

A Correlation of
Population Connection Materials

from

Nuestro Mundo, Nuestro Futuro
(Our World, Our Future)

to

Georgia Performance Standards

Organized by:

1. Grade

2. Subject

3. Standard

4. Population Connection Activity

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Grade Two

Mathematics

NUMBERS AND OPERATIONS

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.

If the World Was an Apple

Grade Three

Mathematics

NUMBER AND OPERATIONS

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

- 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.

If the World Was an Apple

- g. Solve problems involving fractions.
If the World Was an Apple

ALGEBRA

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

- a. Describe and extend numeric and geometric patterns.
Life and Death
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.

If the World Was an Apple

Life and Death

Timber!

- b. Solve single and multi-step routine word problems related to all appropriate third grade math standards.

If the World Was an Apple

Timber!

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

If the World Was an Apple

Life and Death

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

If the World Was an Apple

Life and Death

Timber!

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

If the World Was an Apple

Life and Death

Timber!

Science

HABITS OF MIND

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.

Life and Death

S3CS5. Students will communicate scientific ideas and activities clearly.

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

Life and Death

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.

Life and Death

LIFE SCIENCE

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

If the World Was an Apple

Social Studies

ECONOMIC UNDERSTANDINGS

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

- a. Natural (land).

If the World Was an Apple

Timber!

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.

If the World Was an Apple

Timber!

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

If the World Was an Apple

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.

If the World Was an Apple
Timber!

c. Responds to questions with appropriate information.

If the World Was an Apple
Life and Death
Timber!

i. Responds appropriately to comments and questions.

If the World Was an Apple

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

If the World Was an Apple
Life and Death
Timber!

Mathematics

NUMBER AND OPERATIONS

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.

If the World Was an Apple

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.

Life and Death
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.

If the World Was an Apple
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.

If the World Was an Apple
Timber!

c. Determine the operation(s) needed to solve a problem.

Life and Death

Timber!

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

If the World Was an Apple

Life and Death

Timber!

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

If the World Was an Apple

Life and Death

Timber!

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

If the World Was an Apple

Life and Death

Timber!

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

If the World Was an Apple

Life and Death

Timber!

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.

If the World Was an Apple

Life and Death

Timber!

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.

If the World Was an Apple

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.

If the World Was an Apple

Life and Death

Timber!

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

Life and Death

Timber!

S4CS5. Students will communicate scientific ideas and activities clearly.

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

If the World Was an Apple

Life and Death
Timber!

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.

If the World Was an Apple
Life and Death
Timber!

LIFE SCIENCE

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

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

Life and Death

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.

If the World Was an Apple
Timber!

c. Responds to questions with appropriate information.

If the World Was an Apple
Life and Death
Timber!

i. Responds appropriately to comments and questions.

If the World Was an Apple
Life and Death
Timber!

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

If the World Was an Apple
Life and Death
Timber!

Mathematics

MEASUREMENT

M5M3. Students will measure capacity with appropriately chosen units and tools.

a. Use milliliters, liters, fluid ounces, cups, pints, quarts, and gallons to measure capacity.
Life and Death

DATA ANALYSIS

M5D1. Students will analyze graphs.

a. Analyze data presented in a graph.
If the World Was an Apple
Timber!

M5D2. Students will collect, organize, and display data using the most appropriate graph.

Timber!

PROCESS SKILLS

M5P1. Using the appropriate technology, students will solve problems that arise in mathematics and in other contexts.

a. Solve non-routine word problems using the strategy of make it simpler as well as all strategies learned in previous grades.

If the World Was an Apple
Timber!

b. Solve single and multi-step routine word problems related to all appropriate fifth grade math standards.

Life and Death
Timber!

c. Determine the operation(s) needed to solve a problem.

Life and Death

- M5P2. Students will investigate, develop, and evaluate mathematical arguments.
If the World Was an Apple
Life and Death
Timber!
- M5P3. Students will use the language of mathematics to express ideas precisely.
If the World Was an Apple
Life and Death
Timber!
- M5P4. Students will understand how mathematical ideas interconnect and build on one another and apply mathematics in other content areas.
If the World Was an Apple
Life and Death
Timber!
- M5P5. Students will create and use pictures, manipulatives, models, and symbols to organize, record, and communicate mathematical ideas.
If the World Was an Apple
Life and Death
Timber!

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.
If the World Was an Apple
Timber!
 - c. Offer reasons for findings and consider reasons suggested by others.
If the World Was an Apple
Timber!
- 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.
If the World Was an Apple
Life and Death
Timber!
- 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.
Life and Death
Timber!
- S5CS5. Students will communicate scientific ideas and activities clearly.
- c. Use numerical data in describing and comparing objects and events.
If the World Was an Apple
Life and Death
Timber!

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.

If the World Was an Apple

Life and Death

Timber!

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.

If the World Was an Apple

Timber!

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.
 - Environmental Dilemmas
 - Everything Is Connected
 - Life and Death
 - Maria's Education
 - The More The Merrier?
 - Timber!

- c. Responds to questions with appropriate information.
 - Environmental Dilemmas
 - Everything Is Connected
 - Life and Death
 - Maria's Education
 - The More The Merrier?
 - Timber!

- f. Actively solicits another person's comments or opinions.
 - Environmental Dilemmas

- g. Offers own opinion forcefully without being domineering.
 - Environmental Dilemmas

- h. Responds appropriately to comments and questions.
 - Environmental Dilemmas
 - Maria's Education
 - The More The Merrier?

- i. Volunteers contributions and responds when directly solicited by teacher or discussion leader.
 - Everything Is Connected
 - Maria's Education

- j. Gives reasons in support of opinions expressed.
 - Environmental Dilemmas

- 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).
 - Environmental Dilemmas

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.
 - People Count: Facing the Population Challenge*

- f. Recognizes and uses the features of disciplinary texts (e.g., charts, graphs, photos, maps, highlighted vocabulary).
 - People Count: Facing the Population Challenge*

Mathematics

Nuestro Mundo, Nuestro Futuro
Population Connection, 2005

Georgia Performance Standards
Grade Six

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.

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

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

ALGEBRA

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

Life and Death

M6A2. Students will consider relationships between varying quantities.

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

Life and Death

Timber!

- b. Use manipulatives or draw pictures to solve problems involving proportional relationships.

Life and Death

Timber!

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.

Timber!

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

Timber!

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

Timber!

PROCESS STANDARDS

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

- a. Build new mathematical knowledge through problem solving.

Life and Death

Timber!

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

Life and Death

Timber!

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

Life and Death

Timber!

M6P2. Students will reason and evaluate mathematical arguments.

- b. Make and investigate mathematical conjectures.

Timber!

M6P3. Students will communicate mathematically.

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

Life and Death

Timber!

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

d. Use the language of mathematics to express mathematical ideas precisely.
If the World Was an Apple
Life and Death
Timber!

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

c. Recognize and apply mathematics in contexts outside of mathematics.
If the World Was an Apple
Life and Death
Timber!

M6P5. Students will represent mathematics in multiple ways.

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

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

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.
Timber!

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.
Timber!

d. Draw conclusions based on analyzed data.
Life and Death
Timber!

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.
Life and Death
Timber!

S6CS6. Students will communicate scientific ideas and activities clearly.

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

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.

Life and Death
Timber!

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.

Environmental Dilemmas
Everything Is Connected
Life and Death
Timber!

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.

Maria's Education

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.

People Count: Facing the Population Challenge

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.

Life and Death

People Count: Facing the Population Challenge

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.

Maria's Education

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.

People Count: Facing the Population Challenge

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.

Environmental Dilemmas
Everything Is Connected
Life and Death
Maria's Education
The More The Merrier?
Timber!

c. Responds to questions with appropriate information.

Environmental Dilemmas
Everything Is Connected
Life and Death
Maria's Education
The More The Merrier?
Timber!

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

Environmental Dilemmas

g. Offers own opinion forcefully without domineering.

Environmental Dilemmas

h. Responds appropriately to comments and questions.

Environmental Dilemmas
Maria's Education
The More The Merrier?

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

Everything Is Connected
Maria's Education

j. Gives reasons in support of opinions expressed.

Environmental Dilemmas

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).

Environmental Dilemmas

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.

People Count: Facing the Population Challenge

Mathematics

PROCESS STANDARDS

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

a. Build new mathematical knowledge through problem solving.

If the World Was an Apple

Life and Death
Timber!

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

If the World Was an Apple

Life and Death

Timber!

M7P3. Students will communicate mathematically.

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

If the World Was an Apple

Life and Death

Timber!

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

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

If the World Was an Apple

Life and Death

Timber!

M7P5. Students will represent mathematics in multiple ways.

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

Life and Death

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

Life and Death

Science

HABITS OF MIND

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.

Timber!

- d. Draw conclusions based on analyzed data.

Life and Death

Timber!

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.

Everything Is Connected

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

Life and Death

Timber!

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.

Timber!

S7CS7. Students will question scientific claims and arguments effectively.

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

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.
Life and Death
Timber!

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.
Maria's Education

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.
Maria's Education

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.
Life and Death
People Count: Facing the Population Challenge

- 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.
People Count: Facing the Population Challenge

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.
Maria's Education

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.
 - Environmental Dilemmas
 - Everything Is Connected
 - Maria's Education
 - The More The Merrier?
 - Life and Death
 - Timber!

- c. Responds to questions with appropriate information.
 - Environmental Dilemmas
 - Everything Is Connected
 - Life and Death
 - Maria's Education
 - Timber!

- f. Actively solicits another person's comments or opinions.
 - Environmental Dilemmas

- g. Offers own opinion forcefully without domineering.
 - Environmental Dilemmas

- h. Responds appropriately to comments and questions.
 - Environmental Dilemmas
 - Maria's Education
 - The More The Merrier?

- i. Volunteers contributions and responds when directly solicited by teacher or discussion leader.
 - Everything Is Connected
 - Maria's Education

- j. Gives reasons in support of opinions expressed.
 - Environmental Dilemmas

- 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).
 - Environmental Dilemmas

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.
 - People Count: Facing the Population Challenge*

Mathematics

ALGEBRA

M8A3. Students will understand relations and linear functions.

- h. Identify relations and functions as linear or nonlinear.
 - 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.
Timber!
 - c. Interpret solutions in problem contexts.
Timber!

PROCESS STANDARDS

- M8P1. Students will solve problems (using appropriate technology).
- a. Build new mathematical knowledge through problem solving.
Life and Death
Timber!
 - b. Solve problems that arise in mathematics and in other contexts.
Life and Death
Timber!
- M8P3. Students will communicate mathematically.
- d. Use the language of mathematics to express mathematical ideas precisely.
Life and Death
Timber!
- M8P4. Students will make connections among mathematical ideas and to other disciplines.
- c. Recognize and apply mathematics in contexts outside of mathematics.
Life and Death
Timber!
- M8P5. Students will represent mathematics in multiple ways.
- a. Create and use representations to organize, record, and communicate mathematical ideas.
Life and Death
 - c. Use representations to model and interpret physical, social, and mathematical phenomena.
Life and Death

Science

HABITS OF MIND

- 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.
Timber!
 - f. Use ratios and proportions, including constant rates, in appropriate problems.
Life and Death
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.
Life and Death
Timber!
- S8CS6. Students will communicate scientific ideas and activities clearly.
- c. Organize scientific information in appropriate tables, charts, and graphs, and identify relationships they reveal.

Timber!

S8CS7. Students will question scientific claims and arguments effectively.

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).

Environmental Dilemmas

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.

Life and Death

Timber!

Grades Nine to Twelve

Science

(Biology)

HABITS OF MIND

SCSh3. Students will identify and investigate problems scientifically.

- a. Suggest reasonable hypotheses for identified problems.

Environmental Dilemmas

Everything Is Connected

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.

Environmental Dilemmas

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

Environmental Dilemmas

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

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

Everything Is Connected

Social Studies

(World Geography)

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

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

Maria's Education

(Economics)

FUNDAMENTAL ECONOMIC CONCEPTS

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.

Maria's Education

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.
 - Environmental Dilemmas
 - Maria's Education

- c. Responds to questions with appropriate information.
 - Environmental Dilemmas
 - Everything Is Connected
 - Maria's Education

- d. Actively solicits another person's comments or opinions.
 - Environmental Dilemmas

- e. Offers own opinion forcefully without domineering.
 - Environmental Dilemmas

- f. Volunteers contributions and responds when directly solicited by teacher or discussion leader.
 - Environmental Dilemmas
 - Everything Is Connected
 - Maria's Education

- g. Gives reasons in support of opinions expressed.
 - Environmental Dilemmas

- 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).
 - Environmental Dilemmas

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.
 - Environmental Dilemmas
 - Maria's Education

- c. Responds to questions with appropriate information.
 - Environmental Dilemmas
 - Everything Is Connected
 - Maria's Education

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

- e. Offers own opinion forcefully without domineering.
 - Environmental Dilemmas

- f. Contributes voluntarily and responds directly when solicited by teacher or discussion leader.
 - Environmental Dilemmas
 - Everything Is Connected
 - Maria's Education

- g. Gives reasons in support of opinions expressed.
 - Environmental Dilemmas

- 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).
 - Environmental Dilemmas

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.
 - Environmental Dilemmas
 - Everything Is Connected
 - Maria's Education

- b. Asks relevant questions.
 - Environmental Dilemmas
 - Maria's Education

- c. Responds to questions with appropriate information.
 - Environmental Dilemmas
 - Maria's Education

- e. Offers own opinion forcefully without domineering.
 - Environmental Dilemmas

- f. Volunteers contributions and responds when directly solicited by teacher or discussion leader.
 - Environmental Dilemmas
 - Everything Is Connected
 - Maria's Education

- g. Gives reasons in support of opinions expressed.
 - Environmental Dilemmas

- 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).
 - Environmental Dilemmas

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.
 - Environmental Dilemmas
 - Everything Is Connected
 - Maria's Education

- b. Asks relevant questions.
 - Environmental Dilemmas
 - Maria's Education

- c. Responds to questions with appropriate information.
 - Environmental Dilemmas
 - Everything Is Connected
 - Maria's Education

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

- e. Offers own opinion forcefully without domineering.
 - Environmental Dilemmas

- f. Volunteers contributions and responds when directly solicited by teacher or discussion leader.
 - Environmental Dilemmas
 - Everything Is Connected
 - Maria's Education

- g. Gives reasons in support of opinions expressed.
 - Environmental Dilemmas

- 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).
 - Environmental Dilemmas