Project Learning Tree
Secondary Module Correlations
to the Virginia Standards of Learning, Grades 6-12

Abbreviations and Key:

INTRO = Introductory Handbook for the Secondary Modules

FOF = Exploring Environmental Issues: Focus on Forests

ECOL = The Changing Forest: Forest Ecology

MSW = Exploring Environmental Issues: Municipal Solid Waste

RISK = Exploring Environmental Issues: Focus on Risk

⇒ Teaches the concept; main focus of the activity

♦ Includes some teaching of the concept; reinforces the concept; concept is part of the focus of the activity

◊ Reinforces, supports, or addresses the concept; connects concept to an environmental issue

MATHEMATICS

Math 8.13 The student will use information displayed in line, bar, circle, and picture graphs and histograms to make comparisons, predictions, and inferences.

◊ *FOF 4 Who Owns America's Forests?*

Algebra.1 The student will solve linear equations and inequalities in one variable, solve literal equations (formulas) for a given variable and apply these skills to solve practical problems. Graphing calculators will be used to confirm algebraic solutions.

⇒ *RISK 3 Chances Are ... Understanding Probability and Risk*
⇒ *RISK 6 Weighing the Options: A Look at Tradeoffs*
⇒ *RISK 7 Decision Making: Ecological Risk, Wildfires, and Natural Hazards*
♦ *RISK 4 Risk Assessment: Tools of the Trade*
♦ *RISK 5 Communicating Risk*

Algebra.2 The student will represent verbal quantitative situations algebraically and evaluate these expressions for given replacement values of the variables. Students will choose an appropriate computational technique, such as mental mathematics, calculator, or paper and pencil.

⇒ *RISK 3 Chances Are ... Understanding Probability and Risk*
⇒ *RISK 6 Weighing the Options: A Look at Tradeoffs*
♦ *RISK 4 Risk Assessment: Tools of the Trade*

Algebra.5 The student will analyze a given set of data for the existence of a pattern, represent the pattern algebraically and graphically, if possible, and determine if the relation is a function.

⇒ *RISK 3 Chances Are ... Understanding Probability and Risk*

Geometry.7 The student will solve practical problems involving right triangles by using the Pythagorean Theorem and its converse, properties of special right triangles, and right triangle trigonometry. Calculators will be used to solve problems and find decimal approximations for the solutions.

⇒ *ECOL 2 Cast of Thousands*

PROBABILITY AND STATISTICS - ELECTIVE MATH COURSE

Probability & Statistics.1 The student will analyze graphical displays of data, including dotplots, stemplots, and histograms to identify and describe patterns and departures from patterns utilizing central tendency, spread, clusters, gaps, and outliers. Appropriate technology will be used to create graphical displays.

⇒ *RISK 3 Chances Are ... Understanding Probability and Risk*
⇒ *RISK 4 Risk Assessment: Tools of the Trade*
⇒ *RISK 7 Decision Making: Ecological Risk, Wildfires, and Natural Hazards*
♦ *RISK 5 Communicating Risk*
♦ *RISK 8 Taking Action: Reducing Risk in Your School or Community*

Probability & Statistics.8 The student will describe the methods of data collection in a census, sample survey, experiment, and observational study and identify an appropriate method for a given problem setting.

⇒ *RISK 3 Chances Are ... Understanding Probability and Risk*
⇒ *RISK 4 Risk Assessment: Tools of the Trade*
♦ *RISK 5 Communicating Risk*
♦ *RISK 8 Taking Action: Reducing Risk in Your School or Community*

Probability & Statistics.10 The student will plan and conduct an experiment. The plan will address control, randomization, and measurement of experimental error.

⇒ *RISK 3 Chances Are ... Understanding Probability and Risk*
⇒ *RISK 4 Risk Assessment: Tools of the Trade*
♦ *RISK 5 Communicating Risk*
♦ *RISK 8 Taking Action: Reducing Risk in Your School or Community*

Probability & Statistics.11 The student will compute and distinguish between permutations and combinations and use technology for applications.

⇒ *RISK 3 Chances Are ... Understanding Probability and Risk*
⇒ *RISK 4 Risk Assessment: Tools of the Trade*
⇒ *RISK 7 Decision Making: Ecological Risk, Wildfires, and Natural Hazards*
♦ *RISK 5 Communicating Risk*

Probability & Statistics.12 The student will identify and describe two or more events as complementary, dependent, independent, and/or mutually exclusive.

⇒ *RISK 3 Chances Are ... Understanding Probability and Risk*
⇒ *RISK 4 Risk Assessment: Tools of the Trade*
⇒ *RISK 7 Decision Making: Ecological Risk, Wildfires, and Natural Hazards*
♦ *RISK 5 Communicating Risk*
♦ *RISK 8 Taking Action: Reducing Risk in Your School or Community*

Probability & Statistics.13 The student will find probabilities (relative frequency and theoretical) including conditional probabilities for events that are either dependent or independent, by applying the "law of large numbers" concept, the addition rule, and the multiplication rule.

⇒ *RISK 3 Chances Are ... Understanding Probability and Risk*
⇒ *RISK 4 Risk Assessment: Tools of the Trade*
⇒ *RISK 7 Decision Making: Ecological Risk, Wildfires, and Natural Hazards*
♦ *RISK 5 Communicating Risk*
♦ *RISK 8 Taking Action: Reducing Risk in Your School or Community*

Probability & Statistics.15 The student will simulate probability distributions, including binomial and geometric.

⇒ *RISK 3 Chances Are ... Understanding Probability and Risk*
⇒ *RISK 4 Risk Assessment: Tools of the Trade*
⇒ *RISK 7 Decision Making: Ecological Risk, Wildfires, and Natural Hazards*
♦ *RISK 5 Communicating Risk*

Probability & Statistics.17 The student will identify properties of a normal distribution and use a table or graphing calculator to apply the normal distribution to determine probabilities.

⇒ *RISK 3 Chances Are ... Understanding Probability and Risk*
⇒ *RISK 4 Risk Assessment: Tools of the Trade*
♦ *RISK 5 Communicating Risk*
♦ *RISK 8 Taking Action: Reducing Risk in Your School or Community*

SCIENCE

Science 6.11 The student will investigate and understand public policy decisions relating to the environment.

⇒ *FOF 2 Old-Growth Forests*
⇒ *FOF 3 Tough Choices*
⇒ *FOF 4 Who Owns America's Forests*
⇒ *FOF 5 Balancing America's Forests*
⇒ *FOF 6 Squirrels vs. Scopes*

Life Science.1 The student will plan and conduct investigations in which

- data are organized into tables showing repeated trials and means;
- variables are defined;
- SI (metric) units are used;
- criteria are established for evaluating a prediction;
- models are constructed to illustrate and explain phenomena;
- sources of experimental error are identified;
- dependent variables, independent variables, and constants are identified;
- variables are controlled to test hypotheses and trials are repeated;
- continuous line graphs are constructed, interpreted, and used to make predictions; and
- interpretations from the same set of data are evaluated and defended.

⇒ *ECOL 3 The Nature of Plants*

Life Science.4 The student will investigate and understand that the basic needs of organisms must be met in order to carry out life processes.

⇒ *ECOL 3 The Nature of Plants*
♦ *ECOL 1 Adopt-a-Forest*

Life Science.5 The student will investigate and understand classification of organisms.

♦ *ECOL 1 Adopt-a-Forest*

Life Science.6 The student will investigate and understand the basic physical and chemical processes of photosynthesis and its importance to plant and animal life.

⇒ *ECOL 3 The Nature of Plants*

Life Science.7 The student will investigate and understand that organisms within an ecosystem are dependent on one another and on nonliving components of the environment.

⇒ *ECOL 1 Adopt-a-Forest*
⇒ *ECOL 2 Cast of Thousands*

Life Science.8 The student will investigate and understand that interactions exist among members of a population.

⇒ *ECOL 1 Adopt-a-Forest*
⇒ *ECOL 4 Home Sweet Home*
⇒ *ECOL 5 Saga of the Gypsy Moth*
♦ *INTRO 3 Trees as Habitats*

Life Science.9 The student will investigate and understand interactions among populations in a biological community.

⇒ *INTRO 3 Trees as Habitats*
⇒ *ECOL 1 Adopt-a-Forest*
⇒ *ECOL 2 Cast of Thousands*
⇒ *ECOL 5 Saga of the Gypsy Moth*
♦ *ECOL 4 Home Sweet Home*

Life Science.10 The student will investigate and understand how organisms adapt to biotic and abiotic factors in a biome.

⇒ *INTRO 2 Environmental Exchange Box*
⇒ *ECOL 2 Cast of Thousands*
♦ *ECOL 4 Home Sweet Home*

Life Science.11 The student will investigate and understand that ecosystems, communities, populations, and organisms are dynamic and change over time (daily, seasonal, and long term).

⇒ *ECOL 4 Home Sweet Home*
⇒ *ECOL 5 Saga of the Gypsy Moth*
⇒ *ECOL 6 Story of Succession*
⇒ *ECOL 7 Understanding Fire*
♦ *FOF 2 Old-Growth Forests*
♦ *FOF 3 Tough Choices*
♦ *FOF 6 Squirrels vs. Scopes*

Life Science.12 The student will investigate and understand the relationships between ecosystem dynamics and human activity.

⇒ *FOF 2 Old-Growth Forests*
⇒ *FOF 3 Tough Choices*
⇒ *FOF 4 Who Owns America's Forests*
⇒ *FOF 6 Squirrels vs. Scopes*
⇒ *ECOL 4 Home Sweet Home*
⇒ *ECOL 5 Saga of the Gypsy Moth*
⇒ *ECOL 7 Understanding Fire*
⇒ *ECOL 8 Fire Management*
♦ *INTRO 1 Renewable or Not*
♦ *FOF 1 What's a Forest to You?*
♦ *FOF 5 Balancing America's Forests*
♦ *FOF 8 Take Action!*

Life Science.14 The student will investigate and understand that organisms change over time.

⇒ *ECOL 4 Home Sweet Home*
⇒ *ECOL 6 Story of Succession*
⇒ *ECOL 7 Understanding Fire*
⇒ *ECOL 8 Fire Management*

Earth Science.1 The student will plan and conduct investigations in which

- volume, area, mass, elapsed time, direction, temperature, pressure, distance, density, and changes in elevation/depth are calculated utilizing the most appropriate tools;
- technologies, including computers, are used to collect, analyze, and report data and to demonstrate concepts and simulate experimental conditions;
- scales, diagrams, maps, charts, graphs, tables, and profiles are constructed and interpreted;
- variables are manipulated with repeated trials; and
- a scientific viewpoint is constructed and defended.

⇒ *MSW 1 The Waste Stream, Part B Calculating Waste*
⇒ *MSW 3 Recycling & Economics, Part B Graphing Waste*
♦ *FOF 4 Who Owns America's Forests?, Part A Sizing Up Forests*
♦ *MSW 1 The Waste Stream, Part C School Waste Audit*
♦ *MSW 7 Where Does Your Garbage Go?, Part B MSW in Other Communities*
◊ *MSW 3 Recycling & Economics, Part A Recycling Survey*
◊ *MSW 3 Recycling & Economics, Part D Waste Disposal, Costs, and Recycling*
◊ *MSW 8 Take Action: Success Stories & Personal Choices, Part C School Action Plan*

Earth Science.2 The student will demonstrate scientific reasoning and logic by

- analyzing how science explains and predicts the interactions and dynamics of complex Earth systems;
- recognizing that evidence is required to evaluate hypotheses and explanations;
- comparing different scientific explanations for the same observations about the Earth;
- explaining that observation and logic are essential for reaching a conclusion;
- evaluating evidence for scientific theories related to plate tectonics, the structure of the Earth, and its ancient age and origin; and
- making informed judgments related to resource use and its effects on Earth systems.

⇒ *MSW 6 Landfills, Part B Siting a Landfill*

Earth Science.4 The student will investigate and understand the characteristics of the Earth including

- plate tectonics;
- water in all three states;
- position of the Earth in the solar system; and
- effects of density differences and energy transfer on the activities of the atmosphere, oceans, and Earth's interior.

⇒ *RISK 7 Decision Making: Ecological Risk, Wildfires, and Natural Hazards*

Earth Science.7 The student will investigate and understand the differences between renewable and nonrenewable resources.

⇒ *INTRO 1 Renewable or Not*
⇒ *MSW 1 The Waste Stream, Part A Waste Not, Want Not*
⇒ *MSW 2 Source Reduction, Part A Packaging*
⇒ *RISK 7 Decision Making: Ecological Risk, Wildfires, and Natural Hazards*
♦ *INTRO 4 Energy Sleuths*
♦ *FOF 5 Balancing America's Forests*
♦ *MSW 2 Source Reduction, Part C Life-Cycle Factors*
◊ *MSW 3 Composting, Part A Composting Basics*
◊ *MSW 6 Landfills, Part A Designing a Landfill*

Earth Science.8 The student will investigate and understand geologic processes including plate tectonics.

⇒ *RISK 7 Decision Making: Ecological Risk, Wildfires, and Natural Hazards*

Earth Science.9 The student will investigate and understand how freshwater resources are influenced by geologic processes and the activities of humans.

♦ *MSW 2 Source Reduction, Part B Product Toxicity*
♦ *MSW 6 Landfills, Part B Siting a Landfill*
◊ *FOF 8 Take Action!*
◊ *RISK 2 Things Aren't Always What They Seem*

Earth Science.12 The student will investigate and understand the origin and evolution of the atmosphere and the interrelationship of geologic processes, biologic processes, and human activities on its composition and dynamics.

◊ *RISK 2 Things Aren't Always What They Seem*

Earth Science.13 The student will investigate and understand that energy transfer between the sun, Earth, and the Earth's atmosphere drives weather and climate on Earth.

◊ *RISK 2 Things Aren't Always What They Seem*

Biology.1 The student will plan and conduct investigations in which

- observations of living things are recorded in the lab and in the field;
- hypotheses are formulated based on observations;
- variables are defined and investigations are designed to test hypotheses;
- graphing and arithmetic calculations are used as tools in data analysis;
- conclusions are formed based on recorded quantitative and qualitative data;
- impacts of sources of error inherent in experimental design are identified and discussed;
- validity of data is determined;
- alternative explanations and models are recognized and analyzed;
- appropriate technology is used for gathering and analyzing data and communicating results; and
- research is used based on popular and scientific literature.

⇒ *INTRO 7 Watch on Wetlands*
⇒ *ECOL 2 Cast of Thousands*
⇒ *ECOL 3 The Nature of Plants*
⇒ *ECOL 6 Story of Succession*
♦ *INTRO 2 Environmental Exchange Box*
♦ *INTRO 3 Trees as Habitats*
♦ *FOF 4 Who Owns America's Forests?, Part A Sizing Up Forests*
♦ *MSW 4 Composting, Part A Composting Basics*
◊ *FOF 1 What's a Forest to You?*

Biology.5 The student will investigate and understand life functions of monerans, protists, fungi, plants, and animals, including humans.

⇒ *RISK 4 Risk Assessment: Tools of the Trade*
⇒ *RISK 7 Decision Making: Ecological Risk, Wildfires, and Natural Hazards*
♦ *RISK 6 Weighing the Options: A Look at Tradeoffs*

Biology.7 The student will investigate and understand bases for modern classification systems.

♦ *ECOL 1 Adopt-a-Forest*
♦ *ECOL 2 Cast of Thousands*

Biology.8 The student will investigate and understand how populations change through time.

⇒ *ECOL 5 Saga of the Gypsy Moth*
⇒ *ECOL 6 Story of Succession*
⇒ *RISK 7 Decision Making: Ecological Risk, Wildfires, and Natural Hazards*
♦ *INTRO 5 400-Acre Wood*
♦ *FOF 2 Old-Growth Forests*
♦ *ECOL 1 Adopt-a-Forest*
♦ *ECOL 2 Cast of Thousands*
♦ *ECOL 4 Home Sweet Home*
♦ *ECOL 7 Understanding Fire*
♦ *ECOL 8 Fire Management*
♦ *RISK 6 Weighing the Options: A Look at Tradeoffs*
◊ *RISK 2 Things Aren't Always What They Seem*

Biology.9 The student will investigate and understand dynamic equilibria within populations, communities, and ecosystems.

⇒ *ECOL 1 Adopt-a-Forest*
⇒ *ECOL 2 Cast of Thousands*
⇒ *ECOL 4 Home Sweet Home*
⇒ *ECOL 5 Saga of the Gypsy Moth*
⇒ *ECOL 6 Story of Succession*
⇒ *ECOL 7 Understanding Fire*
⇒ *ECOL 8 Fire Management*
⇒ *RISK 7 Decision Making: Ecological Risk, Wildfires, and Natural Hazards*
♦ *INTRO 1 Renewable or Not*
♦ *INTRO 3 Trees as Habitats*
♦ *INTRO 5 400-Acre Wood*
♦ *INTRO 7 Watch on Wetlands*
♦ *FOF 2 Old-Growth Forests*
♦ *FOF 3 Tough Choices*
♦ *FOF 4 Who Owns America's Forests?*
♦ *FOF 6 Squirrels vs. Scopes*
♦ *RISK 6 Weighing the Options: A Look at Tradeoffs*
◊ *MSW 1 The Waste Stream, Part A Waste Not, Want Not*
◊ *RISK 2 Things Aren't Always What They Seem*

Chemistry.1 The student will investigate and understand that experiments in which variables are measured, analyzed, and evaluated, produce observations and verifiable data.

⇒ *RISK 3 Chances Are ... Understanding Probability and Risk*
⇒ *RISK 5 Communicating Risk*
◊ *MSW 2 Source Reduction, Part B Product Toxicity*

Chemistry.6 The student will investigate and understand how basic chemical principles relate to other areas of chemistry.

⇒ *MSW 2 Source Reduction, Part B Product Toxicity*

ENGLISH

English 6.2 The student will listen critically and express opinions in oral presentations.
◊ *FOF 5 Balancing America's Forests*
◊ *FOF 7 Words to Live By*

English 6.9 The student will select the best sources for a given purpose, including atlases, dictionaries, globes, interviews, telephone directories, encyclopedias, electronic databases, and the *Reader's Guide*.
◊ *FOF 4 Who Owns America's Forests?*

English 7.1 The student will give and seek information in conversations and in group discussions.
◊ *INTRO 2 Environmental Exchange Box*
◊ *FOF 3 Tough Choices*
◊ *FOF 5 Balancing America's Forests*
◊ *ECOL 1 Adopt-a-Forest*
◊ *ECOL 2 Cast of Thousands*
◊ *ECOL 5 Saga of the Gypsy Moth*
◊ *ECOL 7 Understanding Fire*

English 7.3 The student will identify persuasive messages in nonprint media, including television, radio, and films.
◊ *FOF 6 Squirrels vs. Scopes*

English 7.6 The student will read and understand information from varied sources.
◊ *FOF 3 Tough Choices*

English 7.8 The student will develop narrative, expository, persuasive, and technical writings.
◊ *ECOL 3 The Nature of Plants*
◊ *ECOL 4 Home Sweet Home*

English 7.9 The student will use a word processor to plan, draft, revise, and publish some writings.
◊ *FOF 4 Who Owns America's Forests?*

English 7.10 The student will apply knowledge of resources in preparing written and oral presentations.
◊ *ECOL 1 Adopt-a-Forest*

English 8.1 The student will use interviewing techniques to gain information.
⇒ *FOF 1 What's a Forest to You?*

English 8.5 The student will write in a variety of forms, including narrative, expository and persuasive writings.
◊ *FOF 2 Old-Growth Forests*
◊ *ECOL 4 Home Sweet Home*

English 8.6 The student will analyze mass media messages.
◊ *FOF 6 Squirrels vs. Scopes*

English 9.2 The student will make planned oral presentations.
◊ *INTRO 4 Energy Sleuths*
◊ *INTRO 5 400-Acre Wood*
◊ *INTRO 7 Watch on Wetlands*
◊ *FOF 3 Tough Choices*

English 9.4 The student will read and analyze a variety of print materials.

⇒ *FOF 2 Old-Growth Forests*
⇒ *FOF 6 Squirrels vs. Scopes*
⇒ *RISK 1 What Is Risk?*
⇒ *RISK 5 Communicating Risk*
⇒ *RISK 6 Weighing the Options: A Look at Tradeoffs*
⇒ *RISK 7 Decision Making: Ecological Risk, Wildfires, and Natural Hazards*
⇒ *RISK 8 Taking Action: Reducing Risk in Your School or Community*
◊ *FOF 7 Words to Live By*

English 9.6 The student will develop narrative, literary, expository, and technical writings to inform, explain, analyze, or entertain.
⇒ *FOF 2 Old-Growth Forests (Extra, Extra & Variation)*
⇒ *RISK 5 Communicating Risk*
⇒ *RISK 7 Decision Making: Ecological Risk, Wildfires, and Natural Hazards*
◊ *INTRO 4 Energy Sleuths*
◊ *ECOL 1 Adopt-a-Forest*
◊ *ECOL 4 Home Sweet Home*
◊ *RISK 8 Taking Action: Reducing Risk in Your School or Community*

English 9.7 The student will credit the sources of both quoted and paraphrased ideas.
⇒ *FOF 2 Old-Growth Forests (Extra, Extra & Variation)*
◊ *INTRO 6 Democracy in Action*
◊ *FOF 3 Tough Choices*
◊ *FOF 7 Words to Live By*
◊ *MSW 2 Source Reduction, Part C Life-Cycle Factors*
◊ *RISK 8 Taking Action: Reducing Risk in Your School or Community*

English 9.8 The student will use electronic databases to access information.
♦ *MSW 5 Waste-to-Energy, Part B The Great Debate*
♦ *RISK 7 Decision Making: Ecological Risk, Wildfires, and Natural Hazards*
◊ *INTRO 6 Democracy in Action*
◊ *RISK 5 Communicating Risk*
◊ *RISK 8 Taking Action: Reducing Risk in Your School or Community*

English 10.1 The student will participate in and report small-group learning activities.
⇒ *FOF 4 Who Owns America's Forests?, Part B Check It Out*
⇒ *MSW 2 Source Reduction, Part A Packaging*
⇒ *RISK 5 Communicating Risk*
⇒ *RISK 6 Weighing the Options: A Look at Tradeoffs*
⇒ *RISK 7 Decision Making: Ecological Risk, Wildfires, and Natural Hazards*
◊ *INTRO 3 Trees as Habitats*
◊ *INTRO 4 Energy Sleuths*
◊ *INTRO 5 400-Acre Wood*
◊ *INTRO 6 Democracy in Action*
◊ *INTRO 7 Watch on Wetlands*
◊ *INTRO 9 A Look at Lifestyles*
◊ *FOF 3 Tough Choices*
◊ *ECOL 1 Adopt-a-Forest*
◊ *ECOL 2 Cast of Thousands*
◊ *ECOL 3 The Nature of Plants*
◊ *ECOL 5 Saga of the Gypsy Moth*
◊ *ECOL 6 Story of Succession*

English 10.4 The student will read and interpret printed consumer materials.
⇒ *RISK 8 Taking Action: Reducing Risk in Your School or Community*
♦ *RISK 5 Communicating Risk*
◊ *FOF 2 Old-Growth Forests*
◊ *RISK 6 Weighing the Options: A Look at Tradeoffs*
◊ *RISK 7 Decision Making: Ecological Risk, Wildfires, and Natural Hazards*

English 10.7 The student will develop a variety of writings with an emphasis on exposition.
⇒ *FOF 2 Old-Growth Forests (Extra, Extra & Variation)*
♦ *FOF 1 What's a Forest to You?*
♦ *FOF 7 Words to Live By*
♦ *MSW 2 Source Reduction, Part A Packaging*
◊ *INTRO 5 400-Acre Wood*
◊ *ECOL 4 Home Sweet Home*
◊ *RISK 8 Taking Action: Reducing Risk in Your School or Community*

English 10.8 The student will critique professional and peer writing.
◊ *FOF 6 Squirrel vs. Scopes*

English 10.9 The student will use writing to interpret, analyze, and evaluate ideas.
⇒ *RISK 5 Communicating Risk*
♦ *RISK 7 Decision Making: Ecological Risk, Wildfires, and Natural Hazards*
◊ *INTRO 3 Trees as Habitats*
◊ *FOF 1 What's a Forest to You?*
◊ *RISK 6 Weighing the Options: A Look at Tradeoffs*

English 10.10 The student will collect, evaluate, and organize information.
⇒ *FOF 1 What's a Forest to You?*
⇒ *FOF 2 Old-Growth Forests (Extra, Extra & Variation)*
⇒ *FOF 7 Words to Live By*
⇒ *MSW 3 Recycling and Economics, Part A Recycling Survey*
⇒ *MSW 5 Waste-to-Energy, Part B The Great Debate*
⇒ *MSW 7 Where Does Your Garbage Go?*
⇒ *RISK 5 Communicating Risk*
⇒ *RISK 6 Weighing the Options: A Look at Tradeoffs*
⇒ *RISK 7 Decision Making: Ecological Risk, Wildfires, and Natural Hazards*
♦ *FOF 4 Who Owns America's Forests?, Part B Check It Out*
◊ *INTRO 4 Energy Sleuths*
◊ *INTRO 6 Democracy in Action*
◊ *INTRO 7 Watch on Wetlands*
◊ *FOF 3 Tough Choices*
◊ *ECOL 8 Fire Management*
◊ *MSW 2 Source Reduction, Part C Life-Cycle Factors*
◊ *RISK 8 Taking Action: Reducing Risk in Your School or Community*

English 11.1 The student will make persuasive presentations.
⇒ *MSW 2 Source Reduction, Part A Packaging*
⇒ *RISK 4 Risk Assessment: Tools of the Trade*
⇒ *RISK 6 Weighing the Options: A Look at Tradeoffs*
♦ *MSW 5 Waste-to-Energy, Part B The Great Debate*
◊ *INTRO 4 Energy Sleuths*
◊ *INTRO 5 400-Acre Wood*
◊ *INTRO 9 A Look at Lifestyles*
◊ *FOF 3 Tough Choices*
◊ *ECOL 7 Understanding Fire*

English 11.2 The student will analyze and evaluate persuasive presentations.
⇒ *RISK 4 Risk Assessment: Tools of the Trade*
♦ *RISK 6 Weighing the Options; A Look at Tradeoffs*

English 11.7 The student will write in a variety of forms with an emphasis on persuasion.
⇒ *FOF 7 Words to Live By*
♦ *MSW 2 Source Reduction, Part A Packaging*
◊ *ECOL 4 Home Sweet Home*

English 11.8 The student will write, revise, and edit personal and business correspondence to a standard acceptable in the work place and higher education.
⇒ *MSW 2 Source Reduction, Part A Packaging*
◊ *FOF 8 Take Action!*

English 11.9 The student will analyze, evaluate, synthesize, and organize information from a variety of sources into a documented paper dealing with a question, problem, or issue.
⇒ *FOF 7 Words To Live By*
♦ *RISK 5 Communicating Risk*
◊ *FOF 4 Who Owns America's Forests?, Part B Check It Out*
◊ *ECOL 8 Fire Management*
◊ *MSW 2 Source Reduction, Part C Life-Cycle Factors*
◊ *RISK 8 Taking Action: Reducing Risk in Your School or Community*

English 12.1 The student will make a 5-10 minute formal oral presentation.
⇒ *FOF 4 Who Owns America's Forests?, Part B Check It Out*
♦ *MSW 2 Source Reduction, Part A Packaging*
◊ *INTRO 6 Democracy in Action*

English 12.4 The student will read a variety of print material.
⇒ *RISK 5 Communicating Risk*
⇒ *RISK 8 Taking Action: Reducing Risk in Your School or Community*

English 12.7 The student will develop expository and technical writings.
⇒ *FOF 2 Old-Growth Forests (Extra, Extra & Variation)*
◊ *ECOL 4 Home Sweet Home*

English 12.8 The student will write documented research papers.
♦ *FOF 2 Old-Growth Forests (Extra, Extra & Variation*)
◊ *FOF 3 Tough Choices*
◊ *ECOL 8 Fire Management*
◊ *MSW 2 Source Reduction, Part C Life-Cycle Factors*

HISTORY & SOCIAL SCIENCES

Social Science 7.4 The student will compare the policy-making process at the local, state, and national levels of government.

◊ *FOF 6 Squirrels vs. Scopes*

Social Science 7.9 The student will demonstrate an understanding of the rights and responsibilities of citizens in America.

◊ *FOF 5 Balancing America's Forests*

◊ *FOF 6 Squirrels vs. Scopes*

Social Science 9.9 The student will analyze and explain the effects of the Industrial Revolution.

♦ *MSW 1 The Waste Stream, Part C School Waste Audit*

Social Science 9.11 The student will demonstrate skills in historical research and geographical analysis.

♦ *MSW 1 The Waste Stream, Part D Garbage Through the Ages*

Social Science 10.1 The student will use maps, globes, photographs, and pictures to analyze the physical and human landscapes of the world.

♦ *RISK 7 Decision Making: Ecological Risk, Wildfires, and Natural Hazards*

◊ *ECOL 2 Cast of Thousands*

◊ *RISK 1 What is Risk?*

Social Science 10.2 The student will analyze how selected physical and ecological processes shape the Earth's surface.

⇒ *MSW 2 Source Reduction, Part A Packaging*

⇒ *RISK 5 Communicating Risk*

⇒ *RISK 7 Decision Making: Ecological Risk, Wildfires, and Natural Hazards*

♦ *FOF 1 What's a Forest to You?*

♦ *FOF 7 Words to Live By*

♦ *ECOL 7 Understanding Fire*

♦ *ECOL 8 Fire Management*

♦ *MSW 1 The Waste Stream, Part A Waste Not, Want Not*

♦ *RISK 6 Weighing the Options: A Look at Tradeoffs*

◊ *INTRO 2 Environmental Exchange Box*

◊ *INTRO 7 Watch on Wetlands*

◊ *INTRO 9 A Look at Lifestyles*

◊ *ECOL 5 Saga of the Gypsy Moth*

◊ *RISK 8 Taking Action: Reducing Risk in Your School or Community*

Social Science 10.3 The student will explain how

- geographic regions change over time;
- characteristics of regions have led to regional labels;
- regional landscapes reflect the cultural characteristics of their inhabitants as well as historical events; and
- technological advances have led to increasing interaction among regions.

♦ *RISK 6 Weighing the Options: A Look at Tradeoffs*

♦ *RISK 7 Decision Making: Ecological Risk, Wildfires, and Natural Hazards*

◊ *INTRO 2 Environmental Exchange Box*

Social Science 10.5 The student will compare and contrast the distribution, growth rates, and characteristics of human population, in terms of settlement patterns and the location of natural and capital resources.

⇒ *MSW 1 The Waste Stream, Part A Waste Not, Want Not*
⇒ *RISK 7 Decision Making: Ecological Risk, Wildfires, and Natural Hazards*

Social Science 10.6 The student will analyze past and present trends in human migration and cultural interaction as they are influenced by social, economic, political, and environmental factors.

⇒ *RISK 1 What Is Risk?*

Social Science 10.8 The student will identify natural hazards, describe their characteristics, explain their impact on human and physical systems, and assess efforts to manage their consequences in developed and less developed regions.

⇒ *RISK 7 Decision Making: Ecological Risk, Wildfires, and Natural Hazards*
◊ *RISK 8 Taking Action: Reducing Risk in Your School or Community*

Social Science 10.9 The student will identify natural, human, and capital resources, describe their distribution, and explain their significance, in terms of location of contemporary and selected historical economic and land-use regions.

⇒ *MSW 1 The Waste Stream, Part D Garbage Through the Ages*
♦ *MSW 1 The Waste Stream, Part A Waste Not, Want Not*
♦ *RISK 7 Decision Making: Ecological Risk, Wildfires, and Natural Hazards*
◊ *INTRO 1 Renewable or Not*
◊ *INTRO 7 Watch on Wetlands*
◊ *INTRO 9 A Look at Lifestyles*
◊ *FOF 7 Words To Live By*
◊ *ECOL 5 Saga of the Gypsy Moth*
◊ *ECOL 7 Understanding Fire*
◊ *RISK 8 Taking Action: Reducing Risk in Your School or Community*

Social Science 10.10 The student will analyze the patterns of urban development, in terms of site and situation, the function of towns and cities, and problems related to human mobility, social structure, and the environment.

⇒ *MSW 1 The Waste Stream, Part D Garbage Through the Ages*
♦ *ECOL 8 Fire Management*
◊ *INTRO 7 Watch on Wetlands*
◊ *FOF 7 Words To Live By*
◊ *ECOL 7 Understanding Fire*
◊ *MSW 1 The Waste Stream, Part C School Waste Audit*
◊ *RISK 8 Taking Action: Reducing Risk in Your School or Community*

Social Science 10.15 The student will apply geography to interpret the past, understand the present, and plan for the future.

⇒ *RISK 7 Decision Making: Ecological Risk, Wildfires, and Natural Hazards*

Social Science 11.1 The student will analyze and explain the contacts between American Indians and European settlers during the Age of Discovery

◊ *INTRO 1 Renewable or Not*

Social Science 12.5 The student will identify and explain fundamental concepts of democracy, with emphasis placed on equality of all citizens under the law, the fundamental worth and dignity of the individual, majority rule and minority rights, the necessity of compromise, individual freedom, and the rule of law.

♦ *RISK 6 Weighing the Options: A Look at Tradeoffs*

Social Science 12.6 The student will analyze in writing, discussion, and debate current issues confronting local, state, and national governments in terms of perennial challenges to democracies.

♦ *RISK 6 Weighing the Options: A Look at Tradeoffs*
♦ *RISK 7 Decision Making: Ecological Risk, Wildfires, and Natural Hazards*
◊ *FOF 5 Balancing America's Forests*
◊ *FOF 6 Squirrels vs. Scopes*

Social Science 12.7 The student will analyze and compare national and state governments.

⇒ *FOF 5 Balancing America's Forests*

Social Science 12.9 The student will identify and distinguish among the units of local governments in Virginia, including counties, cities, towns, and regional authorities and will analyze a local public issue.

♦ *FOF 5 Balancing America's Forests*
◊ *FOF 6 Squirrels vs. Scopes*

Social Science 12.10 The student will explain and give current examples of how political parties, interest groups, the media, and individuals influence the policy agenda and decision making of government institutions.

⇒ *FOF 6 Squirrels vs. Scopes*
⇒ *RISK 2 Things Aren't Always What They Seem*
♦ *INTRO 6 Democracy in Action*
♦ *RISK 7 Decision Making: Ecological Risk, Wildfires, and Natural Hazards*
◊ *FOF 5 Balancing America's Forests*
◊ *ECOL 8 Fire Management*

Social Science 12.12 The student will explain the rights, responsibilities, and benefits of citizenship in the United States and Virginia.

◊ *RISK 7 Decision Making: Ecological Risk, Wildfires, and Natural Hazards*

Social Science 12.13 The student will develop the skills needed for informed participation in public affairs.

⇒ *RISK 8 Taking Action: Reducing Risk in Your School or Community*
♦ *FOF 8 Take Action!*
◊ *INTRO 6 Democracy in Action*
◊ *FOF 3 Tough Choices*
◊ *ECOL 8 Fire Management*
◊ *RISK 7 Decision Making: Ecological Risk, Wildfires, and Natural Hazards*

Social Science 12.14 The student will compare the United States political and economic systems with those of major democratic and authoritarian nations.

♦ *RISK 6 Weighing the Options: A Look at Tradeoffs*

Social Science 12.16 The student will analyze the role of government in the United States economy.

♦ *RISK 6 Weighing the Options: A Look at Tradeoffs*