

# PROJECT HOW TO GUIDEBOOK



If you have any questions, please contact Keep Knoxville Beautiful at [info@keepknoxvillebeautiful.org](mailto:info@keepknoxvillebeautiful.org) or (865) 521-6957.

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# How to Host a Litter Pickup



## **Before the Cleanup:**

Step One: Find a site appropriate for your volunteers

- KKB staff can help you pick a location if needed

Step Two: Determine where your volunteers will park and meet

Step Three: Determine a location for garbage disposal

- If there is a dumpster, find out if it is privately owned or city owned
  - If private, ask permission to use
- If you are in the city and there is no dumpster:
  - Pile bags at an intersection and call the city at 311 to request a bulky waste trash pickup
  - Tell the 311 operator that you did a cleanup with Keep Knoxville Beautiful
  - Write down the confirmation number in case you need to check on the status of the pickup
- If you are in the county and there is no dumpster, either:
  - Dispose of bags at a convenience center
  - If you are unable to haul the bags, reach out to KKB to see if there is an option for the litter crew to assist.

Step Four: Identify how many volunteers will be there and how long the event will last

## Step Five: Pick up supplies from KKB

- We provide gloves, litter pickers, trash bags, safety vests, and road signs
- Our office is located at Knoxville Botanical Gardens and Arboretum (2743 Wimpole Ave). We are in the garage apartment behind the white visitor's center. Please let us know when you're coming so we can have the supplies for you

Step Six: Contact your group of volunteers the week before the event to remind them of event information

## **During the Cleanup**

Step One: Give introduction

- Explain where the group will be cleaning
- Review Safety Tips (see page 6)
- Give an end time for volunteers to return

Step Two: Safety

- Consider accessibility, traffic levels, and speed limit
- Wear safety vests and put out signs if needed
- Have a first aid kit and hand sanitizer
- Bathrooms and water
  - If you think your group may need it, make sure there is access to bathrooms
  - If there is a private facility nearby (i.e. church, restaurant, gas station), ask if they will allow access to their facilities

Step Three: Take photos and have fun!

- Share your photos with KKB!
  - Facebook: Keep Knoxville Beautiful
  - Instagram: @keepknoxvillebeautiful
  - Twitter: @knoxbeautiful

## **After the Cleanup**

Step One: Collect supplies from volunteers

- Please leave used gloves unfolded so we can wash them afterwards
- Please fold safety vests

## Step Two: Properly dispose of trash bags

- Take trash bags to a convenience center
- Pile trash bags at an intersection near the road for pick up
  - If in the city, 311 will need to know the address and intersection where bags are left
  - If in the county, notify KKB of the address and intersection of the bags **if it was arranged ahead of time with KKB.**

## Step Three: Reporting

- Fill out the Cleanup Results form that was given to you by KKB (see page 9)

## Step Four: Return supplies

- Please return supplies and Cleanup Results form the following business day
- Please let us know when you are stopping by to return supplies

## **Key Things to Bring with You:**

- Water
- First aid kit
- Hand sanitizer or wipes
- Sunscreen and bug spray

## **Litter Pick Up Safety Tips:**

- Never work alone on the roadside. Always pair up.
- Be aware of your surroundings and potential hazards (cars, poison ivy, sharp objects, etc.)
- Wear gloves and thick-soled, closed toe shoes
- Always wear a safety vest
- Bag small items that do not have sharp edges
- Leave large items out of the bag. Leave in visible area for pick up. If too heavy to move, notify KKB of the location
- Don't pick up hazardous materials, such as hypodermic needles, sharp objects, old batteries, dead animals, and other identified objects
  - When picking up needles, put them in a bottle and close the lid before placing it in your trash bag
  - If a large quantity of needles, leave them and notify authorities
  - If something is labeled as explosive, toxic, harmful, or corrosive, do not pick it up
- Leave liquids in containers

## Be Aware of Mobile Meth Labs:

- Don't open or touch suspicious closed bottles
- Call the non-emergency police if you suspect you've found a mobile meth lab
- Signs that a mobile meth lab may be present:
  - Unusual odors (ether, ammonia, acetone, or other chemicals)
  - Excessive amounts of trash, particularly chemical containers, coffee filters, pieces of cloth that are stained red, and duct tape rolls
- Common items in mobile meth labs:
  - Sudafed packs
  - Aluminum foil
  - Cold compress packs
  - Plastic bottles with plastic tubing
  - Coffee filters
  - Batteries
  - Muriatic acid
  - Lighter fluid



## **Hazards Associated with Mobile Meth Lab Contact:**

Chemicals used to produce mobile meth labs are extremely hazardous. Some are highly volatile and may ignite or explode on contact. Being exposed to the toxic chemicals used to produce the drug possess a variety of health risks. These health risks can include:

**Inhalation:** Inhaling chemical vapors and gas from mobile meth lab production can cause shortness of breath, coughing, chest pain, intoxication, dizziness, nausea, disorientation, and other respiratory problems

**Skin Contact:** Contact with chemicals used to produce mobile meth labs can cause serious skin burns

If you find or think you have come in contact with a mobile meth lab, please notify the Knox County Sherriff's Office at (865) 215-2243 or Knoxville Police Department at (865) 215-7212.



# Keep Knoxville Beautiful Cleanup Results

Please use this worksheet to record the results from your Keep Knoxville Beautiful supported cleanup.

<b>Organization Name:</b>
<b>Cleanup Location:</b>
<b>Cleanup Date:</b>
<b>Contact Name:</b>
<b>Contact Email/phone #:</b>

# of **volunteers:** \_\_\_\_\_

# of **hours** cleanup held: \_\_\_\_\_

# of **trash bags** collected: \_\_\_\_\_

**Miles** (streets, roads, highways, creeks, etc) cleaned: \_\_\_\_\_

**Acres** (park/public land/etc) cleaned: \_\_\_\_\_

# of **tires** collected: \_\_\_\_\_

# of **graffiti sites** removed/abated: \_\_\_\_\_

Did you find any unusual items?

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Materials Check Out			
Litter Pickers:	Gloves:	Safety Vest:	Trash Bags:

# How to Create a Recycling Program

## Step One: Gather support for the recycling program

- Stakeholders should include the school administrators, the manager of the custodial staff, and the representatives of the teaching staff
- Form a recycling team – who will be responsible for the implementation of the program? Who will take the recycling to the collection centers?

## Step Two: Assess current waste operations

- What is the current amount of trash collected by the school each week?
- Conduct a waste audit to see what is being thrown away (see page 13)

## Step Three: Plan the recycling program

- Determine collection points
  - Classrooms, hallways, cafeteria, etc.
- What materials will you collect?
  - Paper
  - Plastic
  - Aluminum
  - Cardboard
- Obtain collection equipment
  - Recycling bins
  - Recycling decals
  - Recycling best practices signage (see page 12)
- Determine disposal method
  - Knox County convenience centers
  - Bins already at school

## Step Four: Implement the recycling program

- Train faculty, administrative staff, custodial staff, and students on how to effectively participate

## Step Five: Analyze and maintain the recycling program

- Assess the effectiveness of the program and address any problems that might have arisen

- Conduct a waste audit to see how much is being recycled correctly/incorrectly

## Step Six: Promote the recycling program

- Include information about the recycling program in newsletters, staff emails, morning announcements
- Encourage teachers to integrate recycling into their lessons when possible
- Share your successes with the entire school!

# RECYCLING BEST PRACTICES

**YES**



Rinsed out plastic containers #1-7.



Rinsed out steel & aluminum food & beverage containers.

Clean cardboard boxes, tubes, snack, cereal, & pizza boxes.



Mixed paper such as magazines, newspaper, envelopes (w/ plastic window), shredded paper (secured in a paper bag), office paper, etc.



If it's not a **YES**, then it's a **NO**



Plastic bags or flexible plastic film.



Paper cups, plates, or bowls. No coffee cups, but recycle the sleeves!



Pet food bags, chip bags, & snack wrappers.



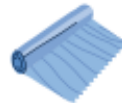
Milk, juice, or ice cream cartons



Paper towels, napkins, & tissues.



Straws, stirrers, Styrofoam, or plastic utensils.



Aluminum foil or baking pans.

**NO**



Ink cartridges, light bulbs, batteries, electronics.



\*Glass items.

## GUIDELINES

\*Glass can be recycled at City of Knoxville Convenience Centers.

- Do NOT bag your recyclables. Plastic bags are not recyclable. All contents should be recycled loosely in the bin.
- Make sure all recycled materials are clean, dry and free of crumbs.
- Break down all cardboard boxes.
- Keep lids with plastic bottles when possible.

# How to Conduct a Classroom Waste Audit

## Step 1: Assemble a team and set a date.

- Select the class that will partake in the waste audit.
- Once you have a team, pick a week for your audit. You want a clear picture of your normal trash output, so pick a week without any special events and when most of your students will be in class.

## Step 2: Determine your waste categories.

- Make a list of the most common trash types your classroom produces. If the audit reveals more categories, you can always add them to your list as you go.
- Common waste audit categories:
  - Paper
  - Cardboard
  - Plastic bottles
  - Other plastic
  - Aluminum cans
  - Food waste
  - Stationery
  - Signage
  - Display materials

## Step 3: Gather your tools.

- Before the event, you'll need to gather supplies to make sure your class can work safely. You'll also want to find an open area for sorting the trash during the audit.
  - Rubber gloves for each volunteer
  - Face masks for each volunteer
  - Tongs for each volunteer (optional)
  - Labelled boxes for sorting each waste category
  - A bathroom scale for weighing each category
  - Clipboards for recording your findings

## Step 4: Sort your trash.

- At the end of the week, round up all the trash and recycling from your classroom.
- Weigh all the trash to get a baseline for how much you throw out each week.
- Weigh all the recyclables to establish how much you recycle each week.
- Wearing gloves, sort all materials into the boxes for their categories.
- As you work, note any recyclables mixed in with trash.
- Once everything has been sorted, weigh each category.

## Step 5: Analyze your results.

- Calculate and record your waste diversion rate using this process:
  - Divide the weight of your recyclables by the combined weight of all your waste (trash + recyclables).
  - Multiply the result by 100.
  - This gives you the percentage of waste you divert from the landfill each week.
- Look at the weights you recorded for individual waste categories.
  - Which categories are highest?
  - Did the highest categories differ between departments?
  - Did you find any recyclables mixed in with the trash?
  - Were there categories you didn't realize you had?

You can use the numbers from your waste audit to look at areas within your waste stream where you can divert waste from the landfill. Is 30% of your waste food scraps and other biodegradable waste like paper towels? Consider composting! Are you only recycling 40% of the recyclable materials you create? Then perhaps invest in some recycling education to better train your class on what's recyclable. You may be surprised by how much of your classroom waste that you can divert from the landfill!

Don't lose track of this waste audit report. At the end of the semester, you can conduct another waste audit and compare the results of the two. Are you recycling more than you did during the first waste audit? Are you throwing away less? Hopefully you will find that conducting the waste audit created awareness of what can and cannot be recycled.

TRACKING SHEET

**Waste Audit Form**

Site Location:

Auditor:

Date (s) sampled:

Total Trash Weight:

Total Recyclables Weight:

Date	Material Type	Bag or Bin #	Contamination	Weight	Notes

weight of recyclables / combined weight of all waste (trash & recyclables) = waste diversion rate

\_\_\_\_\_ / \_\_\_\_\_ X 100 = \_\_\_\_\_

# How to Create a Composting Program

## Step One: Gather support for the compost program

- Stakeholders should include the school administrators, the manager of the custodial staff, and the representatives of the teaching staff
- Form a composting team. Who will be responsible for the implementation of the program?

## Step Two: Assess current waste operations

- What is the current amount of food waste collected by the school each week?
- Conduct a waste audit to see what is being thrown away (see page 13)

## Step Three: Plan the composting program

- Compost should be a ratio of one-part food waste to three-parts brown organic waste (dead plants, leaves, grass clippings)
- Items to Compost
  - Vegetables
  - Fruit
  - Egg shells
  - Paper
  - Coffee grounds
  - Bread
- Items Not to Compost
  - Meat or fish
  - Dairy products
  - Fats and oils
  - Pet waste
- Decide what to do with compost waste stream
  - Will you have a bin on campus?
  - Will you donate the compost to local farms?
- Determine collection points
  - Cafeteria, classrooms, hallways, etc.
- Collection equipment
  - Composting bins
  - Composting decals
  - Composting best practices signage

## Step Four: Implement the composting program

- Train faculty, administrative staff, custodial staff, and students on how to effectively participate



## Step Five: Analyze and maintain the composting program

- Assess the effectiveness of the program and address any problems that might have arisen
- Conduct a waste audit to see how much is being composted correctly/incorrectly

## Step Six: Promote the composting program

- Include information about the composting program in newsletters, staff emails, morning announcements

# How to Build a School Garden

## Step One: Gather support for the garden

- Stakeholders should include the school administrators and representatives of the teaching staff
- Form a gardening team. Who will be responsible for the care and maintenance of the garden? Will it be a gardening club, a specific class/grade level, or the whole school?
- Determine your goals
  - Hands-on learning
  - Provide students with fruit and vegetables to take home
  - Reduce school's food waste
  - Connect students with nature

## Step Two: Find an available space

- Is the space accessible and safe?
- Is there a nearby water source?
- How much sunlight does the space receive?

## Step Three: Select plants

- Decide what type of plants your garden will grow
  - Vegetables
  - Herbs
  - Flowers
- Check hardiness zone of plants (Knox County is in Hardiness Zone 7b)
- Will you grow from seeds or will you buy seedlings?

## Step Four: Design the garden

- Once you know what you are planting, design the layout
- Design the garden for the space you selected
- Consider factors such as
  - Teaching area
  - Fruit and vegetable beds
  - Flower beds
  - Greenhouse
  - Compost pile
  - Irrigation

## Step Five: Gather gardening supplies

- Watering can
- Garden hoes
- Hand trowels
- Shovels
- Gloves
- Wheelbarrow

## Step Six: Plant your garden

- You will need to prepare the ground by tilling it
- If you have a compost bin at school, use some compost to prepare the soil
- Plant the seeds

## Step Seven: Maintain your garden

- Water often until plants are established. Once established, water when dry.
- Weed as needed
- Enjoy your harvest!

# How to Host a Clothing Swap

## Step One: Decide date and location

- If hosting a school clothing swap, pick a time before or after school or on the weekend. Hold the clothing swap in a common area at the school that is easily accessible but will also receive a lot of foot traffic
- Consider a location with access to private changing areas (bathrooms are sufficient) and mirrors

## Step Two: Invite your friends and classmates

- Decide how many people you want to attend the clothing swap
- If you are wanting a large turnout, you can promote the clothing swap to the whole school
- If you are wanting a small turnout, you can invite your class/club/friends

## Step Three: Collect the clothes

- It is very easy to use a clothing swap as an opportunity to empty out your closet, but limit yourself
- Pick out two to ten pieces of clothing that are in good condition
- Collect what you can before the swap, but also keep in mind that shoppers will bring clothes to swap the day of

## Step Four: Display the clothes

- If your school has a theatre department, see if you can use their clothing rack so that you can display your items
- If not, bring several tables (depending on how many people you expect) for display

## Step Five: Have a successful clothing drive!

## Step Six: Decide what to do with remaining clothes

- You can donate them or keep them for your next clothing swap!
- Donation centers in Knox County
  - Goodwill
  - KARM
  - Habitat for Humanity