UF|CPET

FFL Principle 7- Recycle Yard Waste: Trash to Treasure
Elementary School

Amanda Wink, Fishhawk Creek Elementary

Program Type: 5th grade Lab investigation	**Duration:** 60 minutes

Standards:
SC.5.L.17.1: Compare and contrast adaptations displayed by animals and plants that enable them to survive in different environments such as life cycle variations, animal behaviors and physical characteristics.

Learning Objectives: Students will understand the importance of recycling yard and household waste and will identify ways to reduce waste through composting and other sustainable practices at home and in their community.

Guiding Questions: How can recycling yard and household waste help protect Florida's environment and conserve natural resources?

Intended Outcomes

As a result of the program, what I want my audience to LEARN…	**As a result of the program, I want my audience to ACT by…**	**Assessment: (*How will you know* your audience has reached your intended outcomes)**
Students will describe how recycling yard and household waste helps reduce landfill use, enrich soil, and supports healthy ecosystems.	Students will demonstrate responsible environmental behaviors by designing a plan to recycle or compost waste at school or at home.	Reflection and project-based assessment where students explain and illustrate a simple recycling or composting system, showing understanding of key concepts.

Schedule Layout:	**Items Needed:**
ENGAGE (10 minutes) **Activity:** Show a short video or image series depicting a landfill and then a compost pile or recycled garden. Ask students: What do you notice? Where does your yard and food waste go? Have you ever seen composting or recycling in action? **Purpose:** Spark curiosity and activate prior knowledge.	Pictures of landfills, preferably local landfills. Pictures of compost piles and/or recycled garden clippings
EXPLORE (15–20 minutes) **Activity:** In small groups, students investigate two bags of "waste" Students sort items into what can be: recycled, composted or thrown away **Discussion Questions:** Which items break down naturally? Which items take up space in landfills? **Purpose:** Promote hands-on discovery of recyclable and compostable materials.	Baggies of premade "waste" (unlabeled!) -5 bags of yard waste- leaves, sticks, fruit peels, etc. -5 bags of recyclable waste- cans, plastic, paper, etc. Disposable gloves for each student
EXPLAIN (20 minutes) **Mini-Lesson with visuals:** Share copies of "Growing Up Florida-Friendly: A Kid's Guide to the 9 Principles" for each group. You could also jigsaw if needed for different groups with different needs. Define yard waste and household waste and explain what happens when waste is not recycled (landfills, pollution, etc.)	Material: Copies of books, poster paper, markers, index cards for vocabulary

Edited by Morgan Nielsen, Center for Precollegiate Education and Training, University of Florida

Introduce composting as a natural way to recycle yard and food waste to enrich soil and share FFL Principle #7 materials. Essential Vocabulary: Decompose, compost, organic, landfill, biodegradable, recycle	
ELABORATE (30 minutes) **Project Activity:** Students design a "Recycle and Compost Plan" for their school or home. **Options include:** -Drawing a diagram of a compost bin and explaining its parts. -Creating a poster or brochure promoting composting and recycling. -Writing a short persuasive paragraph encouraging families to compost. **Extension Idea:** Create a simple classroom compost bin or garden using lunch scraps (e.g., fruit/vegetable peels only).	Materials: poster paper
EVALUATE (15 minutes)- Assessment Tools: Exit Ticket: *"One thing I learned, one thing I'll do, and one question I still have."* Review student projects/posters for accurate understanding Use a rubric that checks for correct sorting of waste and a clear understanding of the content Practical application of their plan or model	Materials: index cards for exit tickets rubric

Details:

Suggestions for differentiation:

ELL (English Language Learners):

Visual Supports: Use labeled images for vocabulary (compost bin, food scraps, landfill, recycle symbol).
Sentence Frames: "This item can be recycled because _____." "I would compost _____ because _____."
Bilingual Resources: Provide instructions or books in both English and the student's native language, if available.
Peer Buddy System: Pair ELL students with bilingual or English-proficient classmates for sorting and group tasks.
Interactive Word Wall: Include illustrated vocabulary and definitions in simple English for terms like "decompose," "organic," and "landfill."

ESE (Exceptional Student Education)

Simplified Instructions: Break tasks into smaller, clear steps. Use checklists for sorting or project work.
Hands-On Learning: Use tactile activities (e.g., real or replica compost materials) to reinforce concepts.
Graphic Organizers: Provide a composting diagram for students to label or complete with word banks.
Repetition & Routine: Review key terms daily and allow practice through games like "Recycle or Trash?"
Assistive Technology: Use tools like text-to-speech apps, large-print books, or visual timers for task management.

Gifted Students

Extension Activities: Research different composting systems (e.g., vermiculture vs. hot composting), create an educational video or comic explaining how composting works
Independent Inquiry: Pose a "What If?" question—*What would happen to Earth if no one recycled yard waste for 50 years?*
Leadership Roles: Allow gifted students to lead group projects or become "Recycling Ambassadors" to present to other classes.
Cross-Disciplinary Integration: Incorporate math by having them calculate waste reduction from composting over time.