure volume. 5.MD.3.3 – A solid figure that can be packed without gaps or overlaps using <i>n</i> unit cubes is said to have a volume of <i>n</i> cubic units. 5.MD.4 – Measure volume by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units. 5.MD.5.1 – Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume. 5.MD.5.2 – Find the volume of a right rectangular prism with whole number side lengths by packing it with unit cubes, show that the volume is the same as would be found by multiplying the edge lengths or by multiplying the height by the base. Use the associative property to represent 3-D volume. 5.MD.5.3 Recognize volume as additive. Find volumes of solid figures composed of two non-overlapping right rectangular prisms and by adding the volumes of the non-overlapping parts, applying this technique to solve real world problems. 5.MD.5.4 – Apply the formulas <math>V = l \times w \times h</math> and <math>V = b \times h</math> for rectangular prisms to find volumes of right rectangular prisms with whole-number edge lengths in the context of solving real world mathematical problems.</p>	<p>MATH SPECIFIC</p> <ul style="list-style-type: none"> <li>Practice Multi-step Open response problems (volume)</li> </ul> <p>DESIGN THINKING</p> <ul style="list-style-type: none"> <li>state map, license plate, and headdress project</li> </ul> <p>BIG QUESTION RESEARCH</p> <ul style="list-style-type: none"> <li>Research project two sides to every issue or debate team</li> <li>EXHIBITION presentation of POV</li> </ul> <p>SOCIAL STUDEIS SPECIFIC</p> <ul style="list-style-type: none"> <li>What role did advancing technology (innovation) play on western migration?</li> <li>Road Trip simulation (cross country)</li> <li>Economics &amp; Civics</li> </ul> <p>SCIENCE SPECIFIC</p> <ul style="list-style-type: none"> <li>Plant &amp; Animal Structures &amp; Systems</li> <li>Scientific Process</li> <li>Cryogenics</li> <li>Chick Hatching</li> <li>Life Sciences &amp; human reproduction</li> </ul>
<p><b>Language Arts</b></p> <ul style="list-style-type: none"> <li><i>My Brother Sam is Dead</i> (Collier &amp; Collier)</li> <li>Contemporary novel TBD</li> <li><i>The Story of Us (Vol. 4 &amp; 5)</i> (Hakim)</li> <li><i>Jr. Great Books</i> – shared inquiry</li> </ul>	<p><b>Reading Literature Texts</b> RL 5.6 – Describe how a narrator’s or speaker’s point of view influences how events are described.</p> <p><b>Reading Informational Texts</b> RI 5.5 – Compare and contrast the overall structure of events, ideas, concepts, and information in two or more texts. RI 5.6 - Analyze multiple accounts of the same event or topic, noting important similarities and differences in the point of view they represent. RI 5.10 – By the end of the year, read and comprehend – with independence and proficiency - informational texts, including history/social studies, science, and technical texts, at the high end of the grade 4/5 complexity band.</p> <p><b>Reading Foundations</b> RF 5.3 – Know and apply grade level phonics and word analysis in decoding words. Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (roots, affixes) to read accurately unfamiliar multi-syllabic words in context and out of context. RF 5.4 – Read with sufficient accuracy and fluency to support comprehension:</p> <ul style="list-style-type: none"> <li>Read grade level text with purpose and understanding.</li> <li>Read grade-level prose and poetry with accuracy, appropriate rate, and expression.</li> <li>Use context to confirm or self-correct word recognition and understanding, rereading as necessary</li> </ul> <p><b>Writing</b> W 5.4 - Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience. W 5.5 – With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.</p>	<p>MUSIC</p> <ul style="list-style-type: none"> <li>Tchaikovsky</li> <li>Shostakovich</li> </ul> <p>ART</p> <ul style="list-style-type: none"> <li>Stitching on burlap.</li> <li>Russian Constructivism. Collographs.</li> <li>Symbols &amp; Graphic art: flag design.</li> <li>Kahlo, Rivera. Mexican revolution, Mexican muralists, surrealism.</li> <li>Scaling up. Large-scale mural from smaller work (individual or group).</li> <li>Quilt making (Math tie-in). Collaboration, recycling. Gee's Bend quilts.</li> </ul> <p>FIELD TRIPS</p> <ul style="list-style-type: none"> <li>Freedom Trail 4-27 – 5-2</li> <li>Jasper Ridge (3 of 3) Water Quality Testing</li> <li>Tide Pool visit (Half Moon Bay – Astronomical Low Tide middle of May)</li> </ul>

	<p>W 5.6 With some guidance and support from adults, use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of two pages in a single sitting.</p> <p>W 5.9 – Apply grade 5 reading standards to informational texts.</p> <p>W 5.10 – Write routinely over extended time frames and shorter time frames for a range of discipline specific tasks, purposes, and audiences.</p> <p><b>Speaking &amp; Listening</b></p> <p>SL 5.1 Engage effectively in a range of collaborative discussions (in differing grouping configurations) with diverse partners, building on other’s ideas and expressing them clearly.</p> <ul style="list-style-type: none"> <li>• Come to the discussion prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion. (Be ready to defend ideas with facts&gt;)</li> <li>• Follow agreed-upon rules for discussions and carry out assigned roles.</li> <li>• Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others.</li> <li>• Review (paraphrase/summarize) the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions. Engage in ACTIVE listening.</li> </ul> <p>SL 5.4 – Report on a topic or text or present an opinion, sequencing ideas logically and using appropriate facts and relevant, descriptive details to support main ideas or themes. Speak clearly and at understandable pace.</p> <p>SL 5.5 – Include multi-media components and visual displays in presentations when appropriate to enhance the development of main ideas or themes.</p> <p>SL 5.6 – Adapt speech to a variety of contexts and tasks, using formal English when appropriate to task and situation.</p> <p><b>English Language Skills</b></p> <p>L 5.2 – Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling in all writing.</p> <ul style="list-style-type: none"> <li>• Use punctuation to separate items in a series.</li> <li>• Use a comma to separate an introductory element from the rest of the sentence.</li> <li>• Use a comma to set off the words <i>yes</i> and <i>no</i>, to set off a tag question from the rest of the sentence, or to indicate direct address.</li> <li>• Use underlining, quotation marks, and italics to indicate titles of works.</li> <li>• Spell grade appropriate words correctly, consulting references as needed. (Spell check is OK!)</li> </ul> <p>L 5.3 - Use knowledge of language and its conventions when writing, speaking, reading, or listening.</p> <ul style="list-style-type: none"> <li>• Expand, combine and reduce sentences for meaning, reader or listener interest, and style.</li> </ul> <p>L 5.4 – Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade level reading and content, choosing flexibly from a range of strategies:</p> <ul style="list-style-type: none"> <li>• Use context as a clue to the meaning of a word or phrase.</li> <li>• Use common grade-appropriate Greek or Latin affixes or roots as clues to the meaning of a word.</li> <li>• Consult reference materials both print and digital to find pronunciation and determine or clarify the precise meaning of key words and phrases.</li> </ul> <p>L 5.6 – Acquire and use accurately grade appropriate general and academic and domain specific words and phrases, including those that signal contrast, addition, and other logical relationships (e.g. <i>however, nevertheless, similarly, in addition</i>).</p>	<p><b>ACADEMIC OVERVIEW</b></p> <p>Reading</p> <ul style="list-style-type: none"> <li>• Point of View</li> </ul> <p>Reading for Information</p> <ul style="list-style-type: none"> <li>• Compare &amp; Contrast</li> <li>• Visualization</li> <li>• Triangulate Information</li> <li>• Summarize/Synthesize</li> <li>• Author Studies</li> </ul> <p>Reading Foundations</p> <ul style="list-style-type: none"> <li>• Word Attack</li> <li>• Comprehension at HIGH level</li> <li>• Poetry</li> <li>• Contextual clues</li> </ul> <p>Writing</p> <ul style="list-style-type: none"> <li>• Coherence</li> <li>• Writing Process</li> <li>• Publish Writing (2 page minimum)</li> <li>• Persuasive</li> </ul> <p>Speaking &amp; Listening</p> <ul style="list-style-type: none"> <li>• Use Specific Vocabulary</li> <li>• Collaborate</li> <li>• Report to Group</li> <li>• Provide Researched Opinion</li> <li>• Adapt Speech to Topic</li> <li>• Use Multi-media</li> </ul> <p>English</p> <ul style="list-style-type: none"> <li>• Standard Conventions</li> </ul> <p><b>ACADEMIES</b></p> <ul style="list-style-type: none"> <li>• Willy Clafton 4-18 &amp; 4-25</li> <li>• Play or Musical Performance based on Freedom Trail Trip</li> </ul> <p><b>SERVICE LEARNING</b></p> <ul style="list-style-type: none"> <li>• Self-directed</li> </ul>
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<p><b>Social Studies</b></p>	<p><b>5.6 Students understand the course and consequences of the American Revolution:</b></p> <ul style="list-style-type: none"> <li>- 5.6.1 identify and map the major military battles, campaigns, and turning points of the Revolutionary War, the roles of the American and British leaders, and the Indian leaders’ alliances on both sides</li> <li>- 5.6.2 describe the contributions of France and other nations and of individuals to the outcome of the Revolution (e.g., Benjamin Franklin’s negotiations with the French, the French navy, the Treaty of Paris, The Netherlands, Russia, the Marquis Marie Joseph de Lafayette, Tadeusz Ko’sciuszko, Baron Friedrich Wilhelm von Steuben)</li> <li>- 5.6.3 identify the different roles women played during the Revolution (e.g., Abigail Adams, Martha Washington, Molly Pitcher, Phillis Wheatley, Mercy Otis Warren)</li> <li>- 5.6.4 understand the personal impact and economic hardship of the war on families, problems of financing the war, wartime inflation, and laws against hoarding goods and materials and profiteering</li> <li>- 5.6.5 explain how state constitutions that were established after 1776 embodied the ideals of the American Revolution and helped serve as models for the U.S. Constitution</li> <li>- 5.6.6 demonstrate knowledge of the significance of land policies developed under the Continental Congress (e.g., sale of western lands, the Northwest Ordinance of 1787) and those policies’ impact on American Indians’ land.</li> <li>- 5.6.7 understand how the ideals set forth in the Declaration of Independence changed the way people viewed slavery</li> </ul> <p><b>5.8 Students trace the colonization, immigration, and settlement patterns of the American people from 1789 to the mid-1800s, with emphasis on the role of economic incentives, effects of the physical and political geography, and transportation systems:</b></p> <ul style="list-style-type: none"> <li>- 5.8.1 discuss the waves of immigrants from Europe between 1789 and 1850 and their modes of transportation into the Ohio and Mississippi Valleys and through the Cumberland Gap (e.g., overland wagons, canals, flatboats, steamboats)</li> <li>- 5.8.2 name the states and territories that existed in 1850 and identify their locations and major geographical features (e.g., mountain ranges, principal rivers, dominant plant regions)</li> <li>- 5.8.3 demonstrate knowledge of the explorations of the trans-Mississippi West following the Louisiana Purchase (e.g., Meriwether Lewis and William Clark, Zebulon Pike, John Fremont)</li> <li>- 5.8.4 discuss the experiences of settlers on the overland trails to the West (e.g., location of the routes; purpose of the journeys; the influence of the terrain, rivers, vegetation, and climate; life in the territories at the end of these trails)</li> <li>- 5.8.5 describe the continued migration of Mexican settlers into Mexican territories of the West and Southwest</li> <li>- 5.8.6 relate how and when California, Texas, Oregon, and other western lands became part of the United States, including the significance of the Texas War for Independence and the Mexican-American War</li> </ul> <p><b>5.9 Students know the location of the current 50 states and the names of their capitals</b></p>	
<p><b>Science</b></p>	<p><b>2.0 Life Sciences</b></p> <ul style="list-style-type: none"> <li>- <b>2.1 Plants and animals have structures for respiration, digestion, waste disposal, and transport of nutrients:</b> <ul style="list-style-type: none"> <li>• multi-cellular organisms have specialized structures,</li> <li>• blood and oxygen circulates and are exchanged,</li> <li>• there are sequential steps in digestion,</li> <li>• kidneys function as waste disposal,</li> <li>• sugar, water, and minerals are transported through plants,</li> <li>• photosynthesis,</li> <li>• respiration</li> </ul> </li> </ul>	