

About This Module

Overview	Through hands-on activities and games, youth learn what happens to waste, how it affects our environment, and how they can make a difference.
Guiding Questions*	<ul style="list-style-type: none"> • What trash items decompose quickly, and which items take a long time? • How can we reduce, reuse and recycle our trash? • What items can be composted, and why is composting important? • What conditions are needed to make compost? <p>*Guiding questions are not specifically asked in the activities themselves but are meant to guide your preparation and facilitation of the module. Keep these questions top of mind so you can help youth make connections and capture key takeaways relating to the topic.</p>
Activity 1	A Very Old Picnic Youth analyze how long it takes various items leftover from a picnic to decompose. They discuss the impact litter has on our environment and ways to reduce waste.
Activity 2	Recycle Relay Youth learn the importance of recycling, composting and reducing waste; what can and cannot be recycled and composted; and that trash doesn't just disappear when the trash truck picks it up.
Activity 3	Compost Tag Youth play games to learn what materials can and cannot be composted. They learn that compost can make rich soil and reduce the amount of waste going to landfills.
Activity 4	Compost in a Cup Youth make a mini compost in a cup to learn the science behind composting and discover how microorganisms in the soil help to break down organic material into compost.



Key Terms	
Decompose	To decay or break down into smaller parts through chemical change; rot.
Trash	Something that gets disposed of.
Landfill	An area of land in which wastes are placed for permanent disposal.
Reduce	Using less so that less waste is generated. For example, using both sides of paper to reduce the amount of paper needed.
Recycle	Transforming waste materials into usable resources. For example, sending used paper to a recycling facility to be made into newspaper.
Compost	A mixture of decaying organic matter, such as fruit and vegetable waste, leaves and grass. Compost can be added to soil to enrich it.
Microorganism	A living thing of microscopic size (e.g., bacteria, fungus).

Supplies		
Activity 1: A Very Old Picnic	Handouts	
	1	Rates of Decomposition
	1	Ways to Pack a Waste-Free Picnic
	Supplies Needed	
	1 per participant	Ultimate Journey Passports saved from previous activities
		Whiteboard or flipchart paper and markers
	1	Ball or other object
	1	Stopwatch
	For each participant	Picnic-related snacks
	2+ sheets per small group	Paper
	1 per small group	Pen or pencil
	1 set per small group	Markers, crayons or colored pencils
	Large bag with the following items that might be left over from a picnic:	Banana peel
		Orange peel
		Apple core
		Paper towel, soiled
		Newspaper

Supplies

Activity 1: A Very Old Picnic	Large bag with the following items that might be left over from a picnic (cont'd.):	Plastic foam
		Milk carton
		Waxed paper
		Steel can
		Aluminum can
		Plastic storage bag
		Plastic soft drink rings
		Plastic soda bottle
		Glass bottle
Activity 2: Recycle Relay	Handouts	
	1	Recycle, Compost, Throw Away or Reuse Chart
	4 sets	Recycle Relay Cards
	Supplies Needed	
	1 per participant	Ultimate Journey Passports saved from previous activities
	1	Flying disk or soft playground ball
		Tape
	4	Containers or large boxes
	4 sheets	Paper
	16 sheets	Card stock, if possible
	4	Markers
	4	Scissors
	1	Trash bag
	Clean trash items:	Old piece of clothing
		Plastic soda bottle
		Newspaper
		Glass jar
		Printer paper, used
		Cardboard
		Magazine

Supplies

Activity 2: Recycle Relay	Clean trash items (cont'd.):	Paper towel
		Aluminum can
		Plastic foam cup
		Milk carton
Activity 3: Compost Tag	Handouts	
		None
	Supplies Needed	
	1 per participant	Ultimate Journey Passports saved from previous activities
		Whiteboard or flipchart paper and markers
		Computer or projector to display videos
	1	Soft playground ball
	Composting supplies:	Cup of soil
		Newspaper
		Leaves
		Grass
		Twigs
		Banana or orange peel
		Tea bag or coffee grounds
Activity 4: Compost in a Cup	Handouts	
	1	Compost Record Chart
	1	Compost Cup Predictions
	Supplies Needed	
	1 per participant	Ultimate Journey Passports saved from previous activities
	Optional	Camera or other device to take pictures
		Newspaper to cover tables
	1+	Spray bottle
	several	Trays to store the compost cups
	1+ per tray	Thermometer
	1 per participant	16-ounce cup

Supplies

Activity 4: Compost in a Cup	1+	Permanent marker
	1 small piece per participant	Plastic wrap
	1 per participant	Rubber bands
	1 per participant	Metal spoons or trowels
	Organic material cut into small pieces, including:	Leaves
		Grass
		Twigs
		Banana peels
		Orange peels
		Apple cores
		Tea bag or coffee grounds

Background Information

Reduce, Reuse, Recycle – youth have probably heard this slogan, but have they ever stopped to think about these questions:

- How much waste do I produce each day?
- Where does that waste go?
- How does waste impact our environment?
- How can I make a difference?

Through hands-on activities and games, participants will discover the answers to these questions and learn:

- How long it takes various waste items to decompose.
- Ways to reduce the amount of waste they generate.
- What items can be recycled, reused or composted.
- How to pack a waste-free picnic.

Skills

Academic Skills	Social-Emotional Skills
Curiosity	Communication
Creativity and Innovation	Collaboration
Designing and Constructing Explanations	Identifying and Solving Problems

Links to Resources

Activity 3: Compost Tag	“Composting 101: How to Compost in NYC” (youtube.com/watch?v=0hPCKEaMkQU)
	“How to Compost in Small Spaces Using a Trash Can” (youtube.com/watch?v=AOEPnJJw198)
	“How to Compost – 8 Methods (One Is Creepy)” (youtube.com/watch?v=xnOdc6kbJhl)

Extension Activities

Activity 2: Recycle Relay	<ul style="list-style-type: none"> Discuss what the Club can do to keep local parks and community areas clean. Consider hosting a clean-up day at your Club or at a nearby park.
Activity 4: Compost in a Cup	<ul style="list-style-type: none"> Once the three-week composting experiment concludes, invite participants to add their compost to flower and garden beds around the Club or outside their homes. Reflect with a discussion about the value of compost to enrich the soil and to give plants the nutrients they need to grow. If your Club does not yet have a composting program in place, have members brainstorm how they can create a Club composting program. Discuss how composting can be as simple as keeping a pile of grass clippings and leaves. However, a small enclosure helps contain the compost, and a completely enclosed compost bin keeps rodents and other pests out. If your Club does not yet have a compost program, consider scheduling a visit to a community garden or another nearby place that offers such a program.

Note to Facilitator: Portions of Activities 2-4 should be conducted outdoors. Check the weather and schedule the activities for a clear, sunny day.