



*New Jersey Project
Learning Tree
Correlations*

*Exploring
Environmental Issues:
Municipal Solid
Waste*

Window to your world of instruction

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



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Exploring Environmental Issues: Municipal Solid Waste

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: Municipal Solid Waste focuses on developing critical thinking skills while using a constructivist approach to teaching. The main goals of this module are (1) to generate an awareness, interest, and understanding of waste management issues and options; (2) to provide hands-on experiences that help show the interrelationships among waste generation, natural resource use, and disposal; (3) to provide opportunities for exploring a variety of waste management strategies and solutions; and (4) to provide the tools necessary for making informed decisions and choices regarding waste issues at both the individual and the community levels.

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 5.2 (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

1. The Waste Stream
3. Recycling And Economics
5. Waste-To-Energy
6. Landfills
7. Where Does Your Garbage Go?

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.

D. Data Analysis and Probability

PLT activity

1. The Waste Stream

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.

A. Science and Technology

PLT activity

1. The Waste Stream
3. Recycling and Economics
5. Waste-To-Energy
6. Landfills
7. Where Does Your Garbage Go?

C. Technological Design

PLT activity

2. Source Reduction

Standard 5.5

(CHARACTERISTICS OF LIFE) All students will gain an understanding of the structure, characteristics, and basic needs of organisms and will investigate the diversity of life.

A. Matter, Energy and Organization in Living Systems

PLT activity #

2. Source Reduction
4. Composting

Standard 5.6

(CHEMISTRY) All students will gain an understanding of the structure and behavior of matter.

B. Chemical Reactions

PLT activity #

4. Composting
- 5E(#5) Waste-To-Energy
6. Landfills

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.

B. Human Interactions and Impact

PLT activity #

1. The Waste Stream
3. Recycling And Economics

Mathematics Standards

Standard 4.3 (PATTERNS AND ALGEBRA) All students will represent and analyze relationships among variable quantities and solve problems involving patterns, functions, and algebraic concepts and processes.

- A. Patterns
- B. Functions and Relationships
- C. Modeling

PLT activity #

- 3. Recycling And Economics

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.

- B. Communication
- E. Representations
- F. Technology

PLT activity #

- 1. Waste Stream
- 2. Recycling And Economics

Social Studies Standards

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 our democratic society.

- A. Civic Life, Politics, and Government
- B. Citizenship

PLT activity

- 1. The Waste Stream
- 5. Waste-To-Energy
- 6. Landfills
- 7. Where Does Your Garbage Go?
- 8. Take Action: Success Stories and Personal Choices.

Standard 6.4

(UNITED STATES AND NEW JERSEY HISTORY) All students will demonstrate knowledge of United States and New Jersey history in order to understand life and events in the past and how they relate to the present and the future.

- L. Contemporary America (1968-present)

PLT activity

- 1. The Waste Stream
- 5. Waste-To-Energy

Standard 6.5

(ECONOMICS) All students will acquire an understanding of key economic principles in relation to individuals, institutions, and governments.

- A. Economic Literacy

PLT activity

- 3. Recycling And Economics
- 4. Composting

- B. Economics and Society

PLT activity

- 3. Recycling And Economics
- 5. Waste-To-Energy

Standard 6.6 (GEOGRAPHY) All students will apply knowledge of spatial relationships and other geographic skills to understand human behavior in relation to the physical and cultural environment.

D. Environment and Society

PLT activity #

2. Source Reduction
3. Recycling and Economics
4. Composting

Visual and Performing Arts Standards

Standard 1.2 (CREATION AND PERFORMANCE) All students will utilize those skills, media, methods, and technologies appropriate to each art form in the creation, performance, and presentation of dance, music, theater, and visual art.

D. Visual Arts

PLT activity #

2. Source Reduction
7. Where Does Your Garbage Go?

Technological Literacy Standards

Standard 8.2 (TECHNOLOGY EDUCATION) All students will develop an understanding of the nature and impact of technological engineering, technological design, and the designed world as they relate to the individual, society, and the environment.

A. Nature and Impact of Technology

PLT Activity #

1. The Waste Stream
6. Landfills

Career Education and Consumer, Family, and Life Skills

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

PLT activity #

1. The Waste Stream
2. Source Reduction
- 2E(#1) Source Reduction
3. Recycling And Economics
4. Composting
5. Waste-To-Energy
- 5E. Waste-To-Energy
6. Landfills
7. Where Does Your Garbage Go?
8. Take Action: Success Stories And Personal Choices

A. Self-Management

PLT activity #

6. Landfills

B. Interpersonal Communication

PLT activity #

1. The Waste Stream
2. Source Reduction
4. Composting
5. Waste-To-Energy
6. Landfills
8. Take Action: Success Stories And Personal Choices
- 8E. Take Action: Success Stories And Personal Choices

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:

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