



# El Dorado County Career Technical Partnership

In Partnership: Folsom Lake College • El Dorado Union High School District • El Dorado County Office of Education

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<b>Title: Fire Safety Presentation Plan</b>		
<b>Content Area: Science</b>	<b>Grade: 6</b>	<b>Duration: Four Days</b>
<b>Career Technical Industry Sector:</b>	<input checked="" type="checkbox"/> Agriculture and Natural Resources	
<b>Standards and Benchmarks:</b>	<p><b>**Science Content Standards for California Public Schools</b></p> <p><u>Investigation and Experimentation</u>            7. 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.</p> <p>Students will:</p> <ul style="list-style-type: none"> <li>b. Select and use appropriate tools and technology (including calculators, computers, balances, spring scales, microscopes, and binoculars) to perform tests, collect data, and display data;</li> <li>d. Communicate the steps and results from an investigation in written reports and oral presentations.</li> </ul> <p><b>**Mathematics Content Standards for California Public Schools</b></p> <p><u>Algebra and Functions</u>            2.0 Students analyze and use tables, graphs, and rules to solve problems involving rates and proportions.</p> <p><u>Number Sense</u>            1.0 Students compare and order positive and negative fractions, decimals, and mixed numbers. Students solve problems involving fractions, ratios, proportions, and percentages.</p> <p><u>Statistics, Data Analysis, and Probability</u>            1.0 Students compute and analyze statistical measurements for data sets.</p> <p><b>**English Language Arts Content Standards for California Public Schools</b></p> <p><u>Listening and Speaking</u>            1.0 <b>Listening and Speaking Strategies:</b>            Students deliver focused, coherent presentations that convey ideas clearly and relate to the background and interests of the audience. They evaluate the content of oral communication.</p> <ul style="list-style-type: none"> <li>1.4 Select a focus, an organizational structure, and a point of view, matching the purpose, message, occasion, and vocal modulation to the audience.</li> <li>1.5 Emphasize salient points to assist the listener in following the main ideas and concepts.</li> <li>1.6 Support opinions with detailed evidence and with visual or media displays that use appropriate technology.</li> <li>1.7 Use effective rate, volume, pitch, and tone and align nonverbal elements to sustain audience interest and attention.</li> </ul>	



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	<p>2.0 Speaking Applications: Students deliver well-organized formal presentations employing traditional rhetorical strategies (e.g., narration, exposition, persuasion, description). Student speaking demonstrates a command of standard American English and the organizational and delivery strategies outlined in Listening and Speaking Standard 1.0.</p> <p>2.2 Deliver informative presentations: a. Pose relevant questions sufficiently limited in scope to be completely and thoroughly answered. b. Develop the topic with facts, details, examples, and explanations from multiple authoritative sources (e.g., speakers, periodicals, online information).</p> <p>2.4 Deliver persuasive presentations: a. Provide a clear statement of the position. b. Include relevant evidence. c. Offer a logical sequence of information. d. Engage the listener and foster acceptance of the proposition or proposal.</p> <p>2.5 Deliver presentations on problems and solutions: a. Theorize on the causes and effects of each problem and establish connections between the defined problem and at least one solution. b. Offer persuasive evidence to validate the definition of the problem and the proposed solutions.</p> <p><b>**California Career Technical Education Model Curriculum Standards</b></p> <p>E. Forestry and Natural Resources Pathway</p> <p>The Forestry and Natural Resources Pathway helps students understand the relationships between California’s natural resources and the environment. Topics include energy and nutrient cycles, water resources and management, soil conservation, wildlife preservation and management, forest and fire management, and lumber production. In addition, students study the outdoor recreation industry and multiple-use management.</p> <p><i>E9.0 Students understand the role of fire in natural resource management:</i> E9.2 Understand the significance of each of the components of the “fire triangle.” E9.3 Know appropriate wildland fire-suppression practices.</p> <p><b>**SCANS Competencies</b></p> <p><u>Interpersonal</u>: <i>Participates as a Member of a Team</i> &amp; contributes to group effort. <u>Information</u>: Acquires and uses information. <u>Thinking Skills</u>: <i>Seeing Things in the Mind’s Eye</i> — organizes, and processes symbols, pictures, graphs, objects, and other information. <u>Personal Qualities</u>: <i>Self-Management</i> — assesses self accurately, sets personal goals, monitors progress, and exhibits self-control.</p>
<p><b>Objectives:</b></p>	<ul style="list-style-type: none"> <li>• Students will work in a small group to apply their knowledge of wildland fire in California to create a coherent, informative, and persuasive presentation about measures students and families can take to ensure their home is fire-safe.</li> <li>• Students will provide their presentation to other 6<sup>th</sup> grade classes.</li> </ul>
<p><b>Resources and</b></p>	<p>Class needs:</p>



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<p><b>Materials:</b></p>	<p>Set up presentation schedule with 6<sup>th</sup> grade colleagues          Computer lab or mobile lab access</p> <p>Student groups:          Presentation outline          Visual aid supplies: posterboard, scissors, glue, colored pencils          Visual aid from “Living With Fire” jigsaw</p> <p>Copies and samples:          Copies of outline, 2 per group          Sample visual aid, if available from a previous year          Copies of rubric, one per group for evaluation purposes</p>
	<p><u>Higher Level Students:</u>          Motivated students can provide presentation to School Board, school staff, Parent Teacher Council, or local fire-safety council.</p> <p><u>Lower level students:</u>          Students work in groups of three or four.          Classroom aides are assigned to assist struggling students and groups.</p>
<p><b>Preparing Students for the Lesson:</b></p> <ul style="list-style-type: none"> <li>• <b>Transitions</b></li> <li>• <b>Expected Behaviors</b></li> </ul>	<p><u>Expected behaviors:</u>          Students have already received instruction on proper communication and participation expectations for working in small groups: contribute, cooperate, and communicate.</p>
<p><b>Teaching the Lesson (Lesson Sequence/ Activities):</b></p> <ul style="list-style-type: none"> <li>• <b>Motivation/ Anticipatory Set</b></li> <li>• <b>Pre-Assessment/ Activating Background Knowledge</b></li> <li>• <b>Teacher Input, Modeling, &amp; Checking for Understanding</b></li> <li>• <b>Guided Practice</b></li> <li>• <b>Independent</b></li> </ul>	<p><u>Assumptions:</u>          Students will already have completed a unit studying wildland fire in California. The unit includes a small group jigsaw of “Learning to Live With Fire”, and use of Cal Fire 2008 Wildland Fire Summary, and “Benefits of Fire” from the Cal Fire web site (<a href="http://www.fire.ca.gov">www.fire.ca.gov</a>), and use of the interactive CD-ROM “Burning Issues” (Florida State University). Students are familiar with and know how to access and navigate the Cal Fire web site.</p> <p><u>Day One:</u>  <u>Motivation/Background/Activating Prior Knowledge:</u>          Review Discussion:</p> <ol style="list-style-type: none"> <li>1. What did we learn about keeping homes fire-safe in the wildland-urban interface zone? (clearance, brush, ladder fuels, safer home construction materials)</li> <li>2. What did we learn about how most wildland fires are started in California? (playing with matches, arson, using tools or machinery, cigarettes, burn piles out of control, unattended campfires)</li> </ol> <p><u>Teacher Input/Guided Practice: Extemporaneous Speaking</u></p>



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<p><b>Practice</b></p> <ul style="list-style-type: none"><li>• <b>Closure</b></li></ul>	<p>Review prior discussion and use of proper speaking skills: eye contact, gestures and posture, voice clarity.</p> <p>On a note card, each student writes one sentence about fire in California based upon prior discussion and learning.</p> <p>Teacher randomly selects one topic from notecards, then provides sample extemporaneous speech about that topic. Depending upon the character and personality of the class, teacher may instead choose to provide a negative speaking example. (Students often find this more entertaining.)</p> <p><u>Independent Practice:</u></p> <p>Students proceed to select topics and provide speeches. Teacher asks classmates to provide positive feedback to each student. Teacher provides constructive feedback to the class or individuals, as appropriate.</p> <p><u>Day Two:</u></p> <p><u>Motivation/Background/Activating Prior Knowledge:</u></p> <p>Review progress and speaking skills exercised on Day One.</p> <p><u>Independent Practice:</u></p> <p>Assign Group Presentation to be developed and provided to another 6<sup>th</sup> grade class. Presentation rubric should be distributed. Rubric includes the following:</p> <ol style="list-style-type: none"><li>2008 fire facts in California (Cal Fire web site)</li><li>Example data from one real California fire (Cal Fire web site) including location, acreage, cause, cost, injuries or deaths, homes and structures lost.</li><li>Strategies students can use to keep their homes fire-safe</li><li>Visual aide—could be traditional poster or more advanced technology.</li><li>Effective participation by all group members.</li></ol> <p><u>Day Three:</u></p> <p>Groups continue to work on presentations.</p> <p><u>Day Four:</u></p> <p>Groups give presentations: Each group presents to one other 6<sup>th</sup> grade class.</p>
<p><b>Assessment:</b></p>	<p><u>Informal Assessment:</u></p> <p>Extemporaneous speeches will allow students to informally display their working knowledge of fire in California. Teacher will circulate among student groups to assess progress toward meeting expectations described in the rubric, as well as to ensure group process is effective.</p>



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	<p><u>Formal Assessment:</u> Using a rubric, student presentations will be evaluated based upon provided standards. Rubric includes a category for neatness, organization, clarity, effort, teamwork, and behavior during the process of preparing presentation.</p>
<p><b>Notes &amp; Reflections:</b></p>	<p>Fire is not a major topic in the 6<sup>th</sup> grade textbook or standards. It appears in one chapter entitled “Living Resources” under a section about primary and secondary succession. However, since 6<sup>th</sup> grade standards focus on geologic and environmental conditions for living in California, learning about and understanding the role of fire in California is a natural extension of the 6<sup>th</sup> grade science curriculum.</p>

<p><b>Externship Sites:</b></p>	<p>El Dorado National Forest, Amador District</p>	<p>Supervisor/Host: Doug Barber, District Ranger</p>	<p>Assisting: Eric Ferrell, Fire Prevention Officer</p>
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