



*New Jersey Project  
Learning Tree  
Correlations*

*Exploring  
Environmental Issues:  
Focus on Risk*

*Window to your world of instruction*

**PLT correlations to the  
New Jersey Core Curriculum Content Standards**



**New Jersey Department of Environmental Protection**  
**Division of Parks and Forestry**  
**Forest Resource Education Center**  
370 East Veterans Highway  
Jackson, NJ 08527  
[www.njforestrycenter.org](http://www.njforestrycenter.org)  
[www.teachnjenv.org](http://www.teachnjenv.org)  
732-833-9816  
[Elizabeth.faircloth@dep.state.nj.us](mailto:Elizabeth.faircloth@dep.state.nj.us)



## *Exploring Environmental Issues: Focus on Risk*

**Project Learning Tree** is sponsored by the NJ Department of Environmental Protection, Division of Parks and Forestry and is registered with the Department of Education as a professional development provider. Project Learning Tree (PLT) is internationally recognized as one of the premier environmental education programs.

A **Project Learning Tree Workshop for Secondary Educators** may include one of the five secondary environmental education modules: *Exploring Environmental Issues; Focus on Forests, The Places We Live, Municipal Solid Waste, Focus on Risk, and The Changing Forest: Forest Ecology*. All educators will receive a free education module at a PLT workshop.

The PLT secondary environmental education modules are built around five major themes: Diversity, Interrelationships, Systems, Structure and Scale, and Patterns of Change. PLT activities integrate the themes into all aspects of the standard secondary curriculum. Each activity guides the student through a process that begins with awareness, moves students toward understanding, enables them to challenge preconceived notions, and motivates them to seek constructive avenues for environmental action.

*Exploring Environmental Issues: Focus on Risk* focuses on developing critical thinking skills. The activities do not seek to teach students *what* to think. Instead, they focus on teaching students *how* to think about environmental issues. The activities will help students develop skills they need to participate in meaningful public dialogue and decision-making processes that address environmental and human health issues.

Since the development of the New Jersey Core Curriculum Content Standards (CCCS), educators will need to correlate their curriculum with these standards.

This New Jersey Secondary Educators Project Learning Tree Guide lists the written state content standards for each PLT activity. Only the content standards that pertain to PLT activities are written. The activities are presented by their PLT Activity Guide name and number. The letter “E” is added to the activity number if the content standard is found only in the enrichment activity.

## Science Standards

**Standard 5.1** (SCIENTIFIC PROCESSES) All students will develop problem-solving, decision-making and inquiry skills, reflected by formulating usable questions and hypotheses, planning experiments, conducting systematic observations, interpreting and analyzing data, drawing conclusions, and communicating results.

### A. Habits of Mind

#### PLT activity #

1. What is Risk?
  2. Things Aren't Always What They Seem, Part C and Enrichment activities
  3. Chances Are...Understanding Probability and Risk
  4. Risk Assessments: Tools of the Trade
  5. Communicating Risk
  6. Weighing the Options: A Look at Tradeoffs
- Special Topics:  
Electromagnetic Fields: Part A and Part B  
Chlorine: Looking at Tradeoffs  
Plastics, Risk/Benefit Analysis, and Environmental Legislation
8. Taking Action: Reducing Risk in Your School or Community

**Standard 5.2** (SCIENCE AND SOCIETY) All students will develop an understanding of how people of various cultures have contributed to the advancement of science and technology, and how major discoveries and events have advanced science and technology.

### A. Cultural Contributions

#### PLT activity #

2. Things Aren't Always What They Seem:  
Part C and Enrichment activity #1

**Standard 5.3** (MATHEMATICAL APPLICATIONS) All students will integrate mathematics as a tool for problem-solving in science, and as a means of expressing and/or modeling scientific theories.

B. Geometry and Measurement

**PLT activity #**

- 3. Chances Are...Understanding Probability and Risk  
Special Topic: Electromagnetic Fields

C. Patterns And Algebra

**PLT activity #**

- 3. Chances Are...Understanding Probability and Risk

D. Data Analysis and Probability

**PLT activity #**

- 3. Chances Are...Understanding Probability and Risk
- 7. Decision Making: Ecological Risk, Wildfires, and Natural Hazards; Part B

**Standard 5.4** (NATURE AND PROCESS OF TECHNOLOGY) All students will understand the interrelationships between science and technology and develop a conceptual understanding of the nature and process of technology.

B. Nature of Technology

**PLT activity #**

- 3. Chances Are...Understanding Probability and Risk  
Special Topics:  
Chlorine: Looking at Tradeoffs  
Plastics, Risk/Benefit Analysis, and  
Environmental Legislation

C. Technological Design

**PLT activity #**

- 6. Weighing the Options: A Look at Tradeoffs
- 8. Taking Action: Reducing Risk in Your  
School or Community

**Standard 5.10**

(ENVIRONMENTAL STUDIES) All students will develop an understanding of the environment as a system of interdependent components affected by human activity and natural phenomena.

A. Natural Systems and Interactions

**PLT Activity #**

7. Decision Making: Ecological Risk, Wildfires, and Natural Hazards; Part C

B. Human Interactions and Impact

**PLT Activity #**

2. Things Aren't Always What They Seem
3. Chances Are...Understanding Probability and Risk
6. Weighing the Options: A Look at Tradeoffs
7. Decision Making: Ecological Risk, Wildfires, and Natural Hazards; Part A, and Part B

Special Topics:

Electromagnetic Fields

Chlorine: Looking at Tradeoffs

Plastics, Risk/Benefit Analysis, and Environmental Legislation

8. Taking Action; Reducing Risk in Your School or Community

**Mathematics Standards**

**Standard 4.1**

(NUMBER AND NUMERICAL OPERATIONS) All students will develop number sense and will perform standard numerical operations and estimations on all types of numbers in a variety of ways.

C. Estimation

**PLT activity #**

3. Things Aren't Always What They Seem
7. Decision Making: Ecological Risk, Wildfires, and Natural Hazards, Part A, and Part C

**Standard 4.3**

(PATTERNS AND ALGEBRA) All students will represent and analyze relationships and variable quantities and solve problems involving patterns, functions, and algebraic concepts and processes.

A. Functions and Relationships

**PLT activity #**

3. Chances Are...Understanding Probability and Risk

C. Modeling

**PLT activity #**

3. Chances Are...Understanding Probability and Risk
7. Decision Making: Ecological Risk, Wildfires, and Natural Hazards; Part B

D. Procedures

**PLT activity #**

3. Chances Are...Understanding Probability and Risk

**Standard 4.4**

(DATA ANALYSIS, PROBABILITY, AND DISCRETE MATHEMATICS) All students will develop an understanding of the concepts and techniques of data analysis, probability, and discrete mathematics and will use them to model situations, solve problems, and analyze and draw appropriate inferences from data.

A. Data Analysis

**PLT activity #**

3. Chances Are...Understanding Probability and Risk

B. Probability

**PLT activity #**

3. Chances Are...Understanding Probability and Risk
4. Risk Assessments: Tools of the Trade
7. Decision Making: Ecological Risk, Wildfires, and Natural Hazards; Part B

C. Discrete Mathematics—Systematic Listing and Counting

**PLT activity #**

3. Chances Are...Understanding Probability and Risk

**Standard 4.5**

(MATHEMATICAL PROCESSES) All students will use mathematical processes of problem solving, communication, connections, reasoning, representations, and technology to solve problems and communicate mathematical ideas.

A. Problem Solving

**PLT activity #**

3. Chances Are...Understanding Probability and Risk

Special Topic:

Plastics, Risk/Benefit Analysis, and Environmental  
Legislation

B. Communication

**PLT activity #**

3. Chances Are...Understanding Probability and Risk

4. Risk Assessment: Tools of the Trade

5. Communicating Risk, Part A

Special Topic: Electromagnetic Fields: Part A, Part B

C. Connections

**PLT activity #**

3. Chances Are...Understanding Probability and Risk

Special Topic:

Plastics, Risk/Benefit Analysis, and Environmental  
Legislation

D. Reasoning

**PLT activity #**

3. Chances Are...Understanding Probability and Risk

7. Decision Making: Ecological Risk, Wildfires, and  
Natural Hazards; Part C

E. Representations

**PLT activity #**

3. Chances Are...Understanding Probability and Risk

7. Decision Making: Ecological Risk, Wildfires, and  
Natural Hazards; Part C

## **Social Studies Standards**

**Standard 6.1** (SKILLS) All students will utilize historical thinking, problem solving, and research skills to maximize their understanding of civics, history, geography, and economics.

### A. Social Studies Skills

#### **PLT activity #**

2. Things Aren't Always What They Seem
4. Weighing the Options: A Look At Tradeoffs

Special Topics:

Electromagnetic Fields: Part A

Plastics, Risk/Benefit Analysis, and Environmental

Legislation: Part B and Enrichment activity #2

**Standard 6.2** (CIVICS) All students will know, understand and appreciate the values and principles of American democracy and the rights, responsibilities, and roles of a citizen in the nation and the world.

### D. Citizenship

#### **PLT activity #**

1. What Is Risk?
  2. Things Aren't Always What They Seem: Part C and Enrichment activity #2
  6. Weighing the Options: A Look At Tradeoffs
- Special Topics:
- Electromagnetic Fields
- Chlorine: Looking at Tradeoffs
- Plastics, Risk/Benefit Analysis, and Environmental Legislation: Part B and Enrichment activity #2
8. Taking Action: Reducing Risk In Your School and Community

## **Language Arts Standards**

**Standard 3.1** (READING) All students will understand and apply the knowledge of sounds, letters, and words in written English to become independent and fluent readers, and will read a variety of materials and texts with fluency and comprehension.

### G. Comprehension Skills and Response To Text

#### **PLT activity #**

1. What Is Risk?

**Standard 3.2** (WRITING) All students will write in clear, concise, organized language that varies in content and form for different audiences and purposes.

### A. Writing As A Process

#### **PLT activity #**

1. What Is Risk? Enrichment activity #2
2. Things Aren't Always What They Seem:  
Enrichment activities #1 and #2

### B. Writing As A Product

#### **PLT activity #**

1. What Is Risk? Enrichment activity #1
4. Risk Assessment: Tools of the Trade

### D. Writing Forms, Audiences, and Purposes

#### **PLT activity #**

1. What Is Risk? Enrichment #1
5. Communicating Risk: Part E and Extension

**Standard 3.3** (SPEAKING) All students will speak in clear, concise, organized language that varies in content and form for different audiences and purposes.

A. Discussion

**PLT activity #**

- 4. Risk Assessment: Tools of the Trade: Part C
- 6. Weighing the Options: A Look at Tradeoffs  
Special Topics:  
Electromagnetic Fields: Part B and Enrichment activity #2  
Chlorine: Looking at Tradeoffs: Enrichment activity #2

**Standard 3.4** (LISTENING) All students will listen actively to information from a variety of sources in a variety of situations.

B. Listening Comprehension

**PLT activity #**

- 1. What Is Risk? Enrichment activity #2
- 4. Risk Assessment: Tools of the Trade: Part C
- 6. Weighing the Options: A Look at Tradeoffs  
Special Topic: Electromagnetic Fields: Part A
- 8. Taking Action: Reducing Risk in Your School or  
Community

**Standard 3.5** (VIEWING AND MEDIA LITERACY) All students will access, view, evaluate, and respond to print, nonprint, and electronic texts and resources.

A. Constructing Meaning from Media

**PLT activity #**

- 5. Communicating Risk: Part D, Part E, and Enrichment activity
- Special Topic:  
Chlorine: Looking at Tradeoffs

B. Living with Media

**PLT activity #**

- Special Topic:  
Chlorine: Looking at Tradeoffs

## Comprehensive Health and Physical Education Standards

### Standard 2.2

(INTEGRATED SKILLS) All students will use health-enhancing personal, interpersonal, and life skills to support a healthy, active lifestyle.

- A. Communication
- B. Decision Making
- C. Planning and Goal setting
- D. Leadership, Advocacy, and Service

#### PLT activity #

- 1. What is Risk? Part A and Part C
- 2. Things Aren't Always What They Seem: Part B, Part C, and Enrichment activity #2
- 4. Risk Assessment: Tools of the Trade: Part C,
- 7. Decision Making; Ecological Risk, Wildfires, and Natural Hazards: Part C

#### Special Topics:

- Chlorine: Looking at Tradeoffs: Enrichment activity #2
- Plastics, Risk/Benefit Analysis, and Environmental Legislation: Part B
- 8. Taking Action: Reducing Risk in Your School or Community: Part A

## Technological Literacy Standards

### Standard 8.1

Computer and information literacy All students will use computer applications to gather and organize information and to solve problems.

- A. Basic Computer Skills and Tools

#### PLT activity #

- 2. Things Aren't Always What They Seem
- 5. Communicating Risk: Enrichment activity

- B. Application of Productivity Tools

#### PLT activity #

- 3. Things Aren't Always What They Seem
- 5. Communicating Risk: Enrichment activity
- Special Topic:

Chlorine: Looking at Tradeoffs, Enrichment activity #2

## **Career Education and Consumer, Family, and Life Skills Standards**

### **Standard 9.2**

(CONSUMER, FAMILY, AND LIFE SKILLS) All students will demonstrate critical life skills in order to be functional members of society.

- A. Critical Thinking
- B. Self-Management
- C. Interpersonal Communication

#### **PLT activity #**

1. What is Risk?
2. Things Aren't Always What They Seem
3. Chances Are... Understanding Probability and Risk
4. Risk Assessment: Tools of the Trade
5. Communicating Risk
6. Weighing the Options: A Look at Tradeoffs
7. Decision Making: Ecological Risk, Wildfires, and Natural Hazards

#### Special Topics:

Electromagnetic Fields

Chlorine: Looking at Tradeoffs

Plastics, Risk/Benefit Analysis, and Environmental Legislation

8. Taking Action: Reducing Risk in Your School or Community

#### **B. Character Development and Ethics**

#### **PLT activity #**

2. Things Aren't Always What They Seem
5. Communicating Risk
6. Weighing the Options: A Look at Tradeoffs

#### Special Topics:

Electromagnetic Fields

Plastics, Risk/Benefit Analysis, and Environmental Legislation

8. Taking Action: Reducing Risk in Your School or Community

The New Jersey Educators Project Learning Guide represents the joint efforts of several groups who are dedicated to bringing environmental education to the classroom and promoting a lifetime of learning in the process. Thanks are extended to:

The New Jersey Department of Environmental Protection  
Division of Parks and Forestry  
NJ Forest Service  
NJ Forest Resource Education Center  
NJDEP, Office of Communications  
USDA Forest Service-Conservation Education  
NJ Natural Resources Education Cooperative  
NJ Department of Education



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[www.njforestrycenter.org](http://www.njforestrycenter.org)  
[www.plt.org](http://www.plt.org)

