

A Correlation of
Population Connection Materials

from

People and the Planet:
Lessons for a Sustainable Future

to

Georgia Performance Standards

Organized by:

1. Grade

2. Subject

3. Standard

4. Population Connection Activity

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Kindergarten

Mathematics

NUMBERS AND OPERATIONS

MKN1. Students will connect numerals to the quantities they represent.

- a. Count a number of objects up to 30.

Food for Thought

- e. Compare two or more sets of objects (1-10) and identify which set is equal to, more than, or less than the other.

Food for Thought

PROCESS SKILLS

MKP1. Students will solve problems that arise in mathematics and in other contexts.

- a. Solve non-routine word problems using the strategy act out the problem or use objects.

Food for Thought

Population Circle

MKP2. Students will investigate, develop, and evaluate mathematical arguments.

Population Circle

MKP5. Students will create and use pictures, manipulatives, models, and symbols to organize, record, and communicate mathematical ideas.

Food for Thought

Population Circle

Science

HABITS OF MIND

SKCS1. Students will be aware of the importance of curiosity, honesty, openness, and skepticism in science and will exhibit these traits in their own efforts to understand how the world works.

- a. Raise questions about the world around you and be willing to seek answers to some of the questions by making careful observations (5 senses) and trying things out.

Population Circle

Treasures Underground

SKCS2. Students will have the computation and estimation skills necessary for analyzing data and following scientific explanations.

- a. Use whole numbers for counting, identifying, and describing things and experiences.

Population Circle

Treasures Underground

SKCS4. Students will use the ideas of system, model, change, and scale in exploring scientific and technological matters.

- a. Use a model—such as a toy or a picture—to describe a feature of the primary thing.

Treasures Underground

- b. Describe changes in size, weight, color, or movement, and note which of their other qualities remains the same. (For example, playing “Follow the Leader” and noting the changes.)

Population Circle

SKCS5. Students will communicate scientific ideas and activities clearly.

- a. Describe and compare things in terms of number, shape, texture, size, weight, color, and motion.

Population Circle

Treasures Underground

NATURE OF SCIENCE

SKCS6. Students will understand the important features of the process of scientific inquiry. Students will apply the following to inquiry learning practices:

- a. In doing science, it is often helpful to work with a team and to share findings with others.
Population Circle

Social Studies

HISTORICAL UNDERSTANDINGS

SSKH3. The student will correctly use words and phrases related to chronology and time to explain how things change.

- a. Now, long ago.
Population Circle

- b. Before, after.
Population Circle

- g. Past, present, future.
Population Circle

Grade One

Mathematics

NUMBER AND OPERATIONS

- M1N1. Students will estimate, model, compare, order, and represent whole numbers up to 100.
- Represent numbers less than 100 using a variety of models, diagrams, and number sentences. Represent numbers larger than 10 in terms of tens and ones using counters and pictures.
Food for Thought
Population Circle
 - Correctly count and represent the number of objects in a set using numerals.
Population Circle
Treasures Underground

PROCESS SKILLS

- M1P1. Students will solve problems that arise in mathematics and in other contexts.
- Solve non-routine word problems using the strategy make a picture or diagram and continue to develop the strategy act out or use objects learned in kindergarten.
Population Circle
- M1P2. Students will investigate, develop, and evaluate mathematical arguments.
Population Circle
- M1P4. Students understand how mathematical ideas interconnect and build on one another and apply mathematics in other content areas.
Food for Thought
Population Circle
Treasures Underground
- M1P5. Students will create and use pictures, manipulatives, models, and symbols to organize, record, and communicate mathematical ideas.
Food for Thought
Population Circle

Science

HABITS OF MIND

- S1CS1. Students will be aware of the importance of curiosity, honesty, openness, and skepticism in science and will exhibit these traits in their own efforts to understand how the world works.
- Raise questions about the world around them and be willing to seek answers to some of the questions by making careful observations and measurements and trying to figure things out.
Cougar Hunt
Population Circle
Treasures Underground
- S1CS2. Students will have the computation and estimation skills necessary for analyzing data and following scientific explanations.
- Use whole numbers in ordering, counting, identifying, measuring, and describing things and experiences.
Cougar Hunt
Population Circle
Treasures Underground
- S1CS4. Students will use the ideas of system, model, change, and scale in exploring scientific and technological matters.
- Use a model—such as a toy or a picture—to describe a feature of the primary thing.
Treasures Underground

b. Describe changes in the size, weight, color, or movement of things, and note which of their other qualities remain the same during a specific change.

Population Circle

S1CS5. Students will communicate scientific ideas and activities clearly.

a. Describe and compare things in terms of number, shape, texture, size, weight, color, and motion.

Population Circle

Treasures Underground

c. Use simple pictographs and bar graphs to communicate data.

Cougar Hunt

LIFE SCIENCE

S1L1. Students will investigate the characteristics and basic needs of plants and animals.

b. Identify the basic needs of an animal.

- Air
- Water
- Food
- Shelter

Cougar Hunt

INTERDEPENDENCE OF LIFE

S1L1a,b,c. Animals eat plants or other animals for food and may also use plants (or even other animals) for shelter and nesting.

Cougar Hunt

Grade Two

Mathematics

NUMBERS AND OPERATIONS

M2N1. Students will understand the place value representation of whole numbers through four digits.

- b. Understand the relative magnitudes of numbers using 10 as a unit, 100 as a unit, or 1000 as a unit.

Represent 2-digit numbers with drawings of tens and ones and 3-digit numbers with drawings of hundreds, tens, and ones.

Food for Thought

Population Circle

M2N4. Students will understand and compare common fractions with small denominators.

- a. Model, identify, label, and compare fractions (thirds, sixths, eighths, tenths) as a representation of equal parts of a whole or of a set.

Earth: The Apple of Our Eye

DATA ANALYSIS AND PROBABILITY

M2D1. Students will create simple tables and graphs and interpret their meaning.

- a. Organize and display data using picture graphs, Venn diagrams, bar graphs, and simple charts/tables to record results.

Food for Thought

- b. Know how to interpret picture graphs, Venn diagrams, and bar graphs.

Food for Thought

PROCESS SKILLS

M2P1. Students will solve problems that arise in mathematics and in other contexts.

- a. Solve non-routine word problems using the strategies of use or look for a pattern or guess and check as well as all strategies learned in previous grades.

Population Circle

M2P2. Students will be able to investigate, develop, and evaluate mathematical arguments.

Population Circle

M2P4. Students understand how mathematical ideas interconnect and build on one another and apply mathematics in other content areas.

Food for Thought

Population Circle

M2P5. Students will be able to create and use pictures, manipulatives, models, and symbols to organize, record, and communicate mathematical ideas.

Food for Thought

Population Circle

Science

HABITS OF MIND

S2CS1. Students will be aware of the importance of curiosity, honesty, openness, and skepticism in science and will exhibit these traits in their own efforts to understand how the world works.

- a. Raise questions about the world around them and be willing to seek answers to some of the questions by making careful observations and measurements and trying to figure things out.

Cougar Hunt

Population Circle

Treasures Underground

S2CS2. Students will have the computation and estimation skills necessary for analyzing data and following scientific explanations.

a. Use whole numbers in ordering, counting, identifying, measuring, and describing things and experiences.

Cougar Hunt

Population Circle

Treasures Underground

S2CS4. Students will use the ideas of system, model, change, and scale in exploring scientific and technological matters.

b. Use a model—such as a toy or a picture—to describe a feature of the primary thing.

Treasures Underground

c. Describe changes in the size, weight, color, or movement of things, and note which of their other qualities remain the same during a specific change.

Population Circle

S2CS5. Students will communicate scientific ideas and activities clearly.

a. Describe and compare things in terms of number, shape, texture, size, weight, color, and motion.

Treasures Underground

THE NATURE OF SCIENCE

S2CS7. Students will understand important features of the process of scientific inquiry. Students will apply the following to inquiry learning practices:

b. In doing science, it is often helpful to work as a team. All team members should reach their own individual conclusions and share their understandings with other members of the team in order to develop a consensus.

Cougar Hunt

Population Circle

Grade Three

English Language Arts

LISTENING/SPEAKING/VIEWING

ELA3LSV1. The student uses oral and visual strategies to communicate. The student

- a. Adapts oral language to fit the situation by following the rules of conversation with peers and adults.
Who Polluted the Potomac?
- b. Recalls, interprets, and summarizes information presented orally.
Who Polluted the Potomac?

Mathematics

NUMBER AND OPERATIONS

M3N2. Students will further develop their skills of addition and subtraction and apply them in problem solving.

- b. Use mental math and estimation strategies to add and subtract.
Seeing Double
- c. Solve problems requiring addition and subtraction.
Timber!

M3N5. Students will understand the meaning of decimal fractions and common fractions in simple cases and apply them in problem-solving situations.

- d. Know and use decimal fractions and common fractions to represent the size of parts created by equal divisions of a whole.
Earth: The Apple of Our Eye
- g. Solve problems involving fractions.
Earth: The Apple of Our Eye

ALGEBRA

M3A1. Students will use mathematical expressions to represent relationships between quantities and interpret given expressions.

- a. Describe and extend numeric and geometric patterns.
Population Circle
The Stork and the Grim Reaper
Timber!

DATA ANALYSIS

M3D1. Students will create and interpret simple tables and graphs.

- a. Solve problems by organizing and displaying data in bar graphs and tables.
Timber!

PROCESS SKILLS

M3P1. Students will solve problems that arise in mathematics and in other contexts.

- a. Solve non-routine word problems using the strategy of logical reasoning as well as all strategies learned in previous grades.
Cougar Hunt
Earth: The Apple of Our Eye
The Stork and the Grim Reaper
Timber!
Water, Water Everywhere
- b. Solve single and multi-step routine word problems related to all appropriate third grade math standards.
Cougar Hunt
Earth: The Apple of Our Eye

Timber!
Water, Water Everywhere

M3P2. Students will investigate, develop, and evaluate mathematical arguments.

Earth: The Apple of Our Eye
Population Circle
The Stork and the Grim Reaper
Water, Water Everywhere

M3P4. Students will understand how mathematical ideas interconnect and build on one another and apply mathematics in other content areas.

Cougar Hunt
Earth: The Apple of Our Eye
Food for Thought
Population Circle
The Stork and the Grim Reaper
Timber!
Water, Water Everywhere

M3P5. Students will create and use pictures, manipulatives, models, and symbols to organize, record, and communicate mathematical ideas.

Earth: The Apple of Our Eye
Food for Thought
Population Circle
The Stork and the Grim Reaper
Timber!
Water, Water Everywhere

Science

HABITS OF MIND

S3CS1. Students will be aware of the importance of curiosity, honesty, openness, and skepticism in science and will exhibit these traits in their own efforts to understand how the world works.

b. Offer reasons for findings and consider reasons suggested by others.

Cougar Hunt
Population Circle
Treasures Underground

S3CS4. Students will use ideas of system, model, change, and scale in exploring scientific and technological matters.

b. Use geometric figures, number sequences, graphs, diagrams, sketches, number lines, maps, and stories to represent corresponding features of objects, events, and processes in the real world.

Cougar Hunt
Population Circle
The Stork and the Grim Reaper
Treasures Underground

S3CS5. Students will communicate scientific ideas and activities clearly.

c. Use numerical data in describing and comparing objects and events.

Population Circle
The Stork and the Grim Reaper

THE NATURE OF SCIENCE

S3CS8. Students will understand important features of the process of scientific inquiry. Students will apply the following to inquiry learning practices:

a. Scientific investigations may take many different forms, including observing what things are like or what is happening somewhere, collecting specimens for analysis, and doing experiments.

Cougar Hunt
Population Circle
The Stork and the Grim Reaper
Treasures Underground

b. Clear and active communication is an essential part of doing science. It enables scientists to inform others about their work, expose their ideas to criticism by other scientists, and stay informed about scientific discoveries around the world.

Population Circle
Treasures Underground

LIFE SCIENCE

S3L1. Students will investigate the habitats of different organisms and the dependence of organisms on their habitat.

d. Explain what will happen to an organism if the habitat is changed.

Cougar Hunt

S3L2. Students will recognize the effects of pollution and humans on the environment.

b. Identify ways to protect the environment.

- Conservation of resources
- Recycling of materials

Earth: The Apple of Our Eye
Treasures Underground
Water, Water Everywhere

INTERDEPENDENCE OF LIFE

S3L1b and S4L1a. Changes in an organism's habitat are sometimes beneficial to it and sometimes harmful.

Cougar Hunt
Who Polluted the Potomac?

Social Studies

ECONOMIC UNDERSTANDINGS

SS3E1. The student will describe the four types of productive resources.

a. Natural (land).

Earth: The Apple of Our Eye
Timber!
Treasures Underground

SS3E3. The student will give examples of interdependence and trade and will explain how voluntary exchange benefits both parties.

a. Describe the interdependence of consumers and producers of goods and services.

Earth: The Apple of Our Eye
Timber!
Treasures Underground

c. Explain that some things are made locally, some elsewhere in the country, and some in other countries

Earth: The Apple of Our Eye

Grade Four

English Language Arts

LISTENING, SPEAKING, AND VIEWING

ELA4LSV1. The student participates in student-to-teacher, student-to-student, and group verbal interactions. The student

b. Asks relevant questions.

Cougar Hunt

Earth: The Apple of Our Eye

Treasures Underground

Timber!

Water, Water Everywhere

Who Polluted the Potomac?

c. Responds to questions with appropriate information.

Cougar Hunt

Earth: The Apple of Our Eye

Population Circle

The Stork and the Grim Reaper

Timber!

Treasures Underground

Water, Water Everywhere

Who Polluted the Potomac?

i. Responds appropriately to comments and questions.

Cougar Hunt

Earth: The Apple of Our Eye

Treasures Underground

Water, Water Everywhere

Who Polluted the Potomac?

j. Volunteers contributions and responds when directly solicited by teacher or discussion leader.

Cougar Hunt

Earth: The Apple of Our Eye

Population Circle

The Stork and the Grim Reaper

Timber!

Treasures Underground

Water, Water Everywhere

Who Polluted the Potomac?

Mathematics

NUMBER AND OPERATIONS

M4N1. Students will further develop their understanding of how whole numbers are represented in the base-ten numeration system.

a. Identify place value names and places from hundredths through one million.

Power of the Pyramids

Seeing Double

M4N4. Students will further develop their understanding of division of whole numbers and divide in problem solving situations without calculators.

b. Solve problems involving division by a 2-digit number (including those that generate a remainder).

On the Double

Power of the Pyramids

M4N6. Students will further develop their understanding of the meaning of common fractions and use them in computations.

- a. Understand representations of simple equivalent fractions.
Earth: The Apple of Our Eye

ALGEBRA

M4A1. Students will represent and interpret mathematical relationships in quantitative expressions.

- a. Understand and apply patterns and rules to describe relationships and solve problems.
Population Circle
The Stork and the Grim Reaper
Timber!

DATA ANALYSIS

M4D1. Students will gather, organize, and display data according to the situation and compare related features.

- a. Represent data in bar, line and pictographs.
Earth: The Apple of Our Eye
Food for Thought
Timber!

PROCESS SKILLS

M4P1. Using the appropriate technology, students will solve problems that arise in mathematics and in other contexts.

- a. Solve non-routine word problems using the strategies of work backwards, use or make a table, and make an organized list as well as all strategies learned in previous grades.
Timber!
- b. Solve single and multi-step routine word problems related to all appropriate fourth grade math standards.
Earth: The Apple of Our Eye
Timber!
Water, Water Everywhere
- c. Determine the operation(s) needed to solve a problem.
The Stork and the Grim Reaper
Timber!

M4P2. Students will investigate, develop, and evaluate mathematical arguments.

- Earth: The Apple of Our Eye
Population Circle
Seeing Double
The Stork and the Grim Reaper
Timber!
Water, Water Everywhere

M4P3. Students will use the language of mathematics to express ideas precisely.

- Earth: The Apple of Our Eye
Population Circle
The Stork and the Grim Reaper
Timber!
Water, Water Everywhere

M4P4. Students will understand how mathematical ideas interconnect and build on one another and apply mathematics in other content areas.

- Earth: The Apple of Our Eye
Population Circle
The Stork and the Grim Reaper
Timber!

Water, Water Everywhere

M4P5. Students will create and use pictures, manipulatives, models, and symbols to organize, record, and communicate mathematical ideas.

Earth: The Apple of Our Eye

Population Circle

The Stork and the Grim Reaper

Timber!

Water, Water Everywhere

Science

HABITS OF MIND

S4CS1. Students will be aware of the importance of curiosity, honesty, openness, and skepticism in science and will exhibit these traits in their own efforts to understand how the world works.

c. Offer reasons for findings and consider reasons suggested by others.

Cougar Hunt

Earth: The Apple of Our Eye

Population Circle

The Stork and the Grim Reaper

Timber!

Treasures Underground

Water, Water Everywhere

Who Polluted the Potomac?

S4CS2. Students will have the computation and estimation skills necessary for analyzing data and following scientific explanations.

a. Add, subtract, multiply, and divide whole numbers mentally, on paper, and with a calculator.

Earth: The Apple of Our Eye

Timber!

S4CS4. Students will use ideas of system, model, change, and scale in exploring scientific and technological matters.

b. Use geometric figures, number sequences, graphs, diagrams, sketches, number lines, maps, and stories to represent corresponding features of objects, events, and processes in the real world. Identify ways in which the representations do not match their original counterparts.

Earth: The Apple of Our Eye

Population Circle

The Stork and the Grim Reaper

Timber!

Water, Water Everywhere

c. Identify patterns of change in things—such as steady, repetitive, or irregular change—using records, tables, or graphs of measurements where appropriate.

Population Circle

The Stork and the Grim Reaper

Timber!

S4CS5. Students will communicate scientific ideas and activities clearly.

c. Use numerical data in describing and comparing objects and events.

Earth: The Apple of Our Eye

Population Circle

The Stork and the Grim Reaper

Timber!

Water, Water Everywhere

THE NATURE OF SCIENCE

S4CS8. Students will understand important features of the process of scientific inquiry. Students will apply the following to inquiry learning practices:

a. Scientific investigations may take many different forms, including observing what things are like or what is happening somewhere, collecting specimens for analysis, and doing experiments.

Cougar Hunt

Earth: The Apple of Our Eye

Population Circle

The Stork and the Grim Reaper

Timber!

Treasures Underground

Water, Water Everywhere

Who Polluted the Potomac?

LIFE SCIENCE

S4L1. Students will describe the roles of organisms and the flow of energy within an ecosystem.

c. Predict how changes in the environment would affect a community (ecosystem) of organisms.

Cougar Hunt

Treasures Underground

Who Polluted the Potomac?

d. Predict effects on a population if some of the plants or animals in the community are scarce or if there are too many.

Cougar Hunt

The Stork and the Grim Reaper

INTERDEPENDENCE OF LIFE

S3L1b and S4L1a. Changes in an organism's habitat are sometimes beneficial to it and sometimes harmful.

Cougar Hunt

Who Polluted the Potomac?

Social Studies

CIVIC/GOVERNMENT UNDERSTANDINGS

SS4G2. The student will describe how physical systems affect human systems.

b. Describe how the early explorers (SS4H2.a) adapted, or failed to adapt to the various physical environments in which they traveled.

Who Polluted the Potomac?

SS4CG4. The student will explain the importance for Americans to share certain central democratic beliefs and principles both personal and civic.

a. Explain the necessity of respecting the rights of others and promoting the common good.

Cougar Hunt

Who Polluted the Potomac?

b. Explain the necessity of obeying reasonable laws/rules voluntarily, and explain why it is important for citizens in a democratic society participate to in public (civic) life (staying informed, voting, volunteering, communicating with public officials).

Who Polluted the Potomac?

Grade Five

English Language Arts

LISTENING, SPEAKING, AND VIEWING

ELA5LSV1. The student participates in student-to-teacher, student-to-student, and group verbal interactions. The student

b. Asks relevant questions.

Cougar Hunt

Earth: The Apple of Our Eye

Timber!

Treasures Underground

Water, Water Everywhere

Who Polluted the Potomac?

c. Responds to questions with appropriate information.

Cougar Hunt

Earth: The Apple of Our Eye

Population Circle

The Stork and the Grim Reaper

Timber!

Treasures Underground

Water, Water Everywhere

Who Polluted the Potomac?

i. Responds appropriately to comments and questions.

Earth: The Apple of Our Eye

The Stork and the Grim Reaper

Timber!

Treasures Underground

Water, Water Everywhere

Who Polluted the Potomac?

j. Volunteers contributions and responds when directly solicited by teacher or discussion leader.

Cougar Hunt

Earth: The Apple of Our Eye

Population Circle

The Stork and the Grim Reaper

Timber!

Treasures Underground

Water, Water Everywhere

Who Polluted the Potomac?

Mathematics

NUMBER AND OPERATIONS

M5N2. Students will further develop their understanding of decimal fractions as part of the base-ten number system.

a. Understand place value.

Food for Thought

Seeing Double

M5N3. Students will further develop their understanding of the meaning of multiplication and division with decimal fractions and use them.

a. Model multiplication and division of decimal fractions by another decimal fraction.

On the Double

Power of the Pyramids

MEASUREMENT

- M5M3. Students will measure capacity with appropriately chosen units and tools.
- Use milliliters, liters, fluid ounces, cups, pints, quarts, and gallons to measure capacity.
The Stork and the Grim Reaper
Water, Water Everywhere

ALGEBRA

- M5A1. Students will represent and interpret the relationships between quantities algebraically.
- Use variables, such as n or x , for unknown quantities in algebraic expressions.
Transportation Tally

DATA ANALYSIS

- M5D1. Students will analyze graphs.
- Analyze data presented in a graph.
Earth: The Apple of Our Eye
Power of the Pyramids
Timber!
- M5D2. Students will collect, organize, and display data using the most appropriate graph.
- Population Circle
Power of the Pyramids
Timber!

PROCESS SKILLS

- M5P1. Using the appropriate technology, students will solve problems that arise in mathematics and in other contexts.
- Solve non-routine word problems using the strategy of make it simpler as well as all strategies learned in previous grades.
Earth: The Apple of Our Eye
Timber!
Water, Water Everywhere
 - Solve single and multi-step routine word problems related to all appropriate fifth grade math standards.
The Stork and the Grim Reaper
Timber!
 - Determine the operation(s) needed to solve a problem.
Measuring a Million
The Stork and the Grim Reaper
- M5P2. Students will investigate, develop, and evaluate mathematical arguments.
- Earth: The Apple of Our Eye
Seeing Double
The Stork and the Grim Reaper
Timber!
Water, Water Everywhere
- M5P3. Students will use the language of mathematics to express ideas precisely.
- Earth: The Apple of Our Eye
Seeing Double
The Stork and the Grim Reaper
Timber!
Water, Water Everywhere

M5P4. Students will understand how mathematical ideas interconnect and build on one another and apply mathematics in other content areas.

Earth: The Apple of Our Eye
Population Circle
Seeing Double
The Stork and the Grim Reaper
Timber!
Water, Water Everywhere

M5P5. Students will create and use pictures, manipulatives, models, and symbols to organize, record, and communicate mathematical ideas.

Earth: The Apple of Our Eye
Population Circle
The Stork and the Grim Reaper
Timber!
Water, Water Everywhere

Science

HABITS OF MIND

S5CS1. Students will be aware of the importance of curiosity, honesty, openness, and skepticism in science and will exhibit these traits in their own efforts to understand how the world works.

a. Keep records of investigations and observations and do not alter the records later.

Earth: The Apple of Our Eye
Population Circle
Timber!

c. Offer reasons for findings and consider reasons suggested by others.

Cougar Hunt
Earth: The Apple of Our Eye
Population Circle
Timber!
Treasures Underground
Water, Water Everywhere
Who Polluted the Potomac?

S5CS2. Students will have the computation and estimation skills necessary for analyzing data and following scientific explanations.

a. Add, subtract, multiply, and divide whole numbers mentally, on paper, and with a calculator.

Earth: The Apple of Our Eye
Population Circle
The Stork and the Grim Reaper
Timber!
Water, Water Everywhere

S5CS4. Students will use ideas of system, model, change, and scale in exploring scientific and technological matters.

c. Identify patterns of change in things—such as steady, repetitive, or irregular change—using records, tables, or graphs of measurements where appropriate.

Population Circle
The Stork and the Grim Reaper
Timber!

S5CS5. Students will communicate scientific ideas and activities clearly.

c. Use numerical data in describing and comparing objects and events.

Earth: The Apple of Our Eye
Population Circle

The Stork and the Grim Reaper
Timber!
Water, Water Everywhere

THE NATURE OF SCIENCE

S5CS8. Students will understand important features of the process of scientific inquiry. Students will apply the following to inquiry learning practices:

a. Scientific investigations may take many different forms, including observing what things are like or what is happening somewhere, collecting specimens for analysis, and doing experiments.

Cougar Hunt
Earth: The Apple of Our Eye
Population Circle
The Stork and the Grim Reaper
Timber!
Treasures Underground
Water, Water Everywhere
Who Polluted the Potomac?

b. Clear and active communication is an essential part of doing science. It enables scientists to inform others about their work, expose their ideas to criticism by other scientists, and stay informed about scientific discoveries around the world.

Earth: The Apple of Our Eye
Population Circle
Timber!
Treasures Underground
Water, Water Everywhere
Who Polluted the Potomac?

Social Studies

HISTORICAL UNDERSTANDINGS

SS5H3. The student will describe how life changed in America at the turn of the Century.

d. Describe the reasons people emigrated to the United States, from where they emigrated, and where they settled.

People on the Move
Who Polluted the Potomac?

Grade Six

English Language Arts

LISTENING, SPEAKING, AND VIEWING

ELA6LSV1. The student participates in student-to-teacher, student-to-student, and group verbal interactions. The student

b. Asks relevant questions.

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
The More The Merrier?
People on the Move
Power of the Pyramids
Seeing Double
Stage Stepping
Stash the Trash
The Stork and the Grim Reaper
Take a Stand
Timber!
Transportation Tally
Treasures Underground
Waste Not, Want Not
Water, Water Everywhere
Who Polluted the Potomac?
A World of Difference
World Real Estate

c. Responds to questions with appropriate information.

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
The More The Merrier?
On the Double

People on the Move
Population Circle
Power of the Pyramids
Seeing Double
Stage Stepping
Stash the Trash
The Stork and the Grim Reaper
Take a Stand
Timber!
Transportation Tally
Treasures Underground
Waste Not, Want Not
Water, Water Everywhere
Who Polluted the Potomac?
A World of Difference

f. Actively solicits another person's comments or opinions.

Eco Ethics
Educating Wanjiku
Family Perspective
Growing Pains in Texas Hill Country
In Search of Sustainable Life
Take a Stand

g. Offers own opinion forcefully without being domineering.

Eco Ethics
Growing Pains in Texas Hill Country
Take a Stand

h. Responds appropriately to comments and questions.

Eco Ethics
Educating Wanjiku
Family Perspective
Food for Thought
For the Common Good
Growing Pains in Texas Hill Country
If Money Won't Buy It
In Search of Sustainable Life
The More The Merrier?
People on the Move
Power of the Pyramids
Stage Stepping
Take a Stand
Treasures Underground
Water, Water Everywhere
Who Polluted the Potomac?
A World of Difference
World Real Estate

i. Volunteers contributions and responds when directly solicited by teacher or discussion leader.

Cougar Hunt
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
People on the Move
Power of the Pyramids
Take a Stand
Treasures Underground
Water, Water Everywhere
Who Polluted the Potomac?
A World of Difference
World Real Estate

j. Gives reasons in support of opinions expressed.

Eco Ethics
Growing Pains in Texas Hill Country
In Search of Sustainable Life
Take a Stand

l. Employs a group decision-making technique such as brainstorming or a problem-solving sequence (e.g., recognizes problem, defines problem, identifies possible solutions, selects optimal solution, implements solution, evaluates solution).

Eco Ethics
For the Common Good
In Search of Sustainable Life

ELA6LSV2. The student listens to and views various forms of text and media in order to gather and share information, persuade others, and express and understand ideas. The student will select and critically analyze messages using rubrics as assessment tools. When delivering or responding to presentations, the student:

a. Gives oral presentations or dramatic interpretations for various purposes.
Growing Pains in Texas Hill Country

READING ACROSS THE CURRICULUM

ELA6RC2. The student participates in discussions related to curricular learning in all subject areas. The student

c. Relates messages and themes from one subject area to those in another area.

The Balance of Nature
Global Family Ties
You're One in Six Billion!
Your Place on the Planet

f. Recognizes and uses the features of disciplinary texts (e.g., charts, graphs, photos, maps, highlighted vocabulary).

The Balance of Nature
Global Family Ties
You're One in Six Billion!
Your Place on the Planet

WRITING

ELA6W2. The student demonstrates competence in a variety of genres. The student produces a narrative (fictional, personal) that:

a. Engages readers by establishing and developing a plot, setting, and point of view that are appropriate to the story (e.g., varied beginnings, standard plot line, cohesive devices).

Looking to the Future

ELA6W2. The student demonstrates competence in a variety of genres. The student produces writing (multi-paragraph expository composition such as description, explanation, comparison and contrast, or problem and solution) that:

a. Engages the reader by establishing a context, creating a speaker's voice, and otherwise developing reader interest.

Looking to the Future

g. Follows an organizational pattern appropriate to the type of composition.

Looking to the Future

Mathematics

NUMBER AND OPERATIONS

M6N1. Students will understand the meaning of the four arithmetic operations as related to positive rational numbers and will use these concepts to solve problems.

g. Solve problems involving fractions, decimals, and percents.

On the Double

Power of the Pyramids

Transportation Tally

MEASUREMENT

M6M2. Students will use appropriate units of measure for finding length, perimeter, area and volume and will express each quantity using the appropriate unit.

a. Measure length to the nearest half, fourth, eighth and sixteenth of an inch.

Measuring a Million

b. Select and use units of appropriate size and type to measure length, perimeter, area and volume.

Measuring a Million

The Stork and the Grim Reaper

c. Compare and contrast units of measure for perimeter, area, and volume.

Measuring a Million

The Stork and the Grim Reaper

M6M3. Students will determine the volume of fundamental solid figures (right rectangular prisms, cylinders, pyramids and cones).

c. Estimate the volumes of simple geometric solids.

Measuring a Million

M6M4. Students will determine the surface area of solid figures (right rectangular prisms and cylinders).

c. Estimate the surface areas of simple geometric solids.

Measuring a Million

ALGEBRA

M6A1. Students will understand the concept of ratio and use it to represent quantitative relationships.

The Stork and the Grim Reaper

Water, Water Everywhere

World Real Estate

M6A2. Students will consider relationships between varying quantities.

a. Analyze and describe patterns arising from mathematical rules, tables, and graphs.

On the Double

Population Circle

Seeing Double

The Stork and the Grim Reaper

Timber!

- b. Use manipulatives or draw pictures to solve problems involving proportional relationships.
 - The Stork and the Grim Reaper
 - Timber!
 - Water, Water Everywhere

M6A3. Students will evaluate algebraic expressions, including those with exponents, and solve simple one-step equations using each of the four basic operations.

- Measuring a Million
- On the Double
- Power of the Pyramids
- Transportation Tally

DATA ANALYSIS AND PROBABILITY

M6D1. Students will pose questions, collect data, represent and analyze the data, and interpret results.

- a. Formulate questions that can be answered by data. Students should collect data by using samples from a larger population (surveys), or by conducting experiments.

- Stage Stepping
- Timber!

- b. Using data, construct frequency distributions, frequency tables, and graphs.

- Cougar Hunt
- The Pop Ecology Files
- Population Circle
- Power of the Pyramids
- Stage Stepping
- Timber!
- World Real Estate

- e. Relate the data analysis to the context of the questions posed.

- Family Perspective
- Measuring a Million
- On the Double
- The Pop Ecology Files
- Power of the Pyramids
- Stage Stepping
- Timber!
- Transportation Tally
- A World of Difference

M6D2. Students will use experimental and simple theoretical probability and understand the nature of sampling. They will also make predictions from investigations.

- a. Predict the probability of a given event through trials/simulations (experimental probability), and represent the probability as a ratio.

- A World of Difference

- b. Determine, and use a ratio to represent, the theoretical probability of a given event.

- A World of Difference

PROCESS STANDARDS

M6P1. Students will solve problems (using appropriate technology).

- a. Build new mathematical knowledge through problem solving.

- Family Perspective
- Measuring a Million
- On the Double
- The Pop Ecology Files

Population Circle
Power of the Pyramids
Seeing Double
Stage Stepping
The Stork and the Grim Reaper
Timber!
Transportation Tally
Water, Water Everywhere
A World of Difference
World Real Estate

b. Solve problems that arise in mathematics and in other contexts.

Family Perspective
Food for Thought
Measuring a Million
On the Double
The Pop Ecology Files
Population Circle
Power of the Pyramids
Seeing Double
Stage Stepping
The Stork and the Grim Reaper
Timber!
Transportation Tally
Water, Water Everywhere
A World of Difference
World Real Estate

c. Apply and adapt a variety of appropriate strategies to solve problems.

Family Perspective
Food for Thought
Measuring a Million
On the Double
The Pop Ecology Files
Population Circle
Power of the Pyramids
Seeing Double
Stage Stepping
The Stork and the Grim Reaper
Timber!
Transportation Tally
Water, Water Everywhere
A World of Difference
World Real Estate

M6P2. Students will reason and evaluate mathematical arguments.

b. Make and investigate mathematical conjectures.

Measuring a Million
The Pop Ecology Files
Population Circle
Seeing Double
Stage Stepping
Timber!
A World of Difference

M6P3. Students will communicate mathematically.

- a. Organize and consolidate their mathematical thinking through communication.

The Pop Ecology Files
Population Circle
Stage Stepping
The Stork and the Grim Reaper
Timber!
Water, Water Everywhere
A World of Difference
World Real Estate

- b. Communicate their mathematical thinking coherently and clearly to peers, teachers, and others.

The Pop Ecology Files
Population Circle
Stage Stepping
Timber!
Water, Water Everywhere
A World of Difference
World Real Estate

- d. Use the language of mathematics to express mathematical ideas precisely.

Earth: The Apple of Our Eye
Family Perspective
Measuring a Million
On the Double
The Pop Ecology Files
Population Circle
Power of the Pyramids
Seeing Double
Stage Stepping
The Stork and the Grim Reaper
Timber!
Transportation Tally
Water, Water Everywhere
What Do You Think?
A World of Difference
World Real Estate

M6P4. Students will make connections among mathematical ideas and to other disciplines.

- c. Recognize and apply mathematics in contexts outside of mathematics.

Earth: The Apple of Our Eye
Family Perspective
Measuring a Million
On the Double
The Pop Ecology Files
Population Circle
Power of the Pyramids
Seeing Double
Stage Stepping
The Stork and the Grim Reaper
Timber!
Transportation Tally
Water, Water Everywhere
A World of Difference
World Real Estate

M6P5. Students will represent mathematics in multiple ways.

- a. Create and use representations to organize, record, and communicate mathematical ideas.
 - Stage Stepping
 - The Stork and the Grim Reaper
 - Water, Water Everywhere
 - A World of Difference
 - World Real Estate

- c. Use representations to model and interpret physical, social, and mathematical phenomena.
 - Stage Stepping
 - The Stork and the Grim Reaper
 - Water, Water Everywhere
 - A World of Difference
 - World Real Estate

MRC. Students will enhance reading in all curriculum areas by:

- a. Reading in All Curriculum Areas
 - Read both informational and fictional texts in a variety of genres and modes of discourse
 - The Balance of Nature*
 - Global Family Ties*
 - You're One in Six Billion!*
 - Your Place on the Planet*

Science

HABITS OF MIND

S6CS1. Students will explore the importance of curiosity, honesty, openness, and skepticism in science and will exhibit these traits in their own efforts to understand how the world works.

- a. Understand the importance of—and keep—honest, clear, and accurate records in science.
 - Cougar Hunt
 - Family Perspective
 - If Money Won't Buy It
 - On the Double
 - Power of the Pyramids
 - Stage Stepping
 - Timber!
 - Transportation Tally
 - A World of Difference
 - World Real Estate

- b. Understand that hypotheses are valuable if they lead to fruitful investigations, even if the hypotheses turn out not to be completely accurate descriptions.
 - For the Common Good
 - Seeing Double
 - Take a Stand
 - Water, Water Everywhere
 - World Real Estate

S6CS3. Students will use computation and estimation skills necessary for analyzing data and following scientific explanations.

- a. Analyze scientific data by using, interpreting, and comparing numbers in several equivalent forms, such as integers and decimals.
 - On the Double
 - Power of the Pyramids
 - Stage Stepping
 - Timber!
 - Transportation Tally
 - A World of Difference

World Real Estate

b. Use metric input units (such as seconds, meters, or grams per milliliter) of scientific calculations to determine the proper unit for expressing the answer.

Measuring a Million

d. Draw conclusions based on analyzed data.

Cougar Hunt

Food for Thought

For the Common Good

Growing Pains in Texas Hill Country

Market Research

On the Double

The Pop Ecology Files

Population Circle

Power of the Pyramids

Stage Stepping

Stash the Trash

The Stork and the Grim Reaper

Timber!

Transportation Tally

Water, Water Everywhere

A World of Difference

World Real Estate

S6CS4. Students will use tools and instruments for observing, measuring, and manipulating equipment and materials in scientific activities.

b. Estimate the effect of making a change in one part of a system on the system as a whole.

Cougar Hunt

Stage Stepping

S6CS5. Students will use the ideas of system, model, change, and scale in exploring scientific and technological matters.

b. Identify several different models (such as physical replicas, pictures, and analogies) that could be used to represent the same thing, and evaluate their usefulness, taking into account such things as the model's purpose and complexity.

Cougar Hunt

Food for Thought

For the Common Good

Population Circle

Stage Stepping

Stash the Trash

The Stork and the Grim Reaper

Timber!

Treasures Underground

Water, Water Everywhere

A World of Difference

World Real Estate

S6CS6. Students will communicate scientific ideas and activities clearly.

c. Organize scientific information using appropriate tables, charts, and graphs, and identify relationships they reveal.

On the Double

The Pop Ecology Files

Power of the Pyramids

Stage Stepping

Timber!
Water, Water Everywhere
World Real Estate

S6CS7. Students will question scientific claims and arguments effectively.

a. Question claims based on vague attributions (such as “Leading doctors say...”) or on statements made by people outside the area of their particular expertise.

Take a Stand

b. Recognize that there may be more than one way to interpret a given set of findings.

Take a Stand

THE NATURE OF SCIENCE

S6CS9. Students will investigate the features of the process of scientific inquiry. Students will apply the following to inquiry learning practices:

a. Scientific investigations are conducted for different reasons. They usually involve collecting evidence, reasoning, devising hypotheses, and formulating explanations.

Cougar Hunt
Family Perspective
Food for Thought
For the Common Good
Growing Pains in Texas Hill Country
If Money Won't Buy It
Market Research
Treasures Underground
The Pop Ecology Files
Population Circle
Power of the Pyramids
Seeing Double
Stage Stepping
Stash the Trash
The Stork and the Grim Reaper
Take a Stand
Timber!
Water, Water Everywhere
A World of Difference
World Real Estate

EARTH SCIENCE

S6E3. Students will recognize the significant role of water in earth processes.

a. Explain that a large portion of the Earth's surface is water, consisting of oceans, rivers, lakes, underground water, and ice.

Water, Water Everywhere
World Real Estate

S6E6. Students will describe various sources of energy and with their uses and conservation.

b. Identify renewable and nonrenewable resources.

For the Common Good
Treasures Underground
The Balance of Nature

THE EARTH

S6E3b. Fresh water, limited in supply, is essential for life and also for most industrial processes. Rivers, lakes, and groundwater can be depleted or polluted, becoming unavailable or unsuitable for life.

Growing Pains in Texas Hill Country
Water, Water Everywhere

S6E5i. The benefits of the earth's resources-such as fresh water, air, soil, and trees-can be reduced by using them wastefully or by deliberately or inadvertently destroying them. The atmosphere and the oceans have a limited capacity to absorb wastes and recycle materials naturally. Cleaning up polluted air, water, or soil or restoring depleted soil, forests, or fishing grounds can be very difficult and costly.

The Balance of Nature

PROCESSES THAT SHAPE THE EARTH

S6E5h and S6E5i. Human activities, such as reducing the amount of forest cover, increasing the amount and variety of chemicals released into the atmosphere, and intensive farming, have changed the earth's land, oceans, and atmosphere. Some of these changes have decreased the capacity of the environment to support some life forms.

Eco Ethics
Everything Is Connected
Food for Thought
For the Common Good
Growing Pains in Texas Hill Country
If Money Won't Buy It
In Search of Sustainable Life
On the Double
The Pop Ecology Files
Population Circle
Stage Stepping
Stash the Trash
The Stork and the Grim Reaper
Timber!
Transportation Tally
Treasures Underground
Water, Water Everywhere
A World of Difference
World Real Estate
The Balance of Nature
You're One in Six Billion!

S6CS10. Students will enhance reading in all curriculum areas by:

- a. Reading in All Curriculum Areas
 - Read both informational and fictional texts in a variety of genres and modes of discourse
- The Balance of Nature*
Global Family Ties
You're One in Six Billion!
Your Place on the Planet

Social Studies

LATIN AMERICA & CANADA

GEOGRAPHIC UNDERSTANDINGS

SS6G4. The student will describe the cultural characteristic of Latin America and the Caribbean and Canada.

- d. Explain how the literacy rate in Canada, Mexico, Brazil, and Chile affects each nations development in the modern world.

Educating Wanjiku

ECONOMIC UNDERSTANDINGS

SS6E3. The student will describe the factors that influence economic growth and examine their presence or absence in countries such as Canada, Mexico, Brazil, and Argentina.

- c. Describe the role of natural resources, including land, air, water, minerals, time, and other gifts of nature.

Food for Thought

EUROPE

HISTORICAL UNDERSTANDING

SS6H4. The student will describe the important developments in Europe between 1400 CE.

- f. Describe the Industrial Revolution including the impact on cities, life styles, and agriculture.

The Stork and the Grim Reaper

You're One in Six Billion!

GEOGRAPHIC UNDERSTANDING

SS6G8. The student will describe the cultural characteristics of Europe.

- c. Explain how the literacy rate in Europe has impacted its development in the modern world.

Educating Wanjiku

ECONOMIC UNDERSTANDING

SS6E7. The student will describe the factors that cause economic growth and examine their presence or absence in countries such as England, Germany, Russia, Poland, and Romania.

- c. Describe the role of natural resources, including land, air, water, minerals, time, and other gifts of nature.

Food for Thought

The Balance of Nature

You're One in Six Billion!

Grade Seven

English Language Arts

LISTENING, SPEAKING, AND VIEWING

ELA7LSV1. The student participates in student-to-teacher, student-to-student, and group verbal interactions. The student

b. Asks relevant questions.

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
The More The Merrier?
People on the Move
Power of the Pyramids
Seeing Double
Stage Stepping
Stash the Trash
The Stork and the Grim Reaper
Take a Stand
Timber!
Transportation Tally
Treasures Underground
Waste Not, Want Not
Water, Water Everywhere
Who Polluted the Potomac?
A World of Difference
World Real Estate

c. Responds to questions with appropriate information.

Cougar Hunt
Eco Ethics
Educating Wanjiku
Everything Is Connected
Family Perspective
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For the Common Good
Growing Pains in Texas Hill Country
The Hunger Banquet
If Money Won't Buy It
In Search of Sustainable Life
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The More The Merrier?
On the Double

People on the Move
Population Circle
Power of the Pyramids
Seeing Double
Stage Stepping
Stash the Trash
The Stork and the Grim Reaper
Take a Stand
Timber!
Transportation Tally
Treasures Underground
Waste Not, Want Not
Water, Water Everywhere
A World of Difference

f. Actively solicits another person's comments or opinions.

Eco Ethics
Educating Wanjiku
Family Perspective
Growing Pains in Texas Hill Country
In Search of Sustainable Life
Take a Stand

g. Offers own opinion forcefully without domineering.

Eco Ethics
Growing Pains in Texas Hill Country
Take a Stand

h. Responds appropriately to comments and questions.

Eco Ethics
Educating Wanjiku
Family Perspective
Food for Thought
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Growing Pains in Texas Hill Country
If Money Won't Buy It
In Search of Sustainable Life
The More The Merrier?
People on the Move
Power of the Pyramids
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Take a Stand
Treasures Underground
Water, Water Everywhere
Who Polluted the Potomac?
A World of Difference
World Real Estate

i. Volunteers contributions and responds when directly solicited by teacher or discussion leader.

Cougar Hunt
Educating Wanjiku
Everything Is Connected
Family Perspective
Food for Thought
For the Common Good
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The Hunger Banquet
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In Search of Sustainable Life
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People on the Move
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Take a Stand
Treasures Underground
Water, Water Everywhere
Who Polluted the Potomac?
World Real Estate

j. Gives reasons in support of opinions expressed.

Eco Ethics
Growing Pains in Texas Hill Country
In Search of Sustainable Life
Take a Stand

l. Employs a group decision-making technique such as brainstorming or a problem-solving sequence (e.g., recognizes problem, defines problem, identifies possible solutions, selects optimal solution, implements solution, evaluates solution).

Eco Ethics
Food for Thought
In Search of Sustainable Life

ELA7LSV2. The student listens to and views various forms of text and media in order to gather and share information, persuade others, and express and understand ideas. The student will select and critically analyze messages using rubrics as assessment tools. When delivering and responding to presentations, the student:

a. Gives oral presentations or dramatic interpretations for various purposes.

Growing Pains in Texas Hill Country

g. Uses multimedia in presentations.

Looking to the Future

READING ACROSS THE CURRICULUM

ELA7RC2. The student participates in discussions related to curricular learning in all subject areas. The student

c. Relates messages and themes from one subject area to those in another area.

The Balance of Nature
Global Family Ties
You're One in Six Billion!
Your Place on the Planet

WRITING

ELA7W1. The student produces writing that establishes an appropriate organizational structure, sets a context and engages the reader, maintains a coherent focus throughout, and provides a satisfying closure. The student

a. Selects a focus, an organizational structure, and a point of view based on purpose, genre expectations, audience, length, and format requirements.

Looking to the Future

ELA7W2. The student demonstrates competence in a variety of genres. The student produces writing (multi-paragraph expository composition such as description, explanation, comparison and contrast, or problem and solution) that:

a. Engages the reader by establishing a context, creating a speaker's voice, and otherwise developing reader interest.

Looking to the Future

Mathematics

ALGEBRA

M7A1. Students will represent and evaluate quantities using algebraic expressions.

a. Translate verbal phrases to algebraic expressions.

Measuring a Million
On the Double
Power of the Pyramids
Transportation Tally

b. Simplify and evaluate algebraic expressions, using commutative, associative, and distributive properties as appropriate.

Measuring a Million
On the Double
Power of the Pyramids
Transportation Tally

M7A2. Students will understand and apply linear equations in one variable.

a. Given a problem, define a variable, write an equation, solve the equation, and interpret the solution.

Measuring a Million

DATA ANALYSIS AND PROBABILITY

M7D1. Students will pose questions, collect data, represent and analyze the data, and interpret results.

b. Construct frequency distributions.

Cougar Hunt

PROCESS STANDARDS

M7P1. Students will solve problems (using appropriate technology).

a. Build new mathematical knowledge through problem solving.

Earth: The Apple of Our Eye
Family Perspective
Measuring a Million
On the Double
The Pop Ecology Files
Population Circle
Power of the Pyramids
Seeing Double
Stage Stepping
The Stork and the Grim Reaper
Timber!
Transportation Tally
Water, Water Everywhere
A World of Difference
World Real Estate

b. Solve problems that arise in mathematics and in other contexts.

Earth: The Apple of Our Eye
Family Perspective
Measuring a Million
On the Double
The Pop Ecology Files
Population Circle
Power of the Pyramids
Seeing Double
Stage Stepping
The Stork and the Grim Reaper
Timber!

Transportation Tally
Water, Water Everywhere
A World of Difference
World Real Estate

M7P3. Students will communicate mathematically.

d. Use the language of mathematics to express mathematical ideas precisely.

Earth: The Apple of Our Eye
Family Perspective
Measuring a Million
On the Double
The Pop Ecology Files
Population Circle
Power of the Pyramids
Seeing Double
Stage Stepping
The Stork and the Grim Reaper
Timber!
Transportation Tally
Water, Water Everywhere
A World of Difference
World Real Estate

M7P4. Students will make connections among mathematical ideas and to other disciplines.

c. Recognize and apply mathematics in contexts outside of mathematics.

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Family Perspective
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On the Double
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Population Circle
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Transportation Tally
Water, Water Everywhere
A World of Difference
World Real Estate

M7P5. Students will represent mathematics in multiple ways.

a. Create and use representations to organize, record, and communicate mathematical ideas.

Stage Stepping
The Stork and the Grim Reaper
Water, Water Everywhere
A World of Difference
World Real Estate

c. Use representations to model and interpret physical, social, and mathematical phenomena.

Stage Stepping
The Stork and the Grim Reaper
Water, Water Everywhere
A World of Difference
World Real Estate

MRC. Students will enhance reading in all curriculum areas by:

- a. Reading in all curriculum areas
 - Read both informational and fictional texts in a variety of genres and modes of discourse
 - The Balance of Nature*
 - Global Family Ties*
 - You're One in Six Billion!*
 - Your Place on the Planet*

Science

HABITS OF MIND

S7CS1. Students will explore of the importance of curiosity, honesty, openness, and skepticism in science and will exhibit these traits in their own efforts to understand how the world works.

- b. Understand that hypotheses can be valuable, even if they turn out not to be completely accurate.
 - For the Common Good
 - Seeing Double
 - Take a Stand
 - Water, Water Everywhere
 - World Real Estate

S7CS3. Students will have the computation and estimation skills necessary for analyzing data and following scientific explanations.

- a. Analyze scientific data by using, interpreting, and comparing numbers in several equivalent forms, such as integers, fractions, decimals, and percents.

- On the Double
- Power of the Pyramids
- Stage Stepping
- Timber!
- Transportation Tally
- A World of Difference
- World Real Estate

- c. Apply the metric system to a scientific investigation that includes metric to metric conversion. (i.e. centimeters to meters)
 - Measuring a Million

- d. Draw conclusions based on analyzed data.

- Cougar Hunt
- Food for Thought
- For the Common Good
- Growing Pains in Texas Hill Country
- Market Research
- On the Double
- The Pop Ecology Files
- Population Circle
- Power of the Pyramids
- Stage Stepping
- Stash the Trash
- The Stork and the Grim Reaper
- Timber!
- Transportation Tally
- Water, Water Everywhere
- A World of Difference
- World Real Estate

S7CS5. Students will use the ideas of system, model, change, and scale in exploring scientific and technological matters.

a. Observe and explain how parts can be related to other parts in a system such as predator/prey relationships in a community/ecosystem.

Cougar Hunt
Everything Is Connected
The Pop Ecology Files
A World of Difference

b. Understand that different models (such as physical replicas, pictures, and analogies) can be used to represent the same thing.

Cougar Hunt
Food for Thought
For the Common Good
Population Circle
Stage Stepping
Stash the Trash
The Stork and the Grim Reaper
Timber!
Treasures Underground
Water, Water Everywhere
A World of Difference
World Real Estate

S7CS6. Students will communicate scientific ideas and activities clearly.

c. Organize scientific information using appropriate simple tables, charts, and graphs, and identify relationships they reveal.

On the Double
The Pop Ecology Files
Power of the Pyramids
Stage Stepping
Timber!
Water, Water Everywhere
World Real Estate

S7CS7. Students will question scientific claims and arguments effectively.

a. Question claims based on vague attributions (such as “Leading doctors say...”) or on statements made by people outside the area of their particular expertise.

Take a Stand

b. Identify the flaws of reasoning that are based on poorly designed research (i.e., facts intermingled with opinion, conclusions based on insufficient evidence).

Eco Ethics
Take a Stand

c. Question the value of arguments based on small samples of data, biased samples, or samples for which there was no control.

A World of Difference

d. Recognize that there may be more than one way to interpret a given set of findings.

Take a Stand

THE NATURE OF SCIENCE

S7CS9. Students will investigate the features of the process of scientific inquiry. Students will apply the following to inquiry learning practices:

b. Scientific investigations usually involve collecting evidence, reasoning, devising hypotheses, and formulating explanations to make sense of collected evidence.

Cougar Hunt

Family Perspective
Food for Thought
For the Common Good
Growing Pains in Texas Hill Country
If Money Won't Buy It
Market Research
The Pop Ecology Files
Population Circle
Seeing Double
Power of the Pyramids
Stage Stepping
Stash the Trash
The Stork and the Grim Reaper
Take a Stand
Timber!
Treasures Underground
Water, Water Everywhere
A World of Difference
World Real Estate

LIFE SCIENCE

S7L4. Students will examine the dependence of organisms on one another and their environments.

c. Recognize that changes in environmental conditions can affect the survival of both individuals and entire species.

Growing Pains in Texas Hill Country
The Pop Ecology Files
A World of Difference
The Balance of Nature

INTERDEPENDENCE OF LIFE

S7L4de and S7L4f. In all environments-freshwater, marine, forest, desert, grassland, mountain, and others-organisms with similar needs may compete with one another for resources, including food, space, water, air, and shelter. In any particular environment, the growth and survival of organisms depend on the physical conditions.

Cougar Hunt
Growing Pains in Texas Hill Country
A World of Difference

S7CS10. Students will enhance reading in all curriculum areas by:

a. Reading in All Curriculum Areas

• Read both informational and fictional texts in a variety of genres and modes of discourse

The Balance of Nature
You're One in Six Billion!
Your Place on the Planet

Social Studies

AFRICA

GEOGRAPHIC UNDERSTANDING

SS7G4. The student will describe the cultural characteristic of different people who live in Africa.

b. Evaluate how the literacy rate of the countries such as Sudan, South Africa, and Egypt has affected their development.

Educating Wanjiku

ECONOMIC UNDERSTANDING

SS7E3. The student will describe the factors that influence economic growth and examine their presence or absence in such African countries as Chad, South Africa, Nigeria, and Kenya.

- c. Describe how natural resources, including land, air, water, minerals, time, and other gifts of nature have affected economic development.

Food for Thought

SOUTHWEST ASIA (MIDDLE EAST)

GEOGRAPHIC UNDERSTANDING

SS7G8. The student will describe the diverse cultural characteristic of the people who live in Southwestern Asia.

- b. Evaluate the effect of the literacy rate on the development of Middle Eastern countries such as Syria, Iran, Israel, and Saudi Arabia.

Educating Wanjiku

ECONOMIC UNDERSTANDING

SS7E7. The student will describe the factors that influence economic growth and examine their presence or absence in Middle Eastern countries such as Israel, Lebanon, Turkey, Israel, Saudi Arabia and Iran.

- c. Describe the role of natural resources, including land, air, water, minerals, time, and other gifts of nature.

Food for Thought

SOUTHERN AND EASTERN ASIA

GEOGRAPHIC UNDERSTANDING

SS7G10. The student will evaluate the impact of government policies and individual behaviors on Southern and Eastern Asia's environment

- c. Describe the environmental problems, such as over population, industrial pollution, and flooding, facing countries in Eastern Asia including China, Japan, and South Korea.

Food for Thought

On the Double

Power of the Pyramids

The Stork and the Grim Reaper

- d. Explain efforts by governments and industries in China, Japan, and South Korea to meet environmental problems such as over population, industrial pollution, and flooding.

Power of the Pyramids

SS7G12. The student will describe the diverse cultural characteristic of the people who live in Southern and Eastern Asia.

- b. Evaluate the effect of the literacy rate on the development of countries such as India, Indonesia, China, and Japan.

Educating Wanjiku

ECONOMIC UNDERSTANDING

SS7E10. The student will describe the factors that cause economic growth and examine their presence or absence in Southern and Eastern Asian countries such as Pakistan, India, China, and Indonesia.

- c. Describe the role of natural resources, including land, air, water, minerals, time, and other gifts of nature.

Food for Thought

Grade Eight

English Language Arts

LISTENING, SPEAKING, AND VIEWING

ELA8LSV1. The student participates in student-to-teacher, student-to-student, and group verbal interactions. The student

b. Asks relevant questions.

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
The More The Merrier?
People on the Move
Power of the Pyramids
Seeing Double
Stage Stepping
Stash the Trash
The Stork and the Grim Reaper
Take a Stand
Timber!
Transportation Tally
Treasures Underground
Waste Not, Want Not
Water, Water Everywhere
A World of Difference
World Real Estate

c. Responds to questions with appropriate information.

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
On the Double
People on the Move
The Pop Ecology Files

Population Circle
Power of the Pyramids
Seeing Double
Stage Stepping
Stash the Trash
The Stork and the Grim Reaper
Take a Stand
Timber!
Transportation Tally
Treasures Underground
Waste Not, Want Not
Water, Water Everywhere
Who Polluted the Potomac?
A World of Difference

f. Actively solicits another person's comments or opinions.

Eco Ethics
Educating Wanjiku
Family Perspective
Growing Pains in Texas Hill Country
In Search of Sustainable Life
Take a Stand

g. Offers own opinion forcefully without domineering.

Eco Ethics
Growing Pains in Texas Hill Country
Take a Stand

h. Responds appropriately to comments and questions.

Eco Ethics
Educating Wanjiku
Family Perspective
Food for Thought
For the Common Good
Growing Pains in Texas Hill Country
If Money Won't Buy It
In Search of Sustainable Life
The More The Merrier?
People on the Move
Power of the Pyramids
Stage Stepping
Take a Stand
Treasures Underground
Water, Water Everywhere
Who Polluted the Potomac?
A World of Difference
World Real Estate

i. Volunteers contributions and responds when directly solicited by teacher or discussion leader.

Cougar Hunt
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
Treasures Underground
People on the Move
Power of the Pyramids
Take a Stand
Water, Water Everywhere
Who Polluted the Potomac?
A World of Difference
World Real Estate

j. Gives reasons in support of opinions expressed.

Eco Ethics
Growing Pains in Texas Hill Country
In Search of Sustainable Life
Take a Stand

l. Employs a group decision-making technique such as brainstorming or a problemsolving sequence (e.g., recognizes problem, defines problem, identifies possible solutions, selects optimal solution, implements solution, evaluates solution).

Eco Ethics
For the Common Good
In Search of Sustainable Life
Something for Everyone

ELA8LSV2. The student listens to and views various forms of text and media in order to gather and share information, persuade others, and express and understand ideas. The student will select and critically analyze messages using rubrics as assessment tools. When delivering and responding to presentations, the student:

a. Gives oral presentations or dramatic interpretations for various purposes.

Growing Pains in Texas Hill Country
Looking to the Future

ELA8LSV2. The student listens to and views various forms of text and media in order to gather and share information, persuade others, and express and understand ideas. The student will select and critically analyze messages using rubrics as assessment tools. When responding to visual and oral texts and media (e.g., television, radio, film productions, and electronic media), the student:

b. Analyzes oral communication by paraphrasing a speaker's purpose and point of view, and asks relevant questions concerning the speaker's content, delivery, and purpose.

Growing Pains in Texas Hill Country
Take a Stand

READING ACROSS THE CURRICULUM

ELA8RC2. The student participates in discussions related to curricular learning in all subject areas. The student

c. Relates messages and themes from one subject area to those in another area.

The Balance of Nature
Global Family Ties
You're One in Six Billion!
Your Place on the Planet

WRITING

ELA8W1. The student produces writing that establishes an appropriate organizational structure, sets a context and engages the reader, maintains a coherent focus throughout, and signals a satisfying closure. The student

a. Selects a focus, organizational structure, and a point of view based on purpose, genre expectations, audience, length, and format requirements.

Looking to the Future

ELA8W2. The student demonstrates competence in a variety of genres. The student produces a narrative (fictional, personal, experimental) that:

- a. Engages readers by establishing and developing a plot, setting, and point of view that are appropriate to the story (e.g., varied beginnings, standard plot line, cohesive devices, and a sharpened focus).

Looking to the Future

ELA8W2. The student demonstrates competence in a variety of genres. The student produces writing (multi-paragraph expository composition such as description, explanation, comparison and contrast, or problem and solution) that:

- a. Engages the reader by establishing a context, creating a speaker's voice, and otherwise developing reader interest.

Looking to the Future

Mathematics

ALGEBRA

M8A1. Students will use algebra to represent, analyze, and solve problems.

- a. Represent a given situation using algebraic expressions or equations in one variable.

Measuring a Million

On the Double

Power of the Pyramids

Transportation Tally

- b. Simplify and evaluate algebraic expressions.

Measuring a Million

Transportation Tally

- c. Solve algebraic equations in one variable, including equations involving absolute values.

Measuring a Million

On the Double

Power of the Pyramids

Transportation Tally

- d. Interpret solutions in problem contexts.

Measuring a Million

On the Double

Power of the Pyramids

Transportation Tally

M8A3. Students will understand relations and linear functions.

- h. Identify relations and functions as linear or nonlinear.

The Pop Ecology Files

Timber!

M8A5. Students will understand systems of linear equations and use them to solve problems.

- b. Solve systems of equations graphically and algebraically, using technology as appropriate.

The Pop Ecology Files

Timber!

- c. Interpret solutions in problem contexts.

The Pop Ecology Files

Timber!

PROCESS STANDARDS

M8P1. Students will solve problems (using appropriate technology).

a. Build new mathematical knowledge through problem solving.

Measuring a Million
On the Double
The Pop Ecology Files
Population Circle
Power of the Pyramids
Seeing Double
Stage Stepping
The Stork and the Grim Reaper
Timber!
Transportation Tally
A World of Difference
World Real Estate

b. Solve problems that arise in mathematics and in other contexts.

Family Perspective
Measuring a Million
On the Double
The Pop Ecology Files
Population Circle
Power of the Pyramids
Seeing Double
Stage Stepping
The Stork and the Grim Reaper
Timber!
Transportation Tally
A World of Difference
World Real Estate

M8P3. Students will communicate mathematically.

d. Use the language of mathematics to express mathematical ideas precisely.

Measuring a Million
On the Double
The Pop Ecology Files
Population Circle
Power of the Pyramids
Seeing Double
Stage Stepping
The Stork and the Grim Reaper
Timber!
Transportation Tally
A World of Difference
World Real Estate

M8P4. Students will make connections among mathematical ideas and to other disciplines.

c. Recognize and apply mathematics in contexts outside of mathematics.

Family Perspective
Measuring a Million
On the Double
The Pop Ecology Files
Population Circle
Seeing Double
Power of the Pyramids
Stage Stepping
The Stork and the Grim Reaper

Timber!
Transportation Tally
A World of Difference
World Real Estate

M8P5. Students will represent mathematics in multiple ways.

- a. Create and use representations to organize, record, and communicate mathematical ideas.

Stage Stepping
The Stork and the Grim Reaper
A World of Difference
World Real Estate

- c. Use representations to model and interpret physical, social, and mathematical phenomena.

Stage Stepping
The Stork and the Grim Reaper
A World of Difference
World Real Estate

MRC. Students will enhance reading in all curriculum areas by:

- a. Reading in all curriculum areas

- Read both informational and fictional texts in a variety of genres and modes of discourse

The Balance of Nature
Global Family Ties
You're One in Six Billion!
Your Place on the Planet

Science

HABITS OF MIND

S8CS1. Students will explore the importance of curiosity, honesty, openness, and skepticism in science and will exhibit these traits in their own efforts to understand how the world works.

- b. Understand that hypotheses can be valuable even if they turn out not to be completely accurate.

For the Common Good
Seeing Double
Take a Stand
Water, Water Everywhere
World Real Estate

S8CS3. Students will have the computation and estimation skills necessary for analyzing data and following scientific explanations.

- a. Analyze scientific data by using, interpreting, and comparing numbers in several equivalent forms, such as integers, fractions, decimals, and percents.

On the Double
Power of the Pyramids
Stage Stepping
Timber!
Transportation Tally
A World of Difference
World Real Estate

- c. Apply the metric system to scientific investigations that include metric to metric conversions (i.e., centimeters to meters).

Measuring a Million

- f. Use ratios and proportions, including constant rates, in appropriate problems.

On the Double
The Pop Ecology Files

Stage Stepping
The Stork and the Grim Reaper
Timber!

S8CS5. Students will use the ideas of system, model, change, and scale in exploring scientific and technological matters.

b. Understand that different models (such as physical replicas, pictures, and analogies) can be used to represent the same thing.

Cougar Hunt
Food for Thought
For the Common Good
Population Circle
Stage Stepping
Stash the Trash
The Stork and the Grim Reaper
Timber!
Treasures Underground
Water, Water Everywhere
A World of Difference
World Real Estate

S8CS6. Students will communicate scientific ideas and activities clearly.

c. Organize scientific information in appropriate tables, charts, and graphs, and identify relationships they reveal.

On the Double
The Pop Ecology Files
Power of the Pyramids
Stage Stepping
Timber!
Water, Water Everywhere
World Real Estate

S8CS7. Students will question scientific claims and arguments effectively.

a. Question claims based on vague attributions (such as “Leading doctors say...”) or on statements made by people outside the area of their particular expertise.

Take a Stand

b. Identify the flaws of reasoning in arguments that are based on poorly designed research (e.g., facts intermingled with opinion, conclusions based on insufficient evidence).

Eco Ethics
Take a Stand

c. Question the value of arguments based on small samples of data, biased samples, or samples for which there was no control.

A World of Difference

d. Recognize that there may be more than one way to interpret a given set of findings.

Take a Stand

S8CS10. Students will enhance reading in all curriculum areas by:

a. Reading in All Curriculum Areas

• Read both informational and fictional texts in a variety of genres and modes of discourse

The Balance of Nature
Global Family Ties
You're One in Six Billion!
Your Place on the Planet

THE NATURE OF SCIENCE

S8CS9. Students will understand the features of the process of scientific inquiry. Students will apply the following to inquiry learning practices:

b. Scientific investigations usually involve collecting evidence, reasoning, devising hypotheses, and formulating explanations to make sense of collected evidence.

- Cougar Hunt
- Family Perspective
- Food for Thought
- For the Common Good
- Growing Pains in Texas Hill Country
- If Money Won't Buy It
- Market Research
- The Pop Ecology Files
- Population Circle
- Power of the Pyramids
- Seeing Double
- Stage Stepping
- Stash the Trash
- The Stork and the Grim Reaper
- Take a Stand
- Timber!
- Treasures Underground
- Water, Water Everywhere
- A World of Difference
- World Real Estate

Grades Nine to Twelve

Mathematics

(Mathematics I)

DATA ANALYSIS AND PROBABILITY

MMID2. Students will use the basic laws of probability

- a. Find the probabilities of mutually exclusive events.

A World of Difference

- b. Find the probabilities of dependent events.

A World of Difference

PROCESS STANDARDS

MMIP1. Students will solve problems.

- a. Build new mathematical knowledge through problem solving.

Stage Stepping

Transportation Tally

A World of Difference

- b. Solve problems that arise in mathematics and in other contexts.

Family Perspective

The Pop Ecology Files

Stage Stepping

Transportation Tally

A World of Difference

MMIP4. Students will make connections among mathematical ideas and to other disciplines.

- c. Recognize and apply mathematics in contexts outside of mathematics.

Family Perspective

The Pop Ecology Files

Stage Stepping

Transportation Tally

A World of Difference

MMIP5. Students will represent mathematics in multiple ways.

- a. Create and use representations to organize, record, and communicate mathematical ideas.

Stage Stepping

A World of Difference

- c. Use representations to model and interpret physical, social, and mathematical phenomena.

Stage Stepping

A World of Difference

(Mathematics II)

PROCESS STANDARDS

MMIIP1. Students will solve problems.

- a. Build new mathematical knowledge through problem solving.

The Pop Ecology Files

Stage Stepping

Transportation Tally

A World of Difference

- b. Solve problems that arise in mathematics and in other contexts.

Family Perspective

The Pop Ecology Files

Stage Stepping
Transportation Tally
A World of Difference

MMIIP3. Students will communicate mathematically.

d. Use the language of mathematics to express mathematical ideas precisely.

The Pop Ecology Files
Stage Stepping
Transportation Tally
A World of Difference

MMIIP4. Students will make connections among mathematical ideas and to other disciplines.

c. Recognize and apply mathematics in contexts outside of mathematics.

Family Perspective
The Pop Ecology Files
People on the Move
Stage Stepping
Transportation Tally
A World of Difference

MMIIP5. Students will represent mathematics in multiple ways.

a. Create and use representations to organize, record, and communicate mathematical ideas.

Stage Stepping
A World of Difference

c. Use representations to model and interpret physical, social, and mathematical phenomena.

Stage Stepping
A World of Difference

(Mathematics III)

PROCESS STANDARDS

MMIIP1. Students will solve problems.

a. Build new mathematical knowledge through problem solving.

The Pop Ecology Files
Stage Stepping
Transportation Tally
A World of Difference

b. Solve problems that arise in mathematics and in other contexts.

Family Perspective
The Pop Ecology Files
Stage Stepping
Transportation Tally
A World of Difference

MMIIP3. Students will communicate mathematically.

d. Use the language of mathematics to express mathematical ideas precisely.

The Pop Ecology Files
Stage Stepping
Transportation Tally
A World of Difference

MMIIP4. Students will make connections among mathematical ideas and to other disciplines.

c. Recognize and apply mathematics in contexts outside of mathematics.

Family Perspective
The Pop Ecology Files

Stage Stepping
Transportation Tally
A World of Difference

MMIIP5. Students will represent mathematics in multiple ways.

- a. Create and use representations to organize, record, and communicate mathematical ideas.

Stage Stepping
A World of Difference

- c. Use representations to model and interpret physical, social, and mathematical phenomena.

Stage Stepping
A World of Difference

(Core Mathematics I)

DATA ANALYSIS AND PROBABILITY

MC1D1. Students will determine the number of outcomes related to a given event

- a. Apply addition and multiplication principles of counting.

A World of Difference

MC1D2. Students will use the basic laws of probability

- a. Find the probabilities of mutually exclusive events.

A World of Difference

- b. Find the probabilities of dependent events.

A World of Difference

PROCESS STANDARDS

MC1P1. Students will solve problems (using appropriate technology).

- a. Build new mathematical knowledge through problem solving.

The Pop Ecology Files

Stage Stepping

Transportation Tally

A World of Difference

- b. Solve problems that arise in mathematics and in other contexts.

The Pop Ecology Files

Stage Stepping

Transportation Tally

A World of Difference

MC1P4. Students will make connections among mathematical ideas and to other disciplines

- c. Recognize and apply mathematics in contexts outside of mathematics.

The Pop Ecology Files

Stage Stepping

Transportation Tally

A World of Difference

MC1P5. Students will represent mathematics in multiple ways.

- a. Create and use representations to organize, record, and communicate mathematical ideas.

Stage Stepping

A World of Difference

- c. Use representations to model and interpret physical, social, and mathematical phenomena.

Stage Stepping

A World of Difference

(Core Mathematics II)

PROCESS STANDARDS

MC2P1. Students will solve problems (using appropriate technology).

- a. Build new mathematical knowledge through problem solving.

The Pop Ecology Files
Stage Stepping
Transportation Tally
A World of Difference

- b. Solve problems that arise in mathematics and in other contexts.

The Pop Ecology Files
Stage Stepping
Transportation Tally
A World of Difference

MC2P3. Students will communicate mathematically.

- d. Use the language of mathematics to express mathematical ideas precisely.

The Pop Ecology Files
Stage Stepping
Transportation Tally
A World of Difference

MC2P4. Students will make connections among mathematical ideas and to other disciplines.

- c. Recognize and apply mathematics in contexts outside of mathematics.

The Pop Ecology Files
Stage Stepping
Transportation Tally
A World of Difference

MC2P5. Students will represent mathematics in multiple ways.

- a. Create and use representations to organize, record, and communicate mathematical ideas.

Stage Stepping
A World of Difference

- c. Use representations to model and interpret physical, social, and mathematical phenomena.

Stage Stepping
A World of Difference

(Core Mathematics III)

PROCESS STANDARDS

MC3P1. Students will solve problems (using appropriate technology).

- a. Build new mathematical knowledge through problem solving.

The Pop Ecology Files
Stage Stepping
Transportation Tally
A World of Difference

- b. Solve problems that arise in mathematics and in other contexts.

The Pop Ecology Files
Stage Stepping
Transportation Tally
A World of Difference

- d. Use the language of mathematics to express mathematical ideas precisely.

Growing Pains in Texas Hill Country

The Pop Ecology Files
Stage Stepping
Transportation Tally
A World of Difference

MC3P4. Students will make connections among mathematical ideas and to other disciplines.

c. Recognize and apply mathematics in contexts outside of mathematics.

The Pop Ecology Files
Stage Stepping
Transportation Tally
A World of Difference

MC3P5. Students will represent mathematics in multiple ways.

a. Create and use representations to organize, record, and communicate mathematical ideas.

Stage Stepping
A World of Difference

c. Use representations to model and interpret physical, social, and mathematical phenomena.

Stage Stepping
A World of Difference

(Core Mathematics IV)

PROCESS STANDARDS

MC4P1. Students will solve problems (using appropriate technology).

a. Build new mathematical knowledge through problem solving.

Family Perspective
The Pop Ecology Files
Stage Stepping
Transportation Tally
A World of Difference

b. Solve problems that arise in mathematics and in other contexts.

Family Perspective
The Pop Ecology Files
Stage Stepping
Transportation Tally
A World of Difference

MC4P3. Students will communicate mathematically.

d. Use the language of mathematics to express mathematical ideas precisely.

Family Perspective
The Pop Ecology Files
Stage Stepping
Transportation Tally
A World of Difference

MC4P4. Students will make connections among mathematical ideas and to other disciplines.

c. Recognize and apply mathematics in contexts outside of mathematics.

Family Perspective
The Pop Ecology Files
Stage Stepping
Transportation Tally
A World of Difference

MC4P5. Students will represent mathematics in multiple ways.

a. Create and use representations to organize, record, and communicate mathematical ideas.

Stage Stepping
A World of Difference

- c. Use representations to model and interpret physical, social, and mathematical phenomena.
Stage Stepping
A World of Difference

(Accelerated Mathematics I)

DATA ANALYSIS AND PROBABILITY

MA1D2. Students will use the basic laws of probability.

- b. Find the probabilities of dependent events.
A World of Difference

PROCESS STANDARDS

MA1P1. Students will solve problems (using appropriate technology).

- a. Build new mathematical knowledge through problem solving.
The Pop Ecology Files
Stage Stepping
Transportation Tally
A World of Difference

- b. Solve problems that arise in mathematics and in other contexts.
The Pop Ecology Files
Stage Stepping
Transportation Tally
A World of Difference

MA1P3. Students will communicate mathematically.

- d. Use the language of mathematics to express mathematical ideas precisely.
The Pop Ecology Files
Stage Stepping
Transportation Tally
A World of Difference

MA1P4. Students will make connections among mathematical ideas and to other disciplines.

- c. Recognize and apply mathematics in contexts outside of mathematics.
The Pop Ecology Files
Stage Stepping
Transportation Tally
A World of Difference

MA1P5. Students will represent mathematics in multiple ways.

- a. Create and use representations to organize, record, and communicate mathematical ideas.
Stage Stepping
A World of Difference
- c. Use representations to model and interpret physical, social, and mathematical phenomena.
Stage Stepping
A World of Difference

(Accelerated Mathematics II)

PROCESS STANDARDS

MA2P1. Students will solve problems (using appropriate technology).

- a. Build new mathematical knowledge through problem solving.
The Pop Ecology Files

Stage Stepping
Transportation Tally
A World of Difference

b. Solve problems that arise in mathematics and in other contexts.

The Pop Ecology Files
Stage Stepping
Transportation Tally
A World of Difference

MA2P3. Students will communicate mathematically.

d. Use the language of mathematics to express mathematical ideas precisely.

The Pop Ecology Files
Stage Stepping
Transportation Tally
A World of Difference

MA2P4. Students will make connections among mathematical ideas and to other disciplines.

c. Recognize and apply mathematics in contexts outside of mathematics.

The Pop Ecology Files
Stage Stepping
Transportation Tally
A World of Difference

MA2P5. Students will represent mathematics in multiple ways.

a. Create and use representations to organize, record, and communicate mathematical ideas.

Stage Stepping
A World of Difference

c. Use representations to model and interpret physical, social, and mathematical phenomena.

Stage Stepping
A World of Difference

Science

(Biology)

HABITS OF MIND

SCSh3. Students will identify and investigate problems scientifically.

a. Suggest reasonable hypotheses for identified problems.

Eco Ethics
Everything Is Connected
Take a Stand

c. Collect, organize and record appropriate data.

The Pop Ecology Files
Power of the Pyramids
Stage Stepping
A World of Difference

d. Graphically compare and analyze data points and/or summary statistics.

Family Perspective
The Pop Ecology Files
Power of the Pyramids
Stage Stepping

e. Develop reasonable conclusions based on data collected.

Family Perspective
The Pop Ecology Files
Power of the Pyramids
Stage Stepping
A World of Difference

SCSh6. Students will communicate scientific investigations and information clearly.

c. Use data as evidence to support scientific arguments and claims in written or oral presentations.

Eco Ethics
Food for Thought
The Pop Ecology Files
Take a Stand

d. Participate in group discussions of scientific investigation and current scientific issues.

Eco Ethics
Food for Thought
For the Common Good
Take a Stand

INTERDEPENDENCE OF LIFE

SB4a and SB4c. Ecosystems can be reasonably stable over hundreds or thousands of years. As any population of organisms grows, it is held in check by one or more environmental factors: depletion of food or nesting sites, increased loss to increased numbers of predators, or parasites. If a disaster such as flood or fire occurs, the damaged ecosystem is likely to recover in stages that eventually result in a system similar to the original one.

Everything Is Connected
The Pop Ecology Files

SB4d. Human beings are part of the earth's ecosystems. Human activities can, deliberately or inadvertently, alter the equilibrium in ecosystems.

Everything Is Connected
Take a Stand
A World of Difference

SB4. Students will assess the dependence of all organisms on one another and the flow of energy and matter within their ecosystems.

d. Assess and explain human activities that influence and modify the environment such as global warming, population growth, pesticide use, and water and power consumption.

Food for Thought
Stage Stepping
Take a Stand
A World of Difference

SCSh9. Students will enhance reading in all curriculum areas by:

a. Reading in all curriculum areas

• Read both informational and fictional texts in a variety of genres and modes of discourse.

The Balance of Nature
Global Family Ties

Social Studies

(World Geography)

SSWG1. The student will explain the physical aspects of geography.

a. Describe the concept of place by explaining how physical characteristics such as landforms, bodies of water, climate, soils, natural vegetation, and animal life are used to describe a place.

Food for Thought

b. Explain how human characteristics including population settlement patterns and human activities such as agriculture and industry can describe a place.

Food for Thought
Growing Pains in Texas Hill Country

c. Analyze the interrelationship between physical and human characteristics of a place.

Growing Pains in Texas Hill Country
A World of Difference

SSWG3. The student will describe the interaction of physical and human systems that have shaped contemporary North Africa/Southwest Asia

a. Describe the location of major physical features and their impact on North Africa/Southwest Asia.

Food for Thought

SSWG4. The student will describe the interaction of physical and human systems that have shaped contemporary Sub-Saharan Africa

a. Describe the location of major physical features and their impact on Sub-Saharan Africa.

Food for Thought

d. Explain how Sub-Saharan Africa's physical features have impacted the distribution of its population.

Food for Thought

SSWG5. The student will describe the interaction of physical and human systems that have shaped contemporary South Asia, Southeastern Asia, and Eastern Asia

a. Describe the location of major physical features and their impact on the regions of Asia.

Food for Thought

c. Analyze the impact of the topography and climate on population distribution in the regions.

Food for Thought

e. Analyze the impact of population growth in the region on both the region and on other regions of the world including China, India, and Japan.

Food for Thought

SSWG6. The student will describe the interaction of physical and human systems that have shaped contemporary Europe.

a. Describe the location of major physical features and their impact on Europe.

Food for Thought

c. Analyze the importance of Europe's coastal location, climatic characteristics, and river systems regarding population, economic development, and world influence.

Food for Thought

SSWG7. The student will describe the interaction of physical and human systems that have shaped contemporary Latin America.

b. Describe the location of major physical features and their impact on Latin America.

Food for Thought

SSWG8. The student will describe the interaction of physical and human systems that have shaped contemporary Canada and the United States

a. Describe the location of major physical features and their impact on the Canada and the United States.

Food for Thought

c. Explain the reasons for the population distribution in Canada and the United States.

Food for Thought
Growing Pains in Texas Hill Country

Take a Stand

d. Explain how the physical geography of Canada and the United States contributed to regional growth and development.

Growing Pains in Texas Hill Country

f. Analyze how transportation and communications improvements led to the growth of industry in the United States and the consequences of such growth especially environmentally for both Canada and the United States.

Transportation Tally

(Economics)

FUNDAMENTAL ECONOMIC CONCEPTS

SSEF5. The student will describe the roles of government in a market economy.

b. Give examples of government regulation and deregulation and their effects on consumers and producers.

Take a Stand

SSEF6. The student will explain how productivity, economic growth and future standards of living are influenced by investment in factories, machinery, new technology and the health, education and training of people.

c. Give examples of how investment in education can lead to a higher standard of living.

Educating Wanjiku

Food for Thought

PERSONAL FINANCE ECONOMICS

SSEPF1. The student will apply rational decision to the making of personal spending and savings choices.

a. Explain that people respond to positive and negative incentives in predictable ways.

For the Common Good

Grade Nine

English Language Arts

LISTENING, SPEAKING, AND VIEWING

ELA9LSV1. The student participates in student-to-teacher, student-to-student, and group verbal interactions. The student

b. Asks relevant questions.

- 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

c. Responds to questions with appropriate information.

- 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
- Power of the Pyramids
- Stage Stepping
- Take a Stand
- A World of Difference

d. Actively solicits another person's comments or opinions.

- Eco Ethics
- Educating Wanjiku
- Family Perspective
- Growing Pains in Texas Hill Country
- Take a Stand

e. Offers own opinion forcefully without domineering.

- Eco Ethics
- Growing Pains in Texas Hill Country
- Take a Stand

f. Volunteers contributions and responds when directly solicited by teacher or discussion leader.

- 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

Power of the Pyramids
Stage Stepping
Take a Stand
Transportation Tally
Who Polluted the Potomac?
A World of Difference
World Real Estate

g. Gives reasons in support of opinions expressed.

Eco Ethics
Growing Pains in Texas Hill Country
Take a Stand

i. Employs group decision-making techniques such as brainstorming or a problemsolving sequence (e.g., recognizes problem, defines problem, identifies possible solutions, selects optimal solution, implements solution, evaluates solution).

Eco Ethics
For the Common Good

LISTENING, SPEAKING, AND VIEWING. When delivering and responding to presentations, the student:

a. Delivers narrative, expository, or persuasive presentations that incorporate the same elements found in that mode or genre of writing.

Growing Pains in Texas Hill Country

Grade Ten

English Language Arts

LISTENING, SPEAKING, AND VIEWING

ELA10LSV1. The student participates in student-to-teacher, student-to-student, and group verbal interactions. The student

b. Asks relevant questions.

- 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

c. Responds to questions with appropriate information.

- 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
- Power of the Pyramids
- Stage Stepping
- Take a Stand
- A World of Difference

d. Actively solicits another person's comments or opinion.

- Eco Ethics
- Educating Wanjiku
- Family Perspective
- Growing Pains in Texas Hill Country
- Take a Stand

e. Offers own opinion forcefully without domineering.

- Eco Ethics
- Growing Pains in Texas Hill Country
- Take a Stand

f. Contributes voluntarily and responds directly when solicited by teacher or discussion leader.

- 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

Power of the Pyramids
Stage Stepping
Take a Stand
Transportation Tally
Who Polluted the Potomac?
A World of Difference
World Real Estate

g. Gives reasons in support of opinions expressed.

Eco Ethics
Growing Pains in Texas Hill Country
Take a Stand

i. Employs group decision-making techniques such as brainstorming or a problem solving sequence (e.g., recognizes problem, defines problem, identifies possible solutions, selects optimal solution, implements solution, evaluates solution).

Eco Ethics
For the Common Good

Grade Eleven

English Language Arts

LISTENING, SPEAKING, AND VIEWING

ELA11LSV1. The student participates in student-to-teacher, student-to-student, and group verbal interactions. The student

- a. Initiates new topics in addition to responding to adult-initiated topics.

- Eco Ethics
- Educating Wanjiku
- Everything Is Connected
- Family Perspective
- Food for Thought
- For the Common Good
- The Hunger Banquet
- Take a Stand

- b. Asks relevant questions.

- 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

- c. Responds to questions with appropriate information.

- 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
- A World of Difference

- e. Offers own opinion forcefully without domineering.

- Eco Ethics
- Growing Pains in Texas Hill Country
- Take a Stand

- f. Volunteers contributions and responds when directly solicited by teacher or discussion leader.

- 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
Power of the Pyramids
Stage Stepping
Take a Stand
Transportation Tally
Who Polluted the Potomac?
A World of Difference
World Real Estate

g. Gives reasons in support of opinions expressed.

Eco Ethics
Growing Pains in Texas Hill Country
Take a Stand

i. Employ group decision-making techniques such as brainstorming or a problem solving sequence (e.g., recognizes problem, defines problem, identifies possible solutions, selects optimal solution, implements solution, evaluates solution).

Eco Ethics
For the Common Good

Grade Twelve

English Language Arts

LISTENING, SPEAKING, AND VIEWING

ELA12LSV1. The student participates in student-to-teacher, student-to-student, and group verbal interactions. The student

- a. Initiates new topics in addition to responding to adult-initiated topics.

- Eco Ethics
- Everything Is Connected
- Family Perspective
- Food for Thought
- For the Common Good
- The Hunger Banquet
- Take a Stand

- b. Asks relevant questions.

- 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

- c. Responds to questions with appropriate information.

- 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
- Power of the Pyramids
- Stage Stepping
- Take a Stand
- A World of Difference

- d. Actively solicits another person's comments or opinion.

- Eco Ethics
- Educating Wanjiku
- Family Perspective
- Growing Pains in Texas Hill Country
- Take a Stand

- e. Offers own opinion forcefully without domineering.

- Eco Ethics
- Growing Pains in Texas Hill Country
- Take a Stand

f. Volunteers contributions and responds when directly solicited by teacher or discussion leader.

- 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
- Power of the Pyramids
- Stage Stepping
- Take a Stand
- Transportation Tally
- Who Polluted the Potomac?
- A World of Difference
- World Real Estate

g. Gives reasons in support of opinions expressed.

- Eco Ethics
- Growing Pains in Texas Hill Country
- Take a Stand

i. Employs group decision-making techniques such as brainstorming or a problem solving sequence (e.g., recognizes problem, defines problem, identifies possible solutions, selects optimal solution, implements solution, evaluates solution).

- Eco Ethics
- For the Common Good