

**Alignment
of
Project Learning Tree
Secondary Environmental Education Program
Exploring Environmental Issues:
Biodiversity
to
California Content Standards

Science

History-Social Studies

English-Language Arts

Grades Seven through Twelve**



Introduction

As part of the national movement to reform education, the California State Board of Education has adopted criteria to measure the skills and knowledge that all students should be able to master in content areas. The purpose of this document is to provide California secondary educators who use Project Learning Tree's *Exploring Environmental Issues: Biodiversity* (download this guide at: www.plt.org/cms/pages/21-21-16.html) with an easy reference guide which aligns the activities to the California Content Standards for grades 7-12. Correlations for suggested enrichment activities are not included in this alignment.

Project Learning Tree (PLT) is an interdisciplinary environmental education program. PLT activities are supplemental curricula that can be effectively utilized in instructional units in a variety of subjects. By using this alignment document, educators can select PLT activities to teach or assess mastery of some of the knowledge and skills standards in the content areas of science, history/social studies, and language arts. In addition, educators can identify activities appropriate for infusing into a well-developed curriculum in order to supplement and reinforce critical and creative thinking, thus helping students achieve concepts and skills required by the standards.

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For more information about Project Learning Tree in California, contact Kay Antunez, Project Learning Tree Coordinator, California Department of Forestry and Fire Protection, P. O. Box 944246, Sacramento, CA 94244-2460, or call (961) 653-7958.

A copy of the Content Standards for Grades K-12 can be obtained at: www.cde.ca.gov/be/st/ss.

Additional information about Project Learning Tree and copies of the correlations for other PLT materials can be obtained at: www.plt.org.

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Correlation of Activities to the California Science Content Standards, Grades 7-12

Grade Seven

Focus on Life Science

Evolution

3. **Biological evolution accounts for the diversity of species developed through gradual processes over many generations. As a basis for understanding this concept:**
- a. Students know both genetic variation and environmental factors are causes of evolution and diversity of organisms.
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 - e. Students know that extinction of a species occurs when the environment changes and the adaptive characteristics of a species are insufficient for its survival.
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Earth and Life History (Earth Sciences)

4. **Evidence from rocks allows us to understand the evolution of life on Earth. As a basis for understanding this concept:**
- f. Students know how movements of Earth's continental and oceanic plates through time, with associated changes in climate and geographic connections, have affected the past and present distribution of organisms.
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Investigation and Experimentation

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. Students will:**
- a. Select and use appropriate tools and technology (including calculators, computers, balances, spring scales, microscopes, and binoculars) to perform tests, collect data, and display data.
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 - b. Use a variety of print and electronic resources (including the World Wide Web) to collect information and evidence as part of a research project.
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 - c. Communicate the logical connection among hypotheses, science concepts, tests conducted, data collected, and conclusions drawn from the scientific evidence.
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d. Construct scale models, maps, and appropriately labeled diagrams to communicate scientific knowledge (e.g., motion of Earth's plates and cell structure).

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e. Communicate the steps and results from an investigation in written reports and oral presentations.

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Grades Nine through Twelve

Biology/Life Sciences - Grades Nine through Twelve

Standards that all students are expected to achieve in the course of their studies are unmarked. Standards that all students should have the opportunity to learn are marked with an asterisk (*).

Ecology

6. Stability in an ecosystem is a balance between competing effects. As a basis for understanding this concept:

a. Students know biodiversity is the sum total of different kinds of organisms and is affected by alterations of habitats.

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b. Students know how to analyze changes in an ecosystem resulting from changes in climate, human activity, introduction of nonnative species, or changes in population size.

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c. Students know how fluctuations in population size in an ecosystem are determined by the relative rates of birth, immigration, emigration, and death.

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e. Students know a vital part of an ecosystem is the stability of its producers and decomposers.

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Evolution

7. The frequency of an allele in a gene pool of a population depends on many factors and may be stable or unstable over time. As a basis for understanding this concept:

d. Students know variation within a species increases the likelihood that at least some members of a

species will survive under changed environmental conditions.

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8. Evolution is the result of genetic changes that occur in constantly changing environments. As a basis for understanding this concept:

- a. Students know how natural selection determines the differential survival of groups of organisms.

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- b. Students know a great diversity of species increases the chance that at least some organisms survive major changes in the environment.

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- c. Students know the effects of genetic drift on the diversity of organisms in a population.

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- d. Students know reproductive or geographic isolation affects speciation.

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Protected Areas: Issues and Analysis

Earth Sciences - Grades Nine through Twelve

Standards that all students are expected to achieve in the course of their studies are unmarked. Standards that all students should have the opportunity to learn are marked with an asterisk (*).

California Geology

9. The geology of California underlies the state's wealth of natural resources as well as its natural hazards. As a basis for understanding this concept:

- a. Students know the resources of major economic importance in California and their relation to California's geology.

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- c. Students know the importance of water to society, the origins of California's fresh water, and the relationship between supply and need.

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Investigation & Experimentation – Grades Nine through Twelve

1. 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 four strands, students should develop their own questions and perform investigations. Students will:

- d. Formulate explanations by using logic and evidence.

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- g. Recognize the usefulness and limitations of models and theories as scientific representations of reality.

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i. Analyze the locations, sequences, or time intervals that are characteristic of natural phenomena (e.g., relative ages of rocks, locations of planets over time, and succession of species in an ecosystem).

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k. Recognize the cumulative nature of scientific evidence.

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l. Analyze situations and solve problems that require combining and applying concepts from more than one area of science.

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m. Investigate a science-based societal issue by researching the literature, analyzing data, and communicating the findings. Examples of issues include irradiation of food, cloning of animals by somatic cell nuclear transfer, choice of energy sources, and land and water use decisions in California.

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Correlation of Activities to the California History-Social Science Content Standards, Grades 7-12

Historical and Social Sciences Analysis Skills – Grades Six through Eight

The intellectual skills noted below are to be learned through, and applied to, the content standards for grades six through eight. They are to be assessed with the content standards in grades six through eight.

In addition to the standards for grades six through eight, students demonstrate the following intellectual reasoning, reflection, and research skills:

Chronological and Spatial Thinking

1. Students explain how major events are related to one another in time.

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2. Students construct various time lines of key events, people, and periods of the historical era they are studying.

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Research, Evidence, and Point of View

1. Students frame questions that can be answered by historical study and research.

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Historical Interpretation

1. Students explain the central issues and problems from the past, placing people and events in a matrix of time and place.

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2. Students understand and distinguish cause, effect, sequence, and correlation in historical events, including the long-and short-term causal relations.

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3. Students explain the sources of historical continuity and how the combination of ideas and events explains the emergence of new patterns.

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4. Students recognize the role of chance, oversight, and error in history.

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5. Students recognize that interpretations of history are subject to change as new information is uncovered.

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Protected Areas: Issues and Analysis

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6. Students interpret basic indicators of economic performance and conduct cost-benefit analyses of economic and political issues.

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Protected Areas: Issues and Analysis

Potatoes, Pesticides, and Biodiversity

Grade Eight

United States History and Geography: Growth and Conflict

Students in grade eight study the ideas, issues, and events from the framing of the Constitution up to World War I, with an emphasis on America's role in the war. After reviewing the development of America's democratic institutions founded on the Judeo-Christian heritage and English parliamentary traditions, particularly the shaping of the Constitution, students trace the development of American politics, society, culture, and economy and relate them to the emergence of major regional differences. They learn about the challenges facing the new nation, with an emphasis on the causes, course, and consequences of the Civil War. They make connections between the rise of industrialization and contemporary social and economic conditions.

8.6 Students analyze the divergent paths of the American people from 1800 to the mid-1800s and the challenges they faced, with emphasis on the Northeast.

3. List the reasons for the wave of immigration from Northern Europe to the United States and describe the growth in the number, size, and spatial arrangements of cities (e.g., Irish immigrants and the Great Irish Famine).

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8.12 Students analyze the transformation of the American economy and the changing social and political conditions in the United States in response to the Industrial Revolution.

5. Examine the location and effects of urbanization, renewed immigration, and industrialization (e.g., the effects on social fabric of cities, wealth and economic opportunity, the conservation movement).

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Protected Areas: Issues and Analysis

Grades Nine through Twelve

Historical and Social Sciences Analysis Skills – Grades Nine through Twelve

The intellectual skills noted below are to be learned through, and applied to, the content standards for grades nine through twelve. They are to be assessed only in conjunction with the content standards in grades nine through twelve.

In addition to the standards for grades nine through twelve, students demonstrate the following intellectual, reasoning, reflection, and research skills.

Chronological and Spatial Thinking

1. Students compare the present with the past, evaluating the consequences of past events and decisions and determining the lessons that were learned.

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Protected Areas: Issues and Analysis

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2. Students analyze how change happens at different rates at different times; understand that some aspects can change while others remain the same; and understand that change is complicated and affects not only technology and politics but also values and beliefs.

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Protected Areas: Issues and Analysis

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3. Students use a variety of maps and documents to interpret human movement, including major patterns of domestic and international migration, changing environmental preferences and settlement patterns, the frictions that develop between population groups, and the diffusion of ideas, technological innovations, and goods.

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Protected Areas: Issues and Analysis

4. Students relate current events to the physical and human characteristics of places and regions.

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Protected Areas: Issues and Analysis

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Historical Research, Evidence, and Point of View

4. Students construct and test hypotheses; collect, evaluate, and employ information from multiple primary and secondary sources; and apply it in oral and written presentations.

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Protected Areas: Issues and Analysis

Historical Interpretation

1. Students show the connections, causal and otherwise, between particular historical events and larger social, economic, and political trends and developments.

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2. Students recognize the complexity of historical causes and effects, including the limitations on determining cause and effect.

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3. Students interpret past events and issues within the context in which an event unfolded rather than solely in terms of present-day norms and values.

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Protected Areas: Issues and Analysis
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4. Students understand the meaning, implication, and impact of historical events and recognize that events could have taken other directions.

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5. Students analyze human modifications of landscapes and examine the resulting environmental policy issues.

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6. Students conduct cost-benefit analyses and apply basic economic indicators to analyze the aggregate economic behavior of the U.S. economy.

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Grade Ten

World History, Culture, and Geography: The Modern World

Students in grade ten study major turning points that shaped the modern world, from the late eighteenth century through the present, including the cause and course of the two world wars. They trace the rise of democratic ideas and develop an understanding of the historical roots of current world issues, especially as they pertain to international relations. They extrapolate from the American experience that democratic ideals are often achieved at a high price, remain vulnerable, and are not practiced everywhere in the world. Students develop an understanding of current world issues and relate them to their historical, geographic, political, economic, and cultural contexts. Students consider multiple accounts of events in order to understand international relations from a variety of perspectives.

10.3. Students analyze the effects of the Industrial Revolution in England, France, Germany, Japan, and the United States.

3. Describe the growth of population, rural to urban migration, and growth of cities associated with the Industrial Revolution.

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5. Understand the connections among natural resources, entrepreneurship, labor, and capital in an industrial economy.

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10.10 Students analyze instances of nation-building in the contemporary world in at least two of the following regions or countries: the Middle East, Africa, Mexico and other parts of Latin America, and China.

1. Understand the challenges in the regions, including their geopolitical, cultural, military, and economic significance and the international relationships in which they are involved.

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Protected Areas: Issues and Analysis

2. Describe the recent history of the regions, including political divisions and systems, key leaders, religious issues, natural features, resources, and population patterns.

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Protected Areas: Issues and Analysis

3. Discuss the important trends in the regions today and whether they appear to serve the cause of individual freedom and democracy.

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Protected Areas: Issues and Analysis

Grade Eleven

United States History and Geography: Continuity and Change in the Twentieth Century

Students in grade eleven study the major turning points in American history in the twentieth century. Following a review of the nation's beginnings and the impact of the Enlightenment on U.S. democratic ideals, students build upon the tenth grade study of global industrialization to understand the emergence and impact of new technology and a corporate economy, including the social and cultural effects. They trace the change in the ethnic composition of American society; the movement toward equal rights for racial minorities and women; and the role of the United States as a major world power. An emphasis is placed on the expanding role of the federal government and federal courts as well as the continuing tension between the individual and the state. Students consider the major social problems of our time and trace their causes in historical events. They learn that the United States has served as a model for other nations and that the rights and freedoms we enjoy are not accidents, but the results of a defined set of political principles that are not always basic to citizens of other countries. Students understand that our rights under the U.S. Constitution are a precious inheritance that depends on an educated citizenry for their preservation and protection.

11.5 Students analyze the major political, social, economic, technological and cultural developments of the 1920s.

7. Discuss the rise of mass production techniques, the growth of cities, the impact of new technologies (e.g., the automobile, electricity), and the resulting prosperity and effect on the American landscape.

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11.8 Students analyze the economic boom and social transformation of post-World War II America.

6. Discuss the diverse environmental regions of North America, their relationship to local economies, and the origins and prospects of environmental problems in those regions.

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Protected Areas: Issues and Analysis

11.11 Students analyze the major social problems and domestic policy issues in contemporary American society.

2. Discuss the significant domestic policy speeches of Truman, Eisenhower, Kennedy, Johnson, Nixon, Carter, Reagan, Bush, and Clinton (e.g., with regard to education, civil rights, economic policy, environmental policy).

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5. Trace the impact of, need for, and controversies associated with environmental conservation, expansion of the national park system, and the development of environmental protection laws, with particular attention to the interaction between environmental protection advocates and property rights advocates.

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Grade Twelve

Principles of American Democracy and Economics

Students in grade twelve pursue a deeper understanding of the institutions of American government. They compare systems of government in the world today and analyze the history and changing interpretations of the Constitution, the Bill of Rights, and the current state of the legislative, executive, and judiciary branches of government. An emphasis is placed on analyzing the relationship among federal, state, and local governments, with particular attention paid to important historical documents such as the *Federalist Papers*. These standards represent the culmination of civic literacy as students prepare to vote, participate in community activities, and assume the responsibilities of citizenship.

In addition to studying government in grade twelve, students will also master fundamental economic concepts, applying the tools (graphs, statistics, equations) from other subject areas to the understanding of operations and institutions of economic systems. Studied in a historic context are the basic economic principles of micro- and macroeconomics, international economics, comparative economic systems, measurement, and methods.

Principles of American Democracy

12.2 Students evaluate and take and defend positions on the scope and limits of rights and obligations as democratic citizens, the relationships among them, and how they are secured.

4. Understand the obligations of civic-mindedness, including voting, being informed on civic issues, volunteering and performing public service, and serving in the military or alternative service.

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Protected Areas: Issues and Analysis

5. Describe the reciprocity between rights and obligations; that is, why enjoyment of one's rights entails respect for the rights of others.

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12.3 Students evaluate and take and defend positions on what the fundamental values and principles of civil society are (i.e., the autonomous sphere of voluntary personal, social, and economic relations that are not part of government), their interdependence, and the meaning and importance of those values and principles for a free society.

1. Explain how civil society provides opportunities for individuals to associate for social, cultural, religious, economic, and political purposes.

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Protected Areas: Issues and Analysis

2. Explain how civil society makes it possible for people, individually or in association with others, to bring their influence to bear on government in ways other than voting and elections.

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Protected Areas: Issues and Analysis

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12.7 Students analyze and compare the powers and procedures of the national, state, tribal, and local governments.

5. Explain how public policy is formed, including the setting of the public agenda and implementation of it through regulations and executive orders.

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12.8 Students evaluate and take and defend positions on the influence of the media on American political life.

1. Discuss the meaning and importance of a free and responsible press.

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Protected Areas: Issues and Analysis

2. Describe the roles of broadcast, print, and electronic media, including the Internet, as means of communication in American politics.

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Protected Areas: Issues and Analysis

3. Explain how public officials use the media to communicate with the citizenry and to shape public opinion.

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Protected Areas: Issues and Analysis

Principles of Economics

12.1 Students understand common economic terms and concepts and economic reasoning.

1. Examine the causal relationship between scarcity and the need for choices.

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Protected Areas: Issues and Analysis

3. Identify the difference between monetary and non monetary incentives and how changes in incentives cause changes in behavior.

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Protected Areas: Issues and Analysis

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4. Evaluate the role of private property as an incentive in conserving and improving scarce resources, including renewable and nonrenewable natural resources.

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Protected Areas: Issues and Analysis

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12.3 Students analyze the influence of the federal government on the American economy.

1. Understand how the role of government in a market economy often includes providing for national defense, addressing environmental concerns, defining and enforcing property rights, attempting to make markets more competitive, and protecting consumers' rights.

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Correlation of Activities to the California English-Language Arts Content Standards, Grades 7-12

Grade Seven

Reading

2.0 Reading Comprehension (Focus on Informational Materials)

Students read and understand grade-level-appropriate material. They describe and connect the essential ideas, arguments, and perspectives of the text by using their knowledge of text structure, organization, and purpose. The selections in *Recommended Literature, Kindergarten Through Grade Twelve* illustrate the quality and complexity of the materials to be read by students. In addition, by grade eight, students read one million words annually on their own, including a good representation of grade-level-appropriate narrative and expository text (e.g., classic and contemporary literature, magazines, newspapers, online information). In grade seven, students make substantial progress toward this goal.

Structural Features of Informational Materials

- 2.2 Locate information by using a variety of consumer, workplace, and public documents.

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- 2.3 Analyze text that uses the cause-and-effect organizational pattern.

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Writing

1.0 Writing Strategies

Students write clear, coherent, and focused essays. The writing exhibits students' awareness of the audience and purpose. Essays contain formal introductions, supporting evidence, and conclusions. Students progress through the stages of the writing process as needed.

Research and Technology

1.4 Identify topics; ask and evaluate questions; and develop ideas leading to inquiry, investigation, and research.

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Protected Areas: Issues and Analysis

1.6 Create documents by using word-processing skills and publishing programs; develop simple databases and spreadsheets to manage information and prepare reports.

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Protected Areas: Issues and Analysis

Evaluation and Revision

1.7 Revise writing to improve organization and word choice after checking the logic of the ideas and the precision of the vocabulary.

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Protected Areas: Issues and Analysis

2.0 Writing Applications (Genres and Their Characteristics)

Students write narrative, expository, persuasive, and descriptive texts of at least 500 to 700 words in each genre. The writing demonstrates a command of standard American English and the research, organizational, and drafting strategies outlined in Writing Standard 1.0.

Using the writing strategies of grade seven outlined in Writing Standard 1.0, students:

2.3 Write research reports:

- a. Pose relevant and tightly drawn questions about the topic.
- b. Convey clear and accurate perspectives on the subject.
- c. Include evidence compiled through the formal research process (e.g., use of a card catalog, *Reader's Guide to Periodical Literature*, a computer catalog, magazines, newspapers, dictionaries).
- d. Document reference sources by means of footnotes and a bibliography.

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Protected Areas: Issues and Analysis

Listening and Speaking

1.0 Listening and Speaking Strategies

Deliver focused, coherent presentations that convey ideas clearly and relate to the background and interests of the audience. Students evaluate the content of oral communication.

Comprehension

1.1 Ask probing questions to elicit information, including evidence to support the speaker's claims and

conclusions.

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1.2 Determine the speaker's attitude toward the subject.

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Protected Areas: Issues and Analysis

1.3 Respond to persuasive messages with questions, challenges, or affirmations.

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Protected Areas: Issues and Analysis

Organization and Delivery of Oral Communication

1.4 Organize information to achieve particular purposes and to appeal to the background and interests of the audience.

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Protected Areas: Issues and Analysis

1.5 Arrange supporting details, reasons, descriptions, and examples effectively and persuasively in relation to the audience.

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Protected Areas: Issues and Analysis

1.6 Use speaking techniques, including voice modulation, inflection, tempo, enunciation, and eye contact, for effective presentations.

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Protected Areas: Issues and Analysis

Analysis and Evaluation of Oral and Media Communications

1.7 Provide constructive feedback to speakers concerning the coherence and logic of a speech's content and delivery and its overall impact upon the listener.

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2.0 Speaking Applications (Genres and Their Characteristics)

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. Using the speaking strategies of grade seven outlined in Listening and Speaking Standard 1.0, students:

2.3 Deliver research presentations:

- a. Pose relevant and concise questions about the topic.
- b. Convey clear and accurate perspectives on the subject.
- c. Include evidence generated through the formal research process (e.g., use of a card catalog, *Reader's Guide to Periodical Literature*, computer databases, magazines, newspapers, dictionaries).
- d. Cite reference sources appropriately.

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2.4 Deliver persuasive presentations:

- a. State a clear position or perspective in support of an argument or proposal.
- b. Describe the points in support of the argument and employ well-articulated evidence.

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Grade Eight

Reading

2.0 Reading Comprehension (Focus on Informational Materials)

Students read and understand grade-level-appropriate material. They describe and connect the essential ideas, arguments, and perspectives of the text by using their knowledge of text structure, organization, and purpose. The selections in *Recommended Literature, Kindergarten Through Grade Twelve* illustrate the quality and complexity of the materials to be read by students. In addition, students read one million words annually on their own, including a good representation of narrative and expository text (e.g., classic and contemporary literature, magazines, newspapers, online information).

Comprehension and Analysis of Grade-Level-Appropriate Text

2.6 Use information from a variety of consumer, workplace, and public documents to explain a situation or decision and to solve a problem.

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Writing

1.0 Writing Strategies

Students write clear, coherent, and focused essays. The writing exhibits students' awareness of audience and purpose. Essays contain formal introductions, supporting evidence, and conclusions. Students progress through the stages of the writing process as needed.

Organization and Focus

1.1 Create compositions that establish a controlling impression, have a coherent thesis, and end with a clear and well-supported conclusion.

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1.2 Establish coherence within and among paragraphs through effective transitions, parallel structures, and similar writing techniques.

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1.3 Support theses or conclusions with analogies, paraphrases, quotations, opinions from authorities, comparisons, and similar devices.

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Research and Technology

1.4 Plan and conduct multiple-step information searches by using computer networks and modems.

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Evaluation and Revision

1.6 Revise writing for word choice; appropriate organization; consistent point of view; and transition paragraphs, passages, and ideas.

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2.0 Writing Applications (Genres and Their Characteristics)

Students write narrative, expository, persuasive, and descriptive essays of at least 500 to 700 words in each genre. Student writing demonstrates a command of standard American English and the research, organizational, and drafting strategies outlined in Writing Standard 1.0.

Using the writing strategies of grade eight outlined in Writing Standard 1.0, students:

- 2.3 Write research reports:
- Define a thesis.
 - Record important ideas, concepts, and direct quotations from significant information sources and paraphrase and summarize all perspectives on the topic, as appropriate.
 - Use a variety of primary and secondary sources and distinguish the nature and value of each.
 - Organize and display information on charts, maps, and graphs.
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Listening and Speaking

1.0 Listening and Speaking Strategies

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.

Organization and Delivery of Oral Communication

1.3 Organize information to achieve particular purposes by matching the message, vocabulary, voice modulation, expression, and tone to the audience and purpose.

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Protected Areas: Issues and Analysis

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1.4 Prepare a speech outline based upon a chosen pattern of organization, which generally includes an introduction; transitions, previews, and summaries; a logically developed body; and an effective conclusion.

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Protected Areas: Issues and Analysis

1.5 Use precise language, action verbs, sensory details, appropriate and colorful modifiers, and the active rather than the passive voice in ways that enliven oral presentations.

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1.6 Use appropriate grammar, word choice, enunciation, and pace during formal presentations.

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2.0 Speaking Applications (Genres and Their Characteristics)

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.

Using the speaking strategies of grade eight outlined in Listening and Speaking Standard 1.0, students:

2.3 Deliver research presentations:

- a. Define a thesis.
- b. Record important ideas, concepts, and direct quotations from significant information sources and paraphrase and summarize all relevant perspectives on the topic, as appropriate.
- c. Use a variety of primary and secondary sources and distinguish the nature and value of each.
- d. Organize and record information on charts, maps, and graphs.

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2.4 Deliver persuasive presentations:

- a. Include a well-defined thesis (i.e., one that makes a clear and knowledgeable judgment).
- b. Differentiate fact from opinion and support arguments with detailed evidence, examples, and reasoning.
- c. Anticipate and answer listener concerns and counterarguments effectively through the inclusion and arrangement of details, reasons, examples, and other elements.
- d. Maintain a reasonable tone.

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Protected Areas: Issues and Analysis

Grades Nine and Ten

Reading

2.0 Reading Comprehension (Focus on Informational Materials)

Students read and understand grade-level-appropriate material. They analyze the organizational patterns, arguments, and positions advanced. The selections in *Recommended Literature, Kindergarten Through Grade Twelve* illustrate the quality and complexity of the materials to be read by students. In addition, by grade twelve, students read two million words annually on their own, including a wide variety of classic and contemporary literature, magazines, newspapers, and online information. In grades nine and ten, students make substantial progress toward this goal.

Structural Features of Informational Materials

2.2 Prepare a bibliography of reference materials for a report using a variety of consumer, workplace, and public documents.

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Comprehension and Analysis of Grade-Level-Appropriate Text

2.3 Generate relevant questions about readings on issues that can be researched.

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2.4 Synthesize the content from several sources or works by a single author dealing with a single issue; paraphrase the ideas and connect them to other sources and related topics to demonstrate comprehension.

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- 2.5 Extend ideas presented in primary or secondary sources through original analysis, evaluation, and elaboration.
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Writing

1.0 Writing Strategies

Students write coherent and focused essays that convey a well-defined perspective and tightly reasoned argument. The writing demonstrates students' awareness of the audience and purpose. Students progress through the stages of the writing process as needed.

Research and Technology

- 1.3 Use clear research questions and suitable research methods (e.g., library, electronic media, personal interview) to elicit and present evidence from primary and secondary sources.
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- 1.4 Develop the main ideas within the body of the composition through supporting evidence (e.g., scenarios, commonly held beliefs, hypotheses, definitions).
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- 1.5 Synthesize information from multiple sources and identify complexities and discrepancies in the information and the different perspectives found in each medium (e.g., almanacs, microfiche, news sources, in-depth field studies, speeches, journals, technical documents).
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- 1.6 Integrate quotations and citations into a written text while maintaining the flow of ideas.
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- 1.7 Use appropriate conventions for documentation in the text, notes, and bibliographies by adhering to those in style manuals (e.g., *Modern Language Association Handbook*, *The Chicago Manual of Style*).
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Listening and Speaking

1.0 Listening and Speaking Strategies

Students formulate adroit judgments about oral communication. They deliver focused and coherent presentations of their own that convey clear and distinct perspectives and solid reasoning. They use gestures, tone, and vocabulary tailored to the audience and purpose.

Organization and Delivery of Oral Communication

- 1.3 Choose logical patterns of organization (e.g., chronological, topical, cause and effect) to inform and to persuade, by soliciting agreement or action, or to unite audiences behind a common belief or cause.
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- 1.4 Choose appropriate techniques for developing the introduction and conclusion (e.g., by using literary quotations, anecdotes, references to authoritative sources).

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Protected Areas: Issues and Analysis

- 1.5 Recognize and use elements of classical speech forms (e.g., introduction, first and second transitions, body, conclusion) in formulating rational arguments and applying the art of persuasion and debate.

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- 1.6 Present and advance a clear thesis statement and choose appropriate types of proof (e.g., statistics, testimony, specific instances) that meet standard tests for evidence, including credibility, validity, and relevance.

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- 1.7 Use props, visual aids, graphs, and electronic media to enhance the appeal and accuracy of presentations.

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- 1.9 Analyze the occasion and the interests of the audience and choose effective verbal and nonverbal techniques (e.g., voice, gestures, eye contact) for presentations.

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2.0 Speaking Applications (Genres and Their Characteristics)

Students deliver polished formal and extemporaneous presentations that combine the traditional rhetorical strategies of narration, exposition, persuasion, and description. Student speaking demonstrates a command of standard American English and the organizational and delivery strategies outlined in Listening and Speaking Standard 1.0.

Using the speaking strategies of grades nine and ten outlined in Listening and Speaking Standard 1.0, students:

- 2.2 Deliver expository presentations:
- Marshal evidence in support of a thesis and related claims, including information on all relevant perspectives.
 - Convey information and ideas from primary and secondary sources accurately and coherently.
 - Make distinctions between the relative value and significance of specific data, facts, and ideas.
 - Include visual aids by employing appropriate technology to organize and display information on charts, maps, and graphs.
 - Anticipate and address the listener's potential misunderstandings, biases, and expectations.
 - Use technical terms and notations accurately.

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- 2.5 Deliver persuasive arguments (including evaluation and analysis of problems and solutions and causes and effects):

- Structure ideas and arguments in a coherent, logical fashion.
- Use rhetorical devices to support assertions (e.g., by appeal to logic through reasoning; by appeal to emotion or ethical belief; by use of personal anecdote, case study, or analogy).
- Clarify and defend positions with precise and relevant evidence, including facts, expert opinions, quotations, expressions of commonly accepted beliefs, and logical reasoning.
- Anticipate and address the listener's concerns and counterarguments.

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Grades Eleven and Twelve

Reading

2.0 Reading Comprehension (Focus on Informational Materials)

Students read and understand grade-level-appropriate material. They analyze the organizational patterns, arguments, and positions advanced. The selections in *Recommended Literature, Kindergarten Through Grade Twelve* illustrate the quality and complexity of the materials to be read by students. In addition, by grade twelve, students read two million words annually on their own, including a wide variety of classic and contemporary literature, magazines, newspapers, and online information.

Comprehension and Analysis of Grade-Level-Appropriate Text.

2.4 Make warranted and reasonable assertions about the author's arguments by using elements of the text to defend and clarify interpretations.

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2.5 Analyze an author's implicit and explicit philosophical assumptions and beliefs about a subject.

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Writing

1.0 Writing Strategies

Students write coherent and focused texts that convey a well-defined perspective and tightly reasoned argument. The writing demonstrates students' awareness of the audience and purpose and progression through the stages of the writing process.

Organization and Focus

1.1 Demonstrate an understanding of the elements of discourse (e.g., purpose, speaker, audience, form) when completing narrative, expository, persuasive, or descriptive writing assignments.

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Protected Areas: Issues and Analysis

1.3 Structure ideas and arguments in a sustained, persuasive, and sophisticated way and support them with precise and relevant examples.

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Protected Areas: Issues and Analysis

Research and Technology

1.6 Develop presentations by using clear research questions and creative and critical research strategies (e.g., field studies, oral histories, interviews, experiments, electronic sources).

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1.7 Use systematic strategies to organize and record information (e.g., anecdotal scripting, annotated bibliographies).

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- 1.8 Integrate databases, graphics, and spreadsheets into word-processed documents.
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2.0 Writing Applications (Genres and Their Characteristics)

Students combine the rhetorical strategies of narration, exposition, persuasion, and description to produce texts of at least 1,500 words each. Student writing demonstrates a command of standard American English and the research, organizational, and drafting strategies outlined in Writing Standard 1.0.

Using the writing strategies of grades eleven and twelve outlined in Writing Standard 1.0, students:

- 2.6 Deliver multimedia presentations:
 - a. Combine text, images, and sound and draw information from many sources (e.g., television broadcasts, videos, films, newspapers, magazines, CD-ROMs, the Internet, electronic media-generated images).
 - b. Select an appropriate medium for each element of the presentation.
 - c. Use the selected media skillfully, editing appropriately and monitoring for quality.
 - d. Test the audience's response and revise the presentation accordingly.
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Written and Oral English Language Conventions

The standards for written and oral English language conventions have been placed between those for writing and for listening and speaking because these conventions are essential to both sets of skills.

1.0 Written and Oral English Language Conventions

Students write and speak with a command of standard English conventions.

- 1.1 Demonstrate control of grammar, diction, and paragraph and sentence structure and an understanding of English usage.
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- 1.2 Produce legible work that shows accurate spelling and correct punctuation and capitalization.
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- 1.3 Reflect appropriate manuscript requirements in writing.
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Listening and Speaking

1.0 Listening and Speaking Strategies

Students formulate adroit judgments about oral communication. They deliver focused and coherent presentations that convey clear and distinct perspectives and demonstrate solid reasoning. They use gestures, tone, and vocabulary tailored to the audience and purpose.

Organization and Delivery of Oral Communication

1.6 Use logical, ethical, and emotional appeals that enhance a specific tone and purpose.

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2.0 Speaking Applications (Genres and Their Characteristics)

Students deliver polished formal and extemporaneous presentations that combine traditional rhetorical strategies of narration, exposition, persuasion, and description. Student speaking demonstrates a command of standard American English and the organizational and delivery strategies outlined in Listening and Speaking Standard 1.0.

Using the speaking strategies of grades eleven and twelve outlined in Listening and Speaking Standard 1.0, students:

2.2 Deliver oral reports on historical investigations:

- a. Use exposition, narration, description, persuasion, or some combination of those to support the thesis.
- b. Analyze several historical records of a single event, examining critical relationships between elements of the research topic.
- c. Explain the perceived reason or reasons for the similarities and differences by using information derived from primary and secondary sources to support or enhance the presentation.
- d. Include information on all relevant perspectives and consider the validity and reliability of sources.

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2.4 Deliver multimedia presentations:

- a. Combine text, images, and sound by incorporating information from a wide range of media, including films, newspapers, magazines, CD-ROMs, online information, television, videos, and electronic media-generated images.
- b. Select an appropriate medium for each element of the presentation.
- c. Use the selected media skillfully, editing appropriately and monitoring for quality.
- d. Test the audience's response and revise the presentation accordingly.

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