

A Correlation of
Population Connection Materials

from

People and the Planet:
Lessons for a Sustainable Future

to

California State Board of Education
Content Standards

Organized by:

1. Subject

2. Grade

3. Standard

4. Population Connection Activity

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English Language Development

Grade Three to Grade Five

(ELD.3-5.Beginning) Listening and Speaking: Comprehension

Answer simple questions with one- to two-word responses.

Cougar Hunt
Treasures Underground
The Stork and the Grim Reaper
Timber!
Water, Water Everywhere (Elementary/Intermediate)
Who Polluted the Potomac?

Retell familiar stories and participate in short conversations by using appropriate gestures, expressions, and illustrative objects.

Who Polluted the Potomac?

(ELD.3-5.Early Intermediate) Listening and Speaking: Comprehension

Ask and answer questions by using phrases or simple sentences.

Cougar Hunt
Treasures Underground
Timber!
Water, Water Everywhere (Elementary/Intermediate)
Who Polluted the Potomac?

(ELD.3-5.Early Intermediate) Listening and Speaking: Comprehension and Organization and Delivery of Oral Communication

Orally identify the main points of simple conversations and stories that are read aloud by using phrases or simple sentences.

Who Polluted the Potomac?

(ELD.3-5.Intermediate) Listening and Speaking: Comprehension

Listen attentively to stories and information and identify important details and concepts by using both verbal and nonverbal responses.

Who Polluted the Potomac?

(ELD.3-5.Early Advanced) Listening and Speaking: Comprehension

Listen attentively to more complex stories and information on new topics across content areas and identify the main points and supporting details.

Who Polluted the Potomac?

(ELD.3-5.Advanced) Listening and Speaking: Comprehension

Listen attentively to stories and information on topics; identify the main points and supporting details.

Who Polluted the Potomac?

(ELD.3-5.Intermediate) Reading: Vocabulary and Concept Development

Use content-related vocabulary in discussions and reading.

Cougar Hunt
Treasures Underground
Who Polluted the Potomac?

(ELD.3-5.Beginning) Reading: Comprehension

Respond orally to stories read aloud, giving one- or two- word responses (e.g., "brown bear") to factual comprehension questions.

Who Polluted the Potomac?

Understand and follow simple one-step directions for classroom activities.

Cougar Hunt
Treasures Underground
Population Circle
The Stork and the Grim Reaper
Timber!
Water, Water Everywhere (Elementary/Intermediate)
Who Polluted the Potomac?

(ELD.3-5.Beginning) Reading: Comprehension and Analysis of Grade Level-Appropriate Text

Identify, using key words and/or phrases, the main idea in a story read aloud.

Who Polluted the Potomac?

(ELD.3-5.Early Intermediate) Reading: Comprehension

Understand and follow simple two-step directions for classroom activities.

Cougar Hunt
Treasures Underground
The Stork and the Grim Reaper
Timber!
Water, Water Everywhere (Elementary/Intermediate)
Who Polluted the Potomac?

(ELD.3-5.Intermediate) Reading: Comprehension and Analysis of Grade Level-Appropriate Text

Understand and follow some multiple-step directions for classroom-related activities.

Cougar Hunt
Treasures Underground
Timber!

(ELD.3-5.Early Advanced) Reading: Comprehension and Analysis of Grade Level-Appropriate Text

Generate and respond to comprehension questions related to the text.

Who Polluted the Potomac?

(ELD.3-5.Beginning) Reading: Narrative Analysis of Grade-Level-Appropriate Text

Listen to a story and respond orally in one or two words to factual comprehension questions.

Who Polluted the Potomac?

Grade Six to Grade Eight

(ELD.6-8.Beginning) Listening and Speaking: Comprehension

Ask and answer questions by using simple sentences or phrases.

Cougar Hunt
Eco Ethics
Everything Is Connected
Family Perspective
Food for Thought
For the Common Good
Growing Pains in Texas Hill Country
The Hunger Banquet
If Money Won't Buy It
In Search of Sustainable Life
Looking to the Future
Market Research
Measuring a Million
Treasures Underground
The More The Merrier?
On the Double
People on the Move
Population Circle
Power of the Pyramids
Seeing Double
Stage Stepping
Stash the Trash
Take a Stand
Timber!
Transportation Tally
Waste Not, Want Not
Water, Water Everywhere (Elementary/Intermediate)
Who Polluted the Potomac?
A World of Difference
World Real Estate

Demonstrate comprehension of oral presentations and instructions through nonverbal responses (e.g., gestures, pointing, drawing).

Growing Pains in Texas Hill Country
Who Polluted the Potomac?

(ELD.6-8.Early Intermediate) Listening and Speaking: Comprehension

Ask and answer questions by using phrases or simple sentences.

Cougar Hunt
Eco Ethics
Educating Wanjiku
Everything Is Connected
Family Perspective
Food for Thought
For the Common Good
Growing Pains in Texas Hill Country
The Hunger Banquet
If Money Won't Buy It
In Search of Sustainable Life
Looking to the Future

Market Research
Measuring a Million
Treasures Underground
The More The Merrier?
On the Double
People on the Move
Population Circle
Power of the Pyramids
Seeing Double
Stage Stepping
Stash the Trash
Take a Stand
Timber!
Transportation Tally
Waste Not, Want Not
Water, Water Everywhere (Elementary/Intermediate)
Who Polluted the Potomac?
A World of Difference
World Real Estate

(ELD.6-8.Early Intermediate) Listening and Speaking: Comprehension and Organization and Delivery of Oral Communication

Restate in simple sentences the main idea of oral presentations in subject-matter content.

Growing Pains in Texas Hill Country
Take a Stand

Prepare and deliver short oral presentations.

Eco Ethics
Looking to the Future
People on the Move
Take a Stand

(ELD.6-8.Intermediate) Listening and Speaking: Comprehension

Respond to messages by asking simple questions or by briefly restating the message.

Eco Ethics
Take a Stand

Listen attentively to stories and information and identify important details and concepts by using both verbal and nonverbal responses.

Who Polluted the Potomac?

(ELD.6-8.Intermediate) Listening and Speaking: Comprehension and Organization and Delivery of Oral Communication

Participate in social conversations with peers and adults on familiar topics by asking and answering questions and soliciting information.

Eco Ethics
In Search of Sustainable Life

Identify the main idea and some supporting details of oral presentations, familiar literature, and key concepts of subject-matter content.

Growing Pains in Texas Hill Country

(ELD.6-8.Intermediate) Listening and Speaking: Organization and Delivery of Oral Communication

Prepare and deliver short presentations on ideas, premises, or images obtained from various common sources.
Looking to the Future
People on the Move

(ELD.6-8.Early Advanced) Listening and Speaking: Comprehension and Organization and Delivery of Oral Communication

Participate in and initiate more extended social conversations with peers and adults on unfamiliar topics by asking and answering questions and restating and soliciting information.

Eco Ethics
In Search of Sustainable Life

Respond to messages by asking questions, challenging statements, or offering examples that affirm the message.

Eco Ethics
Take a Stand

Prepare and deliver presentations that use various sources.

Growing Pains in Texas Hill Country
Looking to the Future
People on the Move

(ELD.6-8.Advanced) Listening and Speaking: Comprehension and Organization and Delivery of Oral Communication

Consistently use appropriate ways of speaking and writing that vary according to the purpose, audience, and subject matter.

Eco Ethics
Growing Pains in Texas Hill Country
Looking to the Future
People on the Move
Take a Stand

Prepare and deliver presentations and reports in various content areas, including a purpose, point of view, introduction, coherent transition, and appropriate conclusions.

Looking to the Future
People on the Move

(ELD.6-8.Early Intermediate) Reading: Vocabulary and Concept Development

Read simple paragraphs and passages independently.

The Balance of Nature
Global Family Ties
People Count: Facing the Population Challenge
You're One in Six Billion!
Your Place on the Planet

(ELD.6-8.Intermediate) Reading: Vocabulary and Concept Development

Use decoding skills and knowledge of both academic and social vocabulary to read independently.

Educating Wanjiku
The Balance of Nature
Global Family Ties
People Count: Facing the Population Challenge
You're One in Six Billion!

Your Place on the Planet

(ELD.6-8.Early Advanced) Reading: Vocabulary and Concept Development

Use decoding skills and knowledge of academic and social vocabulary to begin independent reading.

Educating Wanjiku
The Balance of Nature
Global Family Ties
People Count: Facing the Population Challenge
You're One in Six Billion!
Your Place on the Planet

(ELD.6-8.Advanced) Reading: Vocabulary and Concept Development

Apply knowledge of academic and social vocabulary to achieve independent reading.

Educating Wanjiku
The Balance of Nature
Global Family Ties
People Count: Facing the Population Challenge
You're One in Six Billion!
Your Place on the Planet

(ELD.6-8.Beginning) Reading: Comprehension

Read simple text and orally respond to factual comprehension questions by using keywords or phrases.

Educating Wanjiku

Understand and follow simple multiple-step oral directions for classroom or work-related activities.

Cougar Hunt
Eco Ethics
Educating Wanjiku
Everything Is Connected
Family Perspective
Food for Thought
For the Common Good
Growing Pains in Texas Hill Country
The Hunger Banquet
If Money Won't Buy It
In Search of Sustainable Life
Looking to the Future
Market Research
Measuring a Million
Treasures Underground
The More The Merrier?
On the Double
People on the Move
Population Circle
Power of the Pyramids
Seeing Double
Stage Stepping
Stash the Trash
Take a Stand
Timber!
Transportation Tally
Waste Not, Want Not
Water, Water Everywhere (Elementary/Intermediate)

Who Polluted the Potomac?
A World of Difference
World Real Estate

(ELD.6-8.Beginning) Reading: Comprehension and Analysis of Grade Level-Appropriate Text

Orally identify, using key words or phrases, the main ideas and some details of familiar texts.

Educating Wanjiku
Growing Pains in Texas Hill Country

(ELD.6-8.Early Intermediate) Reading: Comprehension

Read and orally respond to simple literary texts and texts in content areas by using simple sentences to answer factual comprehension questions.

The Balance of Nature
Global Family Ties
People Count: Facing the Population Challenge
You're One in Six Billion!
Your Place on the Planet

(ELD.6-8.Early Intermediate) Reading: Comprehension and Analysis of Grade Level-Appropriate Text

Read text and orally identify the main ideas and details of informational materials, literary text, and text in content areas by using simple sentences.

Educating Wanjiku
The Balance of Nature
Global Family Ties
People Count: Facing the Population Challenge
You're One in Six Billion!
Your Place on the Planet

(ELD.6-8.Intermediate) Reading: Comprehension and Analysis of Grade Level-Appropriate Text

Read text and use detailed sentences to explain orally the main ideas and details of informational text, literary text, and text in content areas.

Educating Wanjiku
The Balance of Nature
Global Family Ties
People Count: Facing the Population Challenge
You're One in Six Billion!
Your Place on the Planet

(ELD.6-8.Early Advanced) Reading: Comprehension and Analysis of Grade Level-Appropriate Text

Identify and explain the main ideas and critical details of informational materials, literary texts, and texts in content areas.

The Balance of Nature
Global Family Ties
People Count: Facing the Population Challenge
You're One in Six Billion!
Your Place on the Planet

(ELD.6-8.Advanced) Reading: Comprehension and Analysis of Grade Level-Appropriate Text

Identify and explain the main ideas and critical details of informational materials, literary text, and text in content areas.

The Balance of Nature
Global Family Ties
People Count: Facing the Population Challenge
You're One in Six Billion!
Your Place on the Planet

(ELD.6-8.Early Intermediate) Reading: Narrative Analysis of Grade-Level-Appropriate Text and Literary Criticism

Describe orally in simple sentences a character in a brief literary text by identifying the thoughts and actions of the character.

Educating Wanjiku

(ELD.6-8.Intermediate) Reading: Narrative Analysis of Grade-Level-Appropriate Text

Use expanded vocabulary and descriptive words in oral and written responses to simple texts.

Educating Wanjiku

The Balance of Nature

Global Family Ties

People Count: Facing the Population Challenge

You're One in Six Billion!

Your Place on the Planet

(ELD.6-8.Beginning) Writing: Organization and Focus

Create simple sentences or phrases with some assistance.

Everything Is Connected

In Search of Sustainable Life

Write simple compositions, such as descriptions and comparison and contrast, that have a main idea and some detail.

Looking to the Future

People on the Move

(ELD.6-8.Early Intermediate) Writing: Organization and Focus

Collect information from various sources (e.g., dictionary, library books, research materials) and take notes on a given topic.

Growing Pains in Texas Hill Country

Looking to the Future

The More The Merrier?

People on the Move

(ELD.6-8.Intermediate) Writing: Organization and Focus

Write brief expository compositions (e.g., description, comparison and contrast, cause and effect, and problem and solution) that include a thesis and some points of support.

Looking to the Future

People on the Move

Grade Nine to Grade Twelve

(ELD.9-12.Beginning) Listening and Speaking: Comprehension

Ask and answer questions by using simple sentences or phrases.

Eco Ethics

Everything Is Connected
Food for Thought
Growing Pains in Texas Hill Country
The Hunger Banquet
Power of the Pyramids
For the Common Good
Stage Stepping
Take a Stand

Demonstrate comprehension of oral presentations and instructions through nonverbal responses.

Growing Pains in Texas Hill Country
Take a Stand

(ELD.9-12.Beginning) Listening and Speaking: Analysis and Evaluation of Oral and Media Communications and Comprehension

Respond with simple words or phrases to questions about simple written texts.

Educating Wanjiku

(ELD.9-12.Early Intermediate) Listening and Speaking: Comprehension

Ask and answer questions by using phrases or simple sentences.

Eco Ethics
Educating Wanjiku
Family Perspective
Food for Thought
For the Common Good
Growing Pains in Texas Hill Country
The Hunger Banquet
Power of the Pyramids
Stage Stepping
Take a Stand
Transportation Tally
A World of Difference

(ELD.9-12.Early Intermediate) Listening and Speaking: Comprehension and Organization and Delivery of Oral Communication

Restate in simple sentences the main idea of oral presentations in subject-matter content.

Growing Pains in Texas Hill Country
Take a Stand

Prepare and deliver short oral presentations.

Growing Pains in Texas Hill Country
Take a Stand

(ELD.9-12.Intermediate) Listening and Speaking: Comprehension

Respond to messages by asking simple questions or by briefly restating the message.

Eco Ethics
Educating Wanjiku
Growing Pains in Texas Hill Country

Listen attentively to stories and information and identify important details and concepts by using both verbal and nonverbal responses.

Growing Pains in Texas Hill Country

Take a Stand

(ELD.9-12.Intermediate) Listening and Speaking: Comprehension and Organization and Delivery of Oral Communication

Participate in social conversations with peers and adults on familiar topics by asking and answering questions and soliciting information.

Eco Ethics

Identify the main idea and some supporting details of oral presentations, familiar literature, and key concepts of subject-matter content.

Growing Pains in Texas Hill Country

Take a Stand

(ELD.9-12.Early Advanced) Listening and Speaking: Comprehension and Organization and Delivery of Oral Communication

Participate in and initiate more extended social conversations with peers and adults on unfamiliar topics by asking and answering questions and restating and soliciting information.

Eco Ethics

Respond to messages by asking questions, challenging statements, or offering examples that affirm the message.

Growing Pains in Texas Hill Country

Take a Stand

Prepare and deliver brief oral presentations/reports on historical investigations, a problem and solution, or a cause and effect.

Growing Pains in Texas Hill Country

(ELD.9-12.Advanced) Listening and Speaking: Comprehension and Organization and Delivery of Oral Communication

Consistently use appropriate ways of speaking and writing that vary according to the purpose, audience, and subject matter.

Eco Ethics

Growing Pains in Texas Hill Country

Take a Stand

(ELD.9-12.Early Intermediate) Reading: Vocabulary and Concept Development

Read simple paragraphs and passages independently.

Educating Wanjiku

Growing Pains in Texas Hill Country

(ELD.9-12.Intermediate) Reading: Vocabulary and Concept Development

Use decoding skills and knowledge of both academic and social vocabulary to read independently.

Educating Wanjiku

Growing Pains in Texas Hill Country

(ELD.9-12.Early Advanced) Reading: Vocabulary and Concept Development

Use decoding skills and knowledge of academic and social vocabulary to begin independent reading.

Educating Wanjiku

Growing Pains in Texas Hill Country

(ELD.9-12.Advanced) Reading: Vocabulary and Concept Development

Apply knowledge of academic and social vocabulary to achieve independent reading.

Educating Wanjiku
Growing Pains in Texas Hill Country

(ELD.9-12.Beginning) Reading: Comprehension

Understand and follow simple multiple-step oral directions for classroom or work-related activities.

Eco Ethics
Family Perspective
Food for Thought
For the Common Good
Growing Pains in Texas Hill Country
The Hunger Banquet
Power of the Pyramids
Stage Stepping
Take a Stand
Transportation Tally
A World of Difference

(ELD.9-12.Beginning) Reading: Comprehension and Analysis of Grade Level-Appropriate Text

Orally identify the main ideas and some details of familiar literature and informational materials/public documents.

Growing Pains in Texas Hill Country

(ELD.9-12.Early Intermediate) Reading: Comprehension

Read and orally respond to simple literary texts and texts in content areas by using simple sentences to answer factual comprehension questions.

Growing Pains in Texas Hill Country

(ELD.9-12.Early Advanced) Reading: Comprehension and Analysis of Grade Level-Appropriate Text

Apply knowledge of language to achieve comprehension of informational materials, literary texts, and texts in content areas.

Educating Wanjiku
Growing Pains in Texas Hill Country

(ELD.9-12.Advanced) Reading: Comprehension and Analysis of Grade Level-Appropriate Text

Apply knowledge of language to achieve comprehension of informational materials, literary text, and text in content areas.

Educating Wanjiku
Growing Pains in Texas Hill Country

(ELD.9-12.Early Intermediate) Reading: Narrative Analysis of Grade-Level-Appropriate Text and Literary Criticism

Describe briefly in simple sentences a character according to what he or she does in a familiar narration, dialogue, or drama.

Educating Wanjiku

(ELD.9-12.Intermediate) Reading: Narrative Analysis of Grade-Level-Appropriate Text

Use expanded vocabulary and descriptive words in oral and written responses to simple texts.

Educating Wanjiku

Growing Pains in Texas Hill Country

(ELD.9-12.Beginning) Writing: Penmanship and Organization and Focus

Organize and record information from selected literature and content areas by displaying it on pictures, lists, charts, and tables.

Stage Stepping

(ELD.9-12.Early Intermediate) Writing: Organization and Focus

Collect information from various sources (e.g., dictionary, library books, research materials) and take notes on a given topic.

Growing Pains in Texas Hill Country

History and Social Science

Kindergarten

(Social Science.K.6) Students understand that history relates to events, people, and places of other times.

3. Understand how people lived in earlier times and how their lives would be different today (e.g., getting water from a well, growing food, making clothing, having fun, forming organizations, living by rules and laws).

Population Circle

Grade Two

(Social Science.2.4) Students understand basic economic concepts and their individual roles in the economy and demonstrate basic economic reasoning skills.

3. Understand how limits on resources affect production and consumption (what to produce and what to consume).

Treasures Underground

Water, Water Everywhere (Elementary/Intermediate)

Grade Three

(Social Science.3.1) Students describe the physical and human geography and use maps, tables, graphs, photographs, and charts to organize information about people, places, and environments in a spatial context.

2. Trace the ways in which people have used the resources of the local region and modified the physical environment (e.g., a dam constructed upstream changed a river or coastline).

Who Polluted the Potomac?

(Social Science.3.2) Students describe the American Indian nations in their local region long ago and in the recent past.

4. Discuss the interaction of new settlers with the already established Indians of the region.

Who Polluted the Potomac?

(Social Science.3.3) Students draw from historical and community resources to organize the sequence of local historical events and describe how each period of settlement left its mark on the land.

3. Trace why their community was established, how individuals and families contributed to its founding and development, and how the community has changed over time, drawing on maps, photographs, oral histories, letters, newspapers, and other primary sources.

Who Polluted the Potomac?

(Social Science.3.4) Students understand the role of rules and laws in our daily lives and the basic structure of the U.S. government.

2. Discuss the importance of public virtue and the role of citizens, including how to participate in a classroom, in the community, and in civic life.

Treasures Underground

Timber!

Water, Water Everywhere (Elementary/Intermediate)

Who Polluted the Potomac?

(Social Science.3.5) Students demonstrate basic economic reasoning skills and an understanding of the economy of the local region.

1. Describe the ways in which local producers have used and are using natural resources, human resources, and capital resources to produce goods and services in the past and the present.

Treasures Underground
Timber!

Grade Four

(Social Science.4.4) Students explain how California became an agricultural and industrial power, tracing the transformation of the California economy and its political and cultural development since the 1850s.

4. Describe rapid American immigration, internal migration, settlement, and the growth of towns and cities (e.g., Los Angeles).

Who Polluted the Potomac?

Grades K to Five

(Social Science.K-5) Chronological and Spatial Thinking

1. Students place key events and people of the historical era they are studying in a chronological sequence and within a spatial context; they interpret time lines.

Population Circle
Who Polluted the Potomac?

2. Students correctly apply terms related to time, including past, present, future, decade, century, and generation.

Population Circle
Who Polluted the Potomac?

3. Students explain how the present is connected to the past, identifying both similarities and differences between the two, and how some things change over time and some things stay the same.

Population Circle
Who Polluted the Potomac?

(Social Science.K-5) Historical Interpretation

2. Students identify the human and physical characteristics of the places they are studying and explain how those features form the unique character of those places.

The Stork and the Grim Reaper
Water, Water Everywhere (Elementary/Intermediate)
Who Polluted the Potomac?

3. Students identify and interpret the multiple causes and effects of historical events.

Population Circle
Who Polluted the Potomac?

Grade Eight

(Social Science.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.

1. Discuss the influence of industrialization and technological developments on the region, including human modification of the landscape and how physical geography shaped human actions (e.g., growth of cities, deforestation, farming, mineral extraction).

Treasures Underground
Timber!
Who Polluted the Potomac?
You're One in Six Billion!
People Count: Facing the Population Challenge

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).

People on the Move

(Social Science.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).

Everything Is Connected
People on the Move
Who Polluted the Potomac?
Global Family Ties

(Social Science.6-8) Chronological and Spatial Thinking

3. Students use a variety of maps and documents to identify physical and cultural features of neighborhoods, cities, states, and countries and to explain the historical migration of people, expansion and disintegration of empires, and the growth of economic systems.

People on the Move
Global Family Ties

(Social Science.6-8) Historical Interpretation

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

Everything Is Connected
Who Polluted the Potomac?
Global Family Ties
People Count: Facing the Population Challenge
You're One in Six Billion!

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

People Count: Facing the Population Challenge
You're One in Six Billion!

Grade Ten

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

2. Examine how scientific and technological changes and new forms of energy brought about massive social, economic, and cultural change (e.g., the inventions and discoveries of James Watt, Eli Whitney, Henry Bessemer, Louis Pasteur, Thomas Edison).

Transportation Tally

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

Food for Thought

(Social Science.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.

Educating Wanjiku
Food for Thought
Power of the Pyramids
A World of Difference

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

Educating Wanjiku
Food for Thought
Power of the Pyramids
A World of Difference

Grade Eleven

(Social Science.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.

Transportation Tally

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

7. Describe the effects on society and the economy of technological developments since 1945, including the computer revolution, changes in communication, advances in medicine, and improvements in agricultural technology.

Power of the Pyramids
Transportation Tally

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

1. Discuss the reasons for the nation's changing immigration policy, with emphasis on how the Immigration Act of 1965 and successor acts have transformed American society.

Take a Stand

3. Describe the changing roles of women in society as reflected in the entry of more women into the labor force and the changing family structure.

Educating Wanjiku

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.

For the Common Good
Growing Pains in Texas Hill Country
Take a Stand

7. Explain how the federal, state, and local governments have responded to demographic and social changes such as population shifts to the suburbs, racial concentrations in the cities, Frostbelt-to-Sunbelt migration, international migration, decline of family farms, increases in out-of-wedlock births, and drug abuse.
Growing Pains in Texas Hill Country

Grade Twelve

(Social Science.12) 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.
For the Common Good

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

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.
Growing Pains in Texas Hill Country

12.10 Students formulate questions about and defend their analyses of tensions within our constitutional democracy and the importance of maintaining a balance between the following concepts: majority rule and individual rights; liberty and equality; state and national authority in a federal system; civil disobedience and the rule of law; freedom of the press and the right to a fair trial; the relationship of religion and government.
Take a Stand

(Social Science.12) 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.
Everything Is Connected
For the Common Good
A World of Difference

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

12.6 Students analyze issues of international trade and explain how the U.S. economy affects, and is affected by, economic forces beyond the United States' borders.

3. Understand the changing role of international political borders and territorial sovereignty in a global economy.
Food for Thought
The Hunger Banquet

Grades Nine to Twelve

(Social Science.9-12) 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.

Family Perspective
Power of the Pyramids
Transportation Tally

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.

Family Perspective
Growing Pains in Texas Hill Country
Power of the Pyramids
Transportation Tally

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.

World Real Estate

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

Food for Thought
Growing Pains in Texas Hill Country
Take a Stand
Transportation Tally

(Social Science.9-12) Historical Interpretation

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

Everything Is Connected
Growing Pains in Texas Hill Country
Transportation Tally
A World of Difference

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

Growing Pains in Texas Hill Country
Take a Stand

Language Arts

Grade Three

(Language Arts.3) Reading

2.0. Reading Comprehension: Students read and understand grade-level-appropriate material. They draw upon a variety of comprehension strategies as needed (e.g., generating and responding to essential questions, making predictions, comparing information from several sources). The selections in Recommended Readings in Literature, Kindergarten Through Grade Eight illustrate the quality and complexity of the materials to be read by students. In addition to their regular school reading, by grade four, students read one-half million words annually, including a good representation of grade-level-appropriate narrative and expository text (e.g., classic and contemporary literature, magazines, newspapers, online information). In grade three, students make substantial progress toward this goal.

Comprehension and Analysis of Grade-Level-Appropriate Text

- 2.7. Follow simple multiple-step written instructions (e.g., how to assemble a product or play a board game).
Treasures Underground
Timber!

(Language Arts.3) Listening and Speaking

1.0. Listening and Speaking Strategies: Students listen critically and respond appropriately to oral communication. They speak in a manner that guides the listener to understand important ideas by using proper phrasing, pitch, and modulation.

Comprehension

- 1.3. Respond to questions with appropriate elaboration.
Cougar Hunt
Treasures Underground
The Stork and the Grim Reaper
Timber!
Water, Water Everywhere (Elementary/Intermediate)
Who Polluted the Potomac?
- 1.7. Use clear and specific vocabulary to communicate ideas and establish the tone.
Who Polluted the Potomac?

Grade Four

(Language Arts.4) Written and Oral English Language Conventions

1.0. Written and Oral English Language Conventions: Students write and speak with a command of standard English conventions appropriate to this grade level.

Sentence Structure

- 1.1. Use simple and compound sentences in writing and speaking.
Cougar Hunt
Treasures Underground
The Stork and the Grim Reaper
Timber!
Water, Water Everywhere (Elementary/Intermediate)
Who Polluted the Potomac?

(Language Arts.4) Listening and Speaking

1.0. Listening and Speaking Strategies: Students listen critically and respond appropriately to oral communication. They speak in a manner that guides the listener to understand important ideas by using proper phrasing, pitch, and modulation.

Comprehension

1.1. Ask thoughtful questions and respond to relevant questions with appropriate elaboration in oral settings.

Cougar Hunt

Treasures Underground

The Stork and the Grim Reaper

Timber!

Water, Water Everywhere (Elementary/Intermediate)

Who Polluted the Potomac?

Organization and Delivery of Oral Communication

1.6 Use traditional structures for conveying information (e.g., cause and effect, similarity and difference, and posing and answering a question).

Cougar Hunt

Who Polluted the Potomac?

Grade Five

(Language Arts.5) 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.

Comprehension

1.1. Ask questions that seek information not already discussed.

Cougar Hunt

Treasures Underground

Water, Water Everywhere (Elementary/Intermediate)

Who Polluted the Potomac?

Grade Six

(Language Arts.6) Reading

1.0. Word Analysis, Fluency, and Systematic Vocabulary Development: Students use their knowledge of word origins and word relationships, as well as historical and literary context clues, to determine the meaning of specialized vocabulary and to understand the precise meaning of grade-level-appropriate words.

Word Recognition

1.1. Read aloud narrative and expository text fluently and accurately and with appropriate pacing, intonation, and expression.

Eco Ethics

Educating Wanjiku

Growing Pains in Texas Hill Country

In Search of Sustainable Life

The Balance of Nature

Global Family Ties

People Count: Facing the Population Challenge

You're One in Six Billion!

Your Place on the Planet

(Language Arts.6) 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 Readings in Literature, Kindergarten Through Grade Eight 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 six, students continue to make progress toward this goal.

Structural Features of Informational Materials

2.1 Identify the structural features of popular media (e.g., newspapers, magazines, online information) and use the features to obtain information.

Growing Pains in Texas Hill Country
Looking to the Future

(Language Arts.6) 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.

Organization and Focus

1.1. Choose the form of writing (e.g., personal letter, letter to the editor, review, poem, report, narrative) that best suits the intended purpose.

In Search of Sustainable Life
Looking to the Future
Market Research

1.2 Create multiple-paragraph expository compositions:

a. Engage the interest of the reader and state a clear purpose.

In Search of Sustainable Life

c. Conclude with a detailed summary linked to the purpose of the composition.

In Search of Sustainable Life

(Language Arts.6) 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.

Organization and Focus

1.3. Use a variety of effective and coherent organizational patterns, including comparison and contrast; organization by categories; and arrangement by spatial order, order of importance, or climactic order.

Eco Ethics
Growing Pains in Texas Hill Country
In Search of Sustainable Life
Looking to the Future
People on the Move

(Language Arts.6) Writing

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. Student writing demonstrates a command of standard American English and the research, organizational, and drafting strategies outlined in Writing Standard 1.0.

2.2 Write expository compositions (e.g., description, explanation, comparison and contrast, problem and solution):

a. State the thesis or purpose.

Growing Pains in Texas Hill Country

Looking to the Future
People on the Move

- b. Explain the situation.
 - Growing Pains in Texas Hill Country
 - Looking to the Future
 - People on the Move
- c. Follow an organizational pattern appropriate to the type of composition.
 - Growing Pains in Texas Hill Country
 - Looking to the Future
 - People on the Move
- d. Offer persuasive evidence to validate arguments and conclusions as needed.
 - Growing Pains in Texas Hill Country
 - People on the Move

2.5 Write persuasive compositions:

- a. State a clear position on a proposition or proposal.
 - In Search of Sustainable Life
- b. Support the position with organized and relevant evidence.
 - In Search of Sustainable Life
- c. Anticipate and address reader concerns and counterarguments.
 - In Search of Sustainable Life

(Language Arts.6) 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.

Comprehension

- 1.3. Restate and execute multiple-step oral instructions and directions.
 - Cougar Hunt
 - Eco Ethics
 - Educating Wanjiku
 - Everything Is Connected
 - Food for Thought
 - For the Common Good
 - Growing Pains in Texas Hill Country
 - The Hunger Banquet
 - If Money Won't Buy It
 - In Search of Sustainable Life
 - Looking to the Future
 - Market Research
 - Measuring a Million
 - Treasures Underground
 - The More The Merrier?
 - People on the Move
 - Power of the Pyramids
 - Seeing Double
 - Stage Stepping
 - Stash the Trash
 - Take a Stand
 - Timber!
 - Waste Not, Want Not

Water, Water Everywhere (Elementary/Intermediate)
Who Polluted the Potomac?
A World of Difference
World Real Estate

(Language Arts.6) 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

1.4. Select a focus, an organizational structure, and a point of view, matching the purpose, message, occasion, and vocal modulation to the audience.

Growing Pains in Texas Hill Country
In Search of Sustainable Life
Looking to the Future
Take a Stand

1.5. Emphasize salient points to assist the listener in following the main ideas and concepts.

Growing Pains in Texas Hill Country
Looking to the Future
Take a Stand

1.6. Support opinions with detailed evidence and with visual or media displays that use appropriate technology.

Growing Pains in Texas Hill Country
In Search of Sustainable Life

(Language Arts.6) Listening and Speaking

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.

2.2 Deliver informative presentations:

b. Develop the topic with facts, details, examples, and explanations from multiple authoritative sources (e.g., speakers, periodicals, online information).

Growing Pains in Texas Hill Country
People on the Move

2.4. Deliver persuasive presentations:

a. Provide a clear statement of the position.

Growing Pains in Texas Hill Country
Take a Stand

b. Include relevant evidence.

Growing Pains in Texas Hill Country

c. Offer a logical sequence of information.

Growing Pains in Texas Hill Country

d. Engage the listener and foster acceptance of the proposition or proposal.

Growing Pains in Texas Hill Country
Take a Stand

Grade Seven

(Language Arts.7) 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.

Organization and Focus

- 1.2. Support all statements and claims with anecdotes, descriptions, facts and statistics, and specific examples.
In Search of Sustainable Life

(Language Arts.7) 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.

In Search of Sustainable Life

People on the Move

(Language Arts.7) Writing

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.

2.4. Write persuasive compositions:

- a. State a clear position or perspective in support of a proposition or proposal.

In Search of Sustainable Life

- b. Describe the points in support of the proposition, employing well-articulated evidence.

In Search of Sustainable Life

- c. Anticipate and address reader concerns and counterarguments.

In Search of Sustainable Life

(Language Arts.7) 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.

Growing Pains in Texas Hill Country

Take a Stand

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

Take a Stand

Growing Pains in Texas Hill Country

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

Growing Pains in Texas Hill Country

People on the Move

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

Growing Pains in Texas Hill Country
Looking to the Future

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

Growing Pains in Texas Hill Country
Looking to the Future
Take a Stand

(Language Arts.7) Listening and Speaking

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:

2.2 Deliver oral summaries of articles and books:

a. Include the main ideas of the event or article and the most significant details.

Growing Pains in Texas Hill Country

b. Use the student's own words, except for material quoted from sources.

Growing Pains in Texas Hill Country

c. Convey a comprehensive understanding of sources, not just superficial details

Growing Pains in Texas Hill Country

2.4. Deliver persuasive presentations:

a. State a clear position or perspective in support of an argument or proposal.

Growing Pains in Texas Hill Country

b. Describe the points in support of the argument and employ well-articulated evidence.

Growing Pains in Texas Hill Country

Grade Eight

(Language Arts.8) Writing

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.

2.1 Write biographies, autobiographies, short stories, or narratives:

a. Relate a clear, coherent incident, event, or situation by using well-chosen details.

Looking to the Future

b. Reveal the significance of, or the writer's attitude about, the subject.

Looking to the Future

2.4. Write persuasive compositions:

a. Include a well-defined thesis (i.e., one that makes a clear and knowledgeable judgment).

In Search of Sustainable Life

b. Present detailed evidence, examples, and reasoning to support arguments, differentiating between facts and opinion.

In Search of Sustainable Life

- c. Provide details, reasons, and examples, arranging them effectively by anticipating and answering reader concerns and counterarguments.

In Search of Sustainable Life

(Language Arts.8) Listening and Speaking

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.

2.4. Deliver persuasive presentations:

- b. Differentiate fact from opinion and support arguments with detailed evidence, examples, and reasoning.

Growing Pains in Texas Hill Country

Take a Stand

- c. Anticipate and answer listener concerns and counterarguments effectively through the inclusion and arrangement of details, reasons, examples, and other elements.

Growing Pains in Texas Hill Country

Take a Stand

- d. Maintain a reasonable tone.

Growing Pains in Texas Hill Country

Take a Stand

Grades Nine Through Ten

(Language Arts.9-10) Writing

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.

2.1 Write biographical or autobiographical narratives or short stories:

- a. Relate a sequence of events and communicate the significance of the events to the audience.

Looking to the Future

(Language Arts.9-10) 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.

Growing Pains in Texas Hill Country

Take a Stand

(Language Arts.9-10) Listening and Speaking

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.

2.3 Apply appropriate interviewing techniques:

- a. Prepare and ask relevant questions.
People on the Move
 - b. Make notes of responses.
People on the Move
- 2.5. Deliver persuasive arguments (including evaluation and analysis of problems and solutions and causes and effects):
- a. Structure ideas and arguments in a coherent, logical fashion.
Growing Pains in Texas Hill Country
 - b. 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).
Growing Pains in Texas Hill Country
Take a Stand
 - c. Clarify and defend positions with precise and relevant evidence, including facts, expert opinions, quotations, expressions of commonly accepted beliefs, and logical reasoning.
Growing Pains in Texas Hill Country
Take a Stand
 - d. Anticipate and address the listener's concerns and counterarguments.
Growing Pains in Texas Hill Country
Take a Stand

Mathematics

Kindergarten

(Math.K) Number Sense

1.0 Students understand the relationship between numbers and quantities (I.e. that a set of objects has the same number of objects in different situations regardless of its position or arrangement:

1.1 Compare two or more sets of objects (up to ten objects in each group) and identify which set is equal to, more than, or less than the other.

Food for Thought

1.3 Know that the larger numbers describe sets with more objects in them than the smaller numbers have.

Food for Thought

(Math.K) Statistics, Data Analysis, and Probability

1.0 Students collect information about objects and events in their environment:

1.1 Pose information questions; collect data; and record the results using objects, pictures, and picture graphs.

The Stork and the Grim Reaper

(Math.K) Mathematical Reasoning

1.0 Students make decisions about how to set up a problem:

1.2 Use tools and strategies, such as manipulatives or sketches, to model problems.

Food for Thought

The Stork and the Grim Reaper

Grade One

(Math.1) Number Sense

1.0 Students understand and use numbers up to 100:

1.1 Count, read, and write whole numbers to 100.

Food for Thought

Population Circle

1.2 Compare and order whole numbers to 100 by using the symbols for less than, equal to, or greater than ($<$, $=$, $>$).

Food for Thought

3.0 Students use estimation strategies in computation and problem solving that involve numbers that use the ones, tens, and hundreds places:

3.1 Make reasonable estimates when comparing larger or smaller numbers.

Food for Thought

(Math.1) Statistics, Data Analysis, and Probability

1.0 Students organize, represent, and compare data by category on simple graphs and charts:

1.2 Represent and compare data (e.g., largest, smallest, most often, least often) by using pictures, bar graphs, tally charts, and picture graphs.

Food for Thought

Water, Water Everywhere (Elementary/Intermediate)

(Math.1) Mathematical Reasoning

1.0 Students make decisions about how to set up a problem:

1.2 Use tools and strategies, such as manipulatives or sketches, to model problems.
The Stork and the Grim Reaper

Grade Two

(Math.2) Number Sense

4.0 Students understand that fractions and decimals may refer to parts of a set and parts of a whole:

4.1 Recognize, name, and compare unit fractions from $1/12$ to $1/2$.
The Stork and the Grim Reaper

4.2 Recognize fractions of a whole and parts of a group (e.g., one-fourth of a pie, two-thirds of 15 balls).
The Stork and the Grim Reaper

(Math.2) Mathematical Reasoning

1.0 Students make decisions about how to set up a problem:

1.2 Use tools, such as manipulatives or sketches, to model problems.
Population Circle
The Stork and the Grim Reaper
Timber!
Water, Water Everywhere (Elementary/Intermediate)

Grade Three

(Math.3) Number Sense

2.0 Students calculate and solve problems involving addition, subtraction, multiplication, and division:

2.1 Find the sum or difference of two whole numbers between 0 and 10,000.
Timber!

(Math.3) Algebra and Functions

2.0 Students represent simple functional relationships:

2.2 Extend and recognize a linear pattern by its rules (e.g., the number of legs on a given number of horses may be calculated by counting by 4s or by multiplying the number of horses by 4).
Timber!

(Math.3) Measurement and Geometry

1.0 Students choose and use appropriate units and measurement tools to quantify the properties of objects:

1.1 Choose the appropriate tools and units (metric and U.S.) and estimate and measure the length, liquid volume, and weight/mass of given objects.
Measuring a Million
Water, Water Everywhere (Elementary/Intermediate)

(Math.3) Mathematical Reasoning

2.0 Students use strategies, skills, and concepts in finding solutions:

2.3 Use a variety of methods, such as words, numbers, symbols, charts, graphs, tables, diagrams, and models, to explain mathematical reasoning.

Population Circle
The Stork and the Grim Reaper
Timber!
Water, Water Everywhere (Elementary/Intermediate)

2.4 Express the solution clearly and logically by using the appropriate mathematical notation and terms and clear language; support solutions with evidence in both verbal and symbolic work.
Timber!

Grade Four

(Math.4) Number Sense

1.0 Students understand the place value of whole numbers and decimals to two decimal places and how whole numbers and decimals relate to simple fractions. Students use the concepts of negative numbers:

1.1 Read and write whole numbers in the millions.

Food for Thought
Measuring a Million
On the Double
Power of the Pyramids
Seeing Double

1.2 Order and compare whole numbers and decimals to two decimal places.

Food for Thought
On the Double

1.5 Explain different interpretations of fractions, for example, parts of a whole, parts of a set, and division of whole numbers by whole numbers; explain equivalents of fractions (see Standard 4.0).

Food for Thought
Water, Water Everywhere (Elementary/Intermediate)

(Math.4) Statistics, Data Analysis, and Probability

1.0 Students organize, represent, and interpret numerical and categorical data and clearly communicate their findings:

1.1 Formulate survey questions; systematically collect and represent data on a number line; and coordinate graphs, tables, and charts.

A World of Difference

1.3 Interpret one-and two-variable data graphs to answer questions about a situation.

Power of the Pyramids
Population Circle
World Real Estate

2.0 Students make predictions for simple probability situations:

2.2 Express outcomes of experimental probability situations verbally and numerically (e.g., 3 out of 4; $3/4$).

A World of Difference

(Math.4) Mathematical Reasoning

2.0 Students use strategies, skills, and concepts in finding solutions:

2.3 Use a variety of methods, such as words, numbers, symbols, charts, graphs, tables, diagrams, and models, to explain mathematical reasoning.

Population Circle
Stage Stepping

The Stork and the Grim Reaper
Timber!
Water, Water Everywhere (Elementary/Intermediate)
World Real Estate

2.4 Express the solution clearly and logically by using the appropriate mathematical notation and terms and clear language; support solutions with evidence in both verbal and symbolic work.

If Money Won't Buy It
On the Double

Grade Five

(Math.5) Number Sense

2.0 Students perform calculations and solve problems involving addition, subtraction, and simple multiplication and division of fractions and decimals:

2.1 Add, subtract, multiply, and divide with decimals; add with negative integers; subtract positive integers from negative integers; and verify the reasonableness of the results.

Measuring a Million
On the Double
Seeing Double
The Stork and the Grim Reaper
Timber!
Transportation Tally
Water, Water Everywhere (Elementary/Intermediate)

2.3 Solve simple problems, including ones arising in concrete situations, involving the addition and subtraction of fractions and mixed numbers (like and unlike denominators of 20 or less), and express answers in the simplest form.

A World of Difference

(Math.5) Algebra and Functions

1.0 Students use variables in simple expressions, compute the value of the expression for specific values of the variable, and plot and interpret the results:

1.1 Use information taken from a graph or equation to answer questions about a problem situation.

On the Double
Power of the Pyramids
Timber!
Transportation Tally
Water, Water Everywhere (Elementary/Intermediate)

(Math.5) Measurement and Geometry

1.0 Students understand and compute the volumes and areas of simple objects:

1.3 Understand the concept of volume and use the appropriate units in common measuring systems (i.e., cubic centimeter [cm³], cubic meter [m³], cubic inch [in³], cubic yard [yd³]) to compute the volume of rectangular solids.

Measuring a Million

(Math.5) Statistics, Data Analysis, and Probability

1.0 Students display, analyze, compare, and interpret different data sets, including data sets of different sizes:

1.2 Organize and display single-variable data in appropriate graphs and representations (e.g., histogram, circle graphs) and explain which types of graphs are appropriate for various data sets.

Power of the Pyramids

World Real Estate

1.3 Use fractions and percentages to compare data sets of different sizes.

Food for Thought
Power of the Pyramids
A World of Difference

(Math.5) Mathematical Reasoning

2.0 Students use strategies, skills, and concepts in finding solutions:

2.3 Use a variety of methods, such as words, numbers, symbols, charts, graphs, tables, diagrams, and models, to explain mathematical reasoning.

Food for Thought
If Money Won't Buy It
On the Double
Population Circle
Seeing Double
Stage Stepping
The Stork and the Grim Reaper
Timber!
Transportation Tally
Water, Water Everywhere (Elementary/Intermediate)
A World of Difference
World Real Estate

2.4 Express the solution clearly and logically by using the appropriate mathematical notation and terms and clear language; support solutions with evidence in both verbal and symbolic work.

If Money Won't Buy It
Measuring a Million
On the Double
Timber!
A World of Difference

2.5 Indicate the relative advantages of exact and approximate solutions to problems and give answers to a specified degree of accuracy.

The Stork and the Grim Reaper

(Math.5) Mathematical Reasoning

3.0 Students move beyond a particular problem by generalizing to other situations:

3.3 Develop generalizations of the results obtained and apply them in other circumstances.

On the Double
Timber!
Transportation Tally
A World of Difference

Grade Six

(Math.6) Number Sense

1.0 Students compare and order positive and negative fractions, decimals, and mixed numbers. Students solve problems involving fractions, ratios, proportions, and percentages:

1.2 Interpret and use ratios in different contexts (e.g., batting averages, miles per hour) to show the relative sizes of two quantities, using appropriate notations (a/b , a to b , $a:b$).

Measuring a Million
On the Double

Seeing Double
The Stork and the Grim Reaper
Timber!
Transportation Tally

2.0 Students calculate and solve problems involving addition, subtraction, multiplication, and division:

2.3 Solve addition, subtraction, multiplication, and division problems, including those arising in concrete situations that use positive and negative integers and combinations of these operations.

If Money Won't Buy It
Measuring a Million
On the Double
Power of the Pyramids
Seeing Double
Stage Stepping
Timber!
Transportation Tally

(Math.6) Algebra and Functions

1.0 Students write verbal expressions and sentences as algebraic expressions and equations; they evaluate algebraic expressions, solve simple linear equations, and graph and interpret their results:

1.1 Write and solve one-step linear equations in one variable.

On the Double
Power of the Pyramids
Transportation Tally

1.2 Write and evaluate an algebraic expression for a given situation, using up to three variables.

On the Double
Power of the Pyramids
Transportation Tally

2.0 Students analyze and use tables, graphs, and rules to solve problems involving rates and proportions:

2.1 Convert one unit of measurement to another (e.g., from feet to miles, from centimeters to inches).

Measuring a Million

(Math.6) Algebra and Functions

3.0 Students investigate geometric patterns and describe them algebraically:

3.1 Use variables in expressions describing geometric quantities (e.g., $P = 2w + 2l$, $A = \frac{1}{2}bh$, $C = \pi d$ - the formulas for the perimeter of a rectangle, the area of a triangle, and the circumference of a circle, respectively).

Measuring a Million

3.2 Express in symbolic form simple relationships arising from geometry.

Measuring a Million

(Math.6) Statistics, Data Analysis, and Probability

2.0 Students use data samples of a population and describe the characteristics and limitations of the samples:

2.1 Compare different samples of a population with the data from the entire population and identify a situation in which it makes sense to use a sample.

Family Perspective
Power of the Pyramids

2.5 Identify claims based on statistical data and, in simple cases, evaluate the validity of the claims.

A World of Difference

3.0 Students determine theoretical and experimental probabilities and use these to make predictions about events:

3.2 Use data to estimate the probability of future events (e.g., batting averages or number of accidents per mile driven).

A World of Difference

(Math.6) Mathematical Reasoning

1.0 Students make decisions about how to approach problems:

1.2 Formulate and justify mathematical conjectures based on a general description of the mathematical question or problem posed.

Measuring a Million

Transportation Tally

A World of Difference

2.0 Students use strategies, skills, and concepts in finding solutions:

2.4 Use a variety of methods, such as words, numbers, symbols, charts, graphs, tables, diagrams, and models, to explain mathematical reasoning.

Measuring a Million

Population Circle

Power of the Pyramids

Stage Stepping

Timber!

Transportation Tally

A World of Difference

2.7 Make precise calculations and check the validity of the results from the context of the problem.

Measuring a Million

On the Double

Power of the Pyramids

Timber!

A World of Difference

Grade Seven

(Math.7) Algebra and Functions

1.0 Students express quantitative relationships by using algebraic terminology, expressions, equations, inequalities, and graphs:

1.1 Use variables and appropriate operations to write an expression, an equation, an inequality, or a system of equations or inequalities that represents a verbal description (e.g., three less than a number, half as large as area A).

Measuring a Million

On the Double

Power of the Pyramids

Transportation Tally

1.5 Represent quantitative relationships graphically and interpret the meaning of a specific part of a graph in the situation represented by the graph.

Power of the Pyramids

(Math.7) Measurement and Geometry

1.0 Students choose appropriate units of measure and use ratios to convert within and between measurement systems to solve problems:

1.1 Compare weights, capacities, geometric measures, times, and temperatures within and between measurement systems (e.g., miles per hour and feet per second, cubic inches to cubic centimeters).
Measuring a Million

1.3 Use measures expressed as rates (e.g., speed, density) and measures expressed as products (e.g., person-days) to solve problems; check the units of the solutions; and use dimensional analysis to check the reasonableness of the answer.
On the Double
Transportation Tally

2.0 Students compute the perimeter, area, and volume of common geometric objects and use the results to find measures of less common objects. They know how perimeter, area, and volume are affected by changes of scale:

2.1 Use formulas routinely for finding the perimeter and area of basic two-dimensional figures and the surface area and volume of basic three-dimensional figures, including rectangles, parallelograms, trapezoids, squares, triangles, circles, prisms, and cylinders.
Measuring a Million

(Math.7) Mathematical Reasoning

1.0 Students make decisions about how to approach problems:

1.1 Analyze problems by identifying relationships, distinguishing relevant from irrelevant information, identifying missing information, sequencing and prioritizing information, and observing patterns.
Measuring a Million
Transportation Tally

1.2 Formulate and justify mathematical conjectures based on a general description of the mathematical question or problem posed.
Everything Is Connected
Measuring a Million
Transportation Tally
A World of Difference

2.0 Students use strategies, skills, and concepts in finding solutions:

2.3 Estimate unknown quantities graphically and solve for them by using logical reasoning and arithmetic and algebraic techniques.
Population Circle

2.5 Use a variety of methods, such as words, numbers, symbols, charts, graphs, tables, diagrams, and models, to explain mathematical reasoning.
Measuring a Million
Population Circle
Power of the Pyramids
Stage Stepping
Timber!
Transportation Tally
A World of Difference

2.8 Make precise calculations and check the validity of the results from the context of the problem.
Measuring a Million
On the Double
Power of the Pyramids

Grades Eight to Twelve

(Math.8-12) Algebra I

15.0 Students apply algebraic techniques to solve rate problems, work problems, and percent mixture problems.

Measuring a Million
On the Double
Power of the Pyramids
Stage Stepping
Transportation Tally
World Real Estate

(Math.8-12) Algebra II

19.0 Students use combinations and permutations to compute probabilities.

A World of Difference

(Math.8-12) Geometry

8.0 Students know, derive, and solve problems involving the perimeter, circumference, area, volume, lateral area, and surface area of common geometric figures.

Measuring a Million

(Math.8-12) Probability and Statistics

1.0 Students know the definition of the notion of independent events and can use the rules for addition, multiplication, and complementation to solve for probabilities of particular events in finite sample spaces.

A World of Difference

8.0 Students organize and describe distributions of data by using a number of different methods, including frequency tables, histograms, standard line and bar graphs, stem-and-leaf displays, scatterplots, and box-and-whisker plots.

Population Circle
Power of the Pyramids
Timber!
World Real Estate

(Math.8-12) Advanced Placement Probability and Statistics

1.0 Students solve probability problems with finite sample spaces by using the rules for addition, multiplication, and complementation for probability distributions and understand the simplifications that arise with independent events.

A World of Difference

14.0 Students organize and describe distributions of data by using a number of different methods, including frequency tables, histograms, standard line graphs and bar graphs, stem-and-leaf displays, scatterplots, and box-and-whisker plots.

Power of the Pyramids
World Real Estate

Science

Kindergarten

(Science.K) 3. Earth Sciences. Earth is composed of land, air, and water. As a basis for understanding this concept:

c. Students know how to identify resources from Earth that are used in everyday life and understand that many resources can be conserved.

Treasures Underground

(Science.K) 4. Investigation and Experimentation. 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. Observe common objects by using the five senses.

Population Circle

e. Communicate observations orally and through drawings.

Treasures Underground

Population Circle

Grade One

(Science.1) 2. Life Sciences. Plants and animals meet their needs in different ways. As a basis for understanding this concept:

a. Students know different plants and animals inhabit different kinds of environments and have external features that help them thrive in different kinds of places.

b. Students know both plants and animals need water, animals need food, and plants need light.

Cougar Hunt

c. Students know animals eat plants or other animals for food and may also use plants or even other animals for shelter and nesting.

Cougar Hunt

(Science.1) 4. Investigation and Experimentation. 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:

b. Record observations and data with pictures, numbers, or written statements.

Cougar Hunt

Grade Two

(Science.2) 3. Earth Sciences. Earth is made of materials that have distinct properties and provide resources for human activities. As a basis for understanding this concept:

e. Students know rock, water, plants, and soil provide many resources, including food, fuel, and building materials, that humans use.

Timber!

Water, Water Everywhere (Elementary/Intermediate)

(Science.2) 4. Investigation and Experimentation. 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. Make predictions based on observed patterns and not random guessing.

Population Circle
The Stork and the Grim Reaper
Timber!

- g. Follow oral instructions for a scientific investigation.

Treasures Underground
Population Circle
The Stork and the Grim Reaper
Timber!
Water, Water Everywhere (Elementary/Intermediate)

Grade Three

(Science.3) 3. Life Sciences. Adaptations in physical structure or behavior may improve an organism's chance for survival. As a basis for understanding this concept:

- b. Students know examples of diverse life forms in different environments, such as oceans, deserts, tundra, forests, grasslands, and wetlands.

Cougar Hunt

- c. Students know living things cause changes in the environment in which they live: some of these changes are detrimental to the organism or other organisms, and some are beneficial.

Treasures Underground
Population Circle
The Stork and the Grim Reaper
Timber!
Who Polluted the Potomac?

- d. Students know when the environment changes, some plants and animals survive and reproduce; others die or move to new locations.

Cougar Hunt
Who Polluted the Potomac?

(Science.3) 5. Investigation and Experimentation. 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:

- c. Use numerical data in describing and comparing objects, events, and measurements.

Cougar Hunt
Food for Thought
Population Circle
The Stork and the Grim Reaper
Timber!
Water, Water Everywhere (Elementary/Intermediate)

- d. Predict the outcome of a simple investigation and compare the result with the prediction.

Population Circle
The Stork and the Grim Reaper
Timber!

- e. Collect data in an investigation and analyze those data to develop a logical conclusion.

Cougar Hunt
Food for Thought
Treasures Underground
Population Circle
The Stork and the Grim Reaper
Timber!
Water, Water Everywhere (Elementary/Intermediate)
Who Polluted the Potomac?

Grade Four

(Science.4) 2. Life Sciences. All organisms need energy and matter to live and grow. As a basis for understanding this concept:

c. Students know decomposers, including many fungi, insects, and microorganisms, recycle matter from dead plants and animals.

Stash the Trash

(Science.4) 3. Life Sciences. Living organisms depend on one another and on their environment for survival. As a basis for understanding this concept:

b. Students know that in any particular environment, some kinds of plants and animals survive well, some survive less well, and some cannot survive at all.

Cougar Hunt
A World of Difference
What Is a Population?

c. Students know many plants depend on animals for pollination and seed dispersal, and animals depend on plants for food and shelter.

Timber!

(Science.4) 6. Investigation and Experimentation. 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:

b. Measure and estimate the weight, length, or volume of objects.

Measuring a Million

c. Formulate and justify predictions based on cause-and-effect relationships.

Power of the Pyramids
Stage Stepping
The Stork and the Grim Reaper
Timber!
Who Polluted the Potomac?
A World of Difference

e. Construct and interpret graphs from measurements.

Population Circle
Power of the Pyramids

f. Follow a set of written instructions for a scientific investigation.

Seeing Double
Stash the Trash
Timber!

Grade Five

(Science.5) 3. Earth Sciences. Water on Earth moves between the oceans and land through the processes of evaporation and condensation. As a basis for understanding this concept:

a. Students know most of Earth's water is present as salt water in the oceans, which cover most of Earth's surface.

Water, Water Everywhere (Elementary/Intermediate)

d. Students know that the amount of fresh water located in rivers, lakes, underground sources, and glaciers is limited and that its availability can be extended by recycling and decreasing the use of water.

Water, Water Everywhere (Elementary/Intermediate)

Who Polluted the Potomac?

(Science.5) 6. Investigation and Experimentation. 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:

c. Plan and conduct a simple investigation based on a student-developed question and write instructions others can follow to carry out the procedure.

Stash the Trash

f. Select appropriate tools (e.g., thermometers, meter sticks, balances, and graduated cylinders) and make quantitative observations.

Measuring a Million

Water, Water Everywhere (Elementary/Intermediate)

g. Record data by using appropriate graphic representations (including charts, graphs, and labeled diagrams) and make inferences based on those data.

On the Double

Population Circle

Power of the Pyramids

Seeing Double

Timber!

Water, Water Everywhere (Elementary/Intermediate)

A World of Difference

World Real Estate

h. Draw conclusions from scientific evidence and indicate whether further information is needed to support a specific conclusion.

Cougar Hunt

On the Double

Population Circle

Power of the Pyramids

Seeing Double

Stage Stepping

The Stork and the Grim Reaper

Timber!

Water, Water Everywhere (Elementary/Intermediate)

Who Polluted the Potomac?

A World of Difference

Grade Six: Focus on Earth Sciences

(Science.6) 5. Ecology (Life Sciences). Organisms in ecosystems exchange energy and nutrients among themselves and with the environment. As a basis for understanding this concept:

b. Students know matter is transferred over time from one organism to others in the food web and between organisms and the physical environment.

Cougar Hunt
Treasures Underground

c. Students know populations of organisms can be categorized by the functions they serve in an ecosystem.
The Balance of Nature

d. Students know different kinds of organisms may play similar ecological roles in similar biomes.
Cougar Hunt

e. Students know the number and types of organisms an ecosystem can support depends on the resources available and on abiotic factors, such as quantities of light and water, a range of temperatures, and soil composition.

Cougar Hunt
Food for Thought
Growing Pains in Texas Hill Country
Treasures Underground
The More The Merrier?
The Stork and the Grim Reaper
Timber!
Water, Water Everywhere (Elementary/Intermediate)
A World of Difference
The Balance of Nature

(Science.6) 6. Resources. Sources of energy and materials differ in amounts, distribution, usefulness, and the time required for their formation. As a basis for understanding this concept:

a. Students know the utility of energy sources is determined by factors that are involved in converting these sources to useful forms and the consequences of the conversion process.

Transportation Tally
The Balance of Nature

b. Students know different natural energy and material resources, including air, soil, rocks, minerals, petroleum, fresh water, wildlife, and forests, and know how to classify them as renewable or nonrenewable.

Food for Thought
Treasures Underground
Take a Stand
Timber!
Water, Water Everywhere (Elementary/Intermediate)

c. Students know the natural origin of the materials used to make common objects.
Treasures Underground

(Science.6) 7. Investigation and Experimentation. 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. Develop a hypothesis.
Population Circle

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.

Measuring a Million

The Stork and the Grim Reaper

Timber!

Water, Water Everywhere (Elementary/Intermediate)

Who Polluted the Potomac?

c. Construct appropriate graphs from data and develop qualitative statements about the relationships between variables.

Population Circle

Power of the Pyramids

Stage Stepping

Timber!

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

Measuring a Million

e. Recognize whether evidence is consistent with a proposed explanation.

Eco Ethics

Take a Stand

Grade Seven: Focus on Life Sciences

(Science.7) 7. Investigation and Experimentation. 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.

Measuring a Million

The Stork and the Grim Reaper

Timber!

Water, Water Everywhere (Elementary/Intermediate)

Who Polluted the Potomac?

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.

Take a Stand

c. Communicate the logical connection among hypotheses, science concepts, tests conducted, data collected, and conclusions drawn from the scientific evidence.

Cougar Hunt

Stage Stepping

A World of Difference

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

Measuring a Million

Grade Eight: Focus on Physical Sciences

(Science.8) 5. Reactions. Chemical reactions are processes in which atoms are rearranged into different combinations of molecules. As a basis for understanding this concept:

(Science.8) 9. Investigation and Experimentation. 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:

e. Construct appropriate graphs from data and develop quantitative statements about the relationships between variables.

Population Circle
Power of the Pyramids
Stage Stepping
Timber!

g. Distinguish between linear and nonlinear relationships on a graph of data.

Population Circle
Timber!

Grades Nine to Twelve: Biology/Life Sciences

6. Ecology. 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.

A World of Difference

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.

Everything Is Connected
A World of Difference

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

Family Perspective
On the Double
Power of the Pyramids
Stage Stepping

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

For the Common Good

Grades Nine to Twelve: Investigation and Experimentation

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:

a. Select and use appropriate tools and technology (such as computer-linked probes, spreadsheets, and graphing calculators) to perform tests, collect data, analyze relationships, and display data.

Power of the Pyramids

d. Formulate explanations by using logic and evidence.

Growing Pains in Texas Hill Country
Power of the Pyramids
Take a Stand

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

- Eco Ethics
- Everything Is Connected
- For the Common Good
- Stage Stepping
- Take a Stand

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.

- Eco Ethics
- Everything Is Connected
- Family Perspective
- Food for Thought
- For the Common Good
- Growing Pains in Texas Hill Country
- Power of the Pyramids
- Stage Stepping
- Take a Stand
- A World of Difference
- World Real Estate