

# Title Page

# **Guide to Hosting a Compost 101 Workshop**







Composting can feel intimidating for people who are just starting out, which is why many look for guidance. But it doesn't have to be difficult or seem like an activity only a few can master. Composting is simply a way to reduce organic waste and turn it into something useful, done in the way that feels most convenient and manageable for each person.

This guide is designed to help learn about composting and teach others about different composting methods, how to run a compost workshop, recruit participants and boost attendance. You can use this guide as a script or a guide on how to describe the 4 composting methods.



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## How to Recruit Attendees

To start a successful composting workshop, you first need to recruit attendees. Consider your intended audience. If you are hosting the workshop for a particular group, you may not want to advertise broadly. If you are hosting a workshop for the general public, you will need to actively recruit participants. This step can feel intimidating if you don't already have an existing group. However, there are several effective ways to spread the word and attract participants who are eager to learn about composting at different levels of experience. We recommend reaching out to your community by posting flyers around town at popular locations and advertising on your social media platforms.

## How to make flyers

A flyer is always a great way to begin promoting your composting workshop. It not only invites anyone who sees it to attend but also raises awareness and sparks interest among people who may be curious about composting but aren't sure where to start.

Before designing your flyer, it's important to settle some key details: the type of workshop you'd like to host, as well as the location, date, and time. Your workshop could provide an overview of different home composting systems, or it could focus on one or two specific methods. This guide is designed to help you introduce four types of home composting systems in a way that works for different learning levels, from beginners to those looking to improve their composting skills. If you'd prefer to focus on just one or two systems, you can build on the composting section of this guide, and you are always welcome to reach out to us for additional support.

Once you've chosen your workshop focus, the next step is to pick a date and time that works best. Depending on your availability and target audience, this could be during the week or on the weekend, in the morning or evening.

From our experience, Saturday mornings tend to work well since many people are available then. Because folks like to sleep in, we usually start around 10 a.m. This gives attendees plenty of time to arrive comfortably, while still allowing us to



cover the material, answer questions, and finish before or around lunchtime. We've also successfully hosted weekday evening workshops, which are a great option for people who may be busy on weekends or and who work during the day. Ultimately, the key is to choose a time and day that best fits the needs of your audience.

With these details in place, you'll be ready to design your flyer. You can make a flyer using different editing software like Canva, Google Slides, Keynote etc.

A good flyer should feel welcoming, clearly introduce the workshop's title, and highlight the location, date, and time of the event. Keep the wording minimal, the flyer is an invitation, not the main source of information. Aim for short and engaging text that grabs the attention of someone walking by. You can use a catchy headline like "Free Composting Workshop" or "We Celebrate" as the title and note these title can change depending on the occasion and the type of workshop that is being held. Make sure to include high-quality visuals and make sure the text is clear, visible, and easy to read from a distance. We have provided examples of our previous flyers down below to get an idea of how to make your own. We recommend adding a QR code that allows attendees to register in advance so that you can anticipate your group size.

When posting flyers around town, think about placing them where they'll get the most visibility, especially in areas with high foot traffic. Great spots include busy coffee shops, business doors, or community bulletin boards. Just be sure to ask for permission before putting up your flyer! Post flyers at a visible location with high foot traffic and can also act as a physical reminder to people that the workshop is happening.





## Making Social Media Post

Social media is one of the easiest and most effective ways to spread the word about your workshop. Posts can serve as reminders for people who are already interested, while also making it easy for them to share with others. By using multiple platforms, you increase the chances of reaching a wider audience.

Don't limit yourself to just one platform, each has its own strengths. For example:

- **Instagram:** Create a post or story with eye-catching visuals
- **Facebook:** Add your event to a "What to Do" activity board or local community group.
- **Reddit:** Share the event in relevant subreddits where people might be interested.

Making a social media post doesn't have to be over the top, you can simply share the flyer you've already created. This helps keep your advertising consistent and makes it easy for people to recognize the event across different platforms.

## Registration and QR code

The QR code allows people to get more information about the workshop and, most importantly, register for the event. You can create a simple Google Form so that anyone interested can easily sign up.

The registration form can include fields such as name, email, and whether they will be attending. If you have a newsletter, you can also include an option asking if they would like to be added to it. The example below shows a sample Google Form we created for a school event.

Adding a QR code to all your flyers and posts can make a big difference when preparing materials later on. They're easy to scan and convenient for anyone who sees your flyer. There are plenty of websites that let you convert your Google Form link into a QR code. Keep in mind that some free sites may limit



how long a QR code remains active. Below are some websites we have used to create our QR codes.

|                                                                     |                                   |
|---------------------------------------------------------------------|-----------------------------------|
| <a href="https://qrcodecreator.com/">https://qrcodecreator.com/</a> | Week free trial, \$15 monthly     |
| <a href="https://qr-generator.ai/">https://qr-generator.ai/</a>     | 10 days free trial, \$20 per year |
| Canva                                                               | Free with Canva membership        |

A screenshot of a Google Forms poll titled "Action Week: Compost Workshop". The form is set for "October 21st 2025 from 1 to 2pm". It contains three questions: "Name" (Short answer text), "Will you be attending?" (Multiple choice with options: Definitely!!, No :(, I will try), and "UC Merced email" (Short answer text). The form is published and saved in Google Drive. The interface shows tabs for "Questions", "Responses", and "Settings". A sidebar on the right contains icons for adding questions, duplicating, deleting, and other form management tools.

## More Tips

We recommend using every method available to raise awareness about the workshop. Timing is just as important as the content. If you post too late, people may not have enough time to plan ahead, but if you post too early, they might forget about it. A good balance is to share flyers and online posts about three weeks before the workshop. This gives people enough time to plan while keeping the event fresh in their minds.

About a week before the workshop, follow up with reminder emails to those who have registered. The reminder should include key details such as what to expect,



parking information, potential weather updates, and the duration of the workshop (approximately two hours).

***Example email reminder:***

Hello [Name],

Thank you so much for registering for our upcoming **Spring into Composting Workshop** at UC Merced! We're thrilled to have you join us as we break down the basics of composting. Here are the details of the workshop:

 **Date:** Saturday, March 29th

 **Time:** 10:00 am – 12:00 pm

 **Location:** The Student Garden at UC Merced. (Google Maps pin: <https://maps.app.goo.gl/Gfd5Fmcq4cFcmeG8A>)

 **Parking:** Parking is available in the gravel parking lot next to the garden. There will be some spots that are labeled for the workshop. Parking is free on the weekend, so don't worry if the labeled spots are filled.

 **Weather:** It's been a warm week, but the forecast calls for slightly cooler weather on Saturday. It may be a bit chilly in the morning and then warm up as we get closer to noon. We recommend wearing layers!

**What to Bring:**

- Water bottle
- Hat and/or sunscreen
- We may get a bit dirty, so wear comfortable clothes and shoes

We'll be covering the science behind composting, benefits of composting, and indoor and outdoor composting strategies with interactive, hands-on activities. Get ready to stir things up and learn how to turn trash into treasure!

If you have any questions, feel free to reach out.





# Pre-workshop Materials

## Agenda and checklist

Create an agenda of the workshop to help guide you and your team on the flow of the workshop. The agenda should include an outline of the major activities of the workshop, timing of each activity, and person(s) leading each activity. Likewise, a checklist of materials needed for the workshop can help with efficient preparation and reduce the chances of forgetting materials. An example agenda and checklist are below:

### **Example agenda:**

Workshop title: Compost 101

Location: At UC Merced Student Garden

Workshop date: October 7th, 2025

Workshop team: Mariana, Michael, Becca

Time: 11am - 1pm(workshop team arrives at 9 am)

### **AGENDA**

1. Check in: 10 minutes
2. Introduction: 15 minutes
  - a. intros: 5 minutes
  - b. Go over Can it be a composted game?: 10 minutes
3. Introduction Poster Information: 15 minutes
4. Composting strategies: 30 minutes at each station (1 hour total)
  - a. **Bin system and tumbler**
    - i. Feedstock mixing activity 10 minutes
    - ii. Bin system - 10 minutes
      1. General overview of the bin system
        - a. How it works poster
        - b. Overview of things to monitor
      2. Questions
      3. Making the pile -15 minutes
    - iii. Tumbler - 5 minutes
  - b. **Station 1: Worm bin and bokashi**
    - i. Vermicomposting system - 15 minutes
      1. General overview and features
      2. Conditions and things to monitor
      3. Show off bin and let people feed worms
      4. Questions
    - ii. Bokashi system - 15 minutes
      1. General overview and features



2. Conditions and things to monitor
3. Show off bin and let people add food and branBokashi bin
4. Questions
5. Questions, Conclusions and Certificates - 10 minutes

### **Example checklist:**

#### Merced Compost Workshop Checklist October 7th, 2025

##### **"Can it be composted?" game:**

- ☐ Poster board with title
- ☐ Graphics
- ☐ Bowl for graphics

##### **Ratios hands on activity:**

- ☐ Clear containers and lids (30)
- ☐ Food scraps (in cold room)
- ☐ Leaves
- ☐ Chopped wood
- ☐ Cardboard (SRE 448 office)
- ☐ Coffee grounds
- ☐ 4-5 Black trays for holding materials
- ☐ 4-5 small shovels
- ☐ Table

##### **Folders for participants:**

- ☐ Gather & prepare folders (20)
- ☐ In the folders
  - ☐ Compost glossary
  - ☐ Decision tree
  - ☐ Greens and browns
  - ☐ What is composting?
  - ☐ overview packet for each composting systems
    - ☐ Vermicompost
    - ☐ Bokashi
    - ☐ 1 Bin System
    - ☐ Tumbler
- ☐ Why composting flier
- ☐ Benefits of community composting flier
- ☐ Examples of products

- ☐ Business cards

##### **Sign in table:**

- ☐ Folding table
- ☐ Canopy
- ☐ Tape
- ☐ Pre assessment survey
- ☐ Post assessment survey
- ☐ Paper sign-in sheet
- ☐ Coloring pages
- ☐ Crayons
- ☐ Pencils (sharpened)
- ☐ Website QR Code flier
- ☐ Name tags
- ☐ Sharpies
- ☐ Giveaways - seed papers
- ☐ Giveaways - stickers
- ☐ Giveaways - books

##### **Posters:**

- ☐ 3 easels (We have 2!, maybe buy a 3rd)
- ☐ Easel pieces in a plastic bag
- ☐ Why compost printed poster
- ☐ Benefits of community compost printed poster
- ☐ What is compost poster board
- ☐ Poster board for indoor systems
- ☐ Poster board for outdoor systems
- ☐ Blank flat poster board to clip our posters onto



### Composting strategies:

- ☐ Small temperature probes (2 depths)
  - ☐ Work Gloves
  - ☐ Nitrile gloves(Different sizes)
  - ☐ Vermicompost bin with worms and waste in it
  - ☐ Empty Bokashi bin
  - ☐ 2 Bokashi brans
  - ☐ Examples of vermicompost bedding
  - ☐ Example of finished vermicompost
  - ☐ Shovels

- ☐ Pitchforks

### Food waste and At-home composting study:

- ☐ Research study sign-up sheet
- ☐ Food waste study fliers
- ☐ Home composting study fliers

### Other:

- ☐ Certificates

These examples are also printable:

[Agenda](#)

[Check List](#)

## Surveys

Surveys are a huge help because they provide feedback on the workshop, insight into how interested people are in composting, and how well the activities are working as teaching tools.

We recommend conducting two surveys, one before the workshop begins and another at the end. This will give you a rough estimate of participants' initial knowledge about composting and show how much they've learned throughout the workshop.

We recommend using sign in sheets to have the contact information of attendees for future events and activities. We also recommend having pens or pencils for the surveys.

[Workshop Sign in Sheet](#)

[Pre-Workshop Survey can be printed here.](#)

[Post-Workshop Survey can be printed here.](#)



## Folders Materials

Folders are a valuable resource to provide to attendees, as they serve multiple purposes: they function as an itinerary, a point of reference during the workshop, and a guide participants can revisit afterward. These folders do not need to be elaborate, but they should be well organized and informative, containing all the material we will cover throughout the workshop.

On the left side of the folder, we've included five clear, easy-to-follow handouts that provide a foundational understanding of composting. These handouts cover what compost is, why composting is important, its benefits, which materials can and cannot be composted, and key definitions for participants to reference.

On the right side, you'll find a guide to help determine which composting system best fits each person who wants to start composting. This section also includes in-depth explanations of each system, tips for monitoring and troubleshooting, and a glossary of common composting terms to support participants in better understanding the process.

| Left side                                                                                                                                                                                                                           | Right side                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <a href="#"><u>What is Composting?</u></a><br><a href="#"><u>Why Compost?</u></a><br><a href="#"><u>Benefits of Community Compost</u></a><br><a href="#"><u>Compost glossary</u></a><br><a href="#"><u>Green/Brown Material</u></a> | <a href="#"><u>What Compost System is best for you</u></a><br><i>1 bin composting system overview</i> <ul style="list-style-type: none"><li>- <a href="#"><u>Monitoring data</u></a></li><li>- <a href="#"><u>One bin trouble shooting</u></a></li></ul><br><a href="#"><u>Vermicomposting system overview</u></a> <ul style="list-style-type: none"><li>- <i>Monitoring data sheet</i></li><li>- <a href="#"><u>Trouble shooting</u></a></li><li>- <a href="#"><u>Glossary</u></a></li></ul><br><i>Bokashi composting system overview</i> <ul style="list-style-type: none"><li>- <i>Monitoring data sheet</i></li><li>- <a href="#"><u>Trouble shooting</u></a></li></ul><br><i>Tumbler composting system overview</i> <ul style="list-style-type: none"><li>- <i>Monitoring data sheet</i></li><li>- <i>Trouble shooting</i></li></ul> |

## Making Information Posters

These materials will serve as informational guides and provide an overview of the topics to be discussed at the beginning of the workshop. These can be printed in large poster or format or made on a tri-fold.

[What is Composting](#) can be printed here.

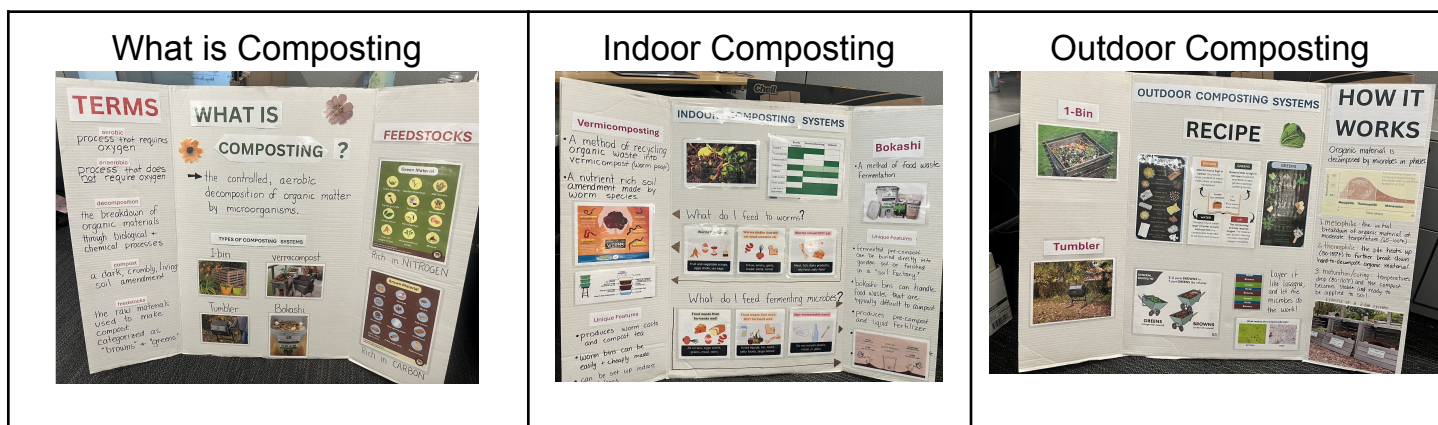
[Outdoor Composting poster](#) can be printed here.

[Indoor Composting System](#) can be printed here.

[Why Composting and Benefits of Community Composting Poster](#) can be printed here.

[Can it be Composted Game](#) can be printed here and [answers here](#).

Here are some examples of the posters we have created:



## Materials for Workshop Activities

For some workshop activities, you will need:

- Can it be Composted Into game
  - Large poster board



- The print out
  - Velcro
- Bin system demonstration:
  - Temperature probe
- Feedstock mixing activity
  - 2-liter clear containers with their lids or gallon size plastic bags
  - Green and brown materials
  - Garden trowels
  - Large trays
- Tumbler systems
  - Tumbler composting unit
- Vermicompost
  - Vermicompost composting unit
  - Harvested vermicompost (optional)
  - Jar of vermi leachate (optional)
- Bokashi
  - Bokashi composting bin
  - Bran starter
  - Jar of bokashi leachate (optional)

These materials will mainly be used for the tumbler and compost pile sections of the workshop, but starting with the [Can it be Composted?](#) The game is a good icebreak. For this activity, you can print and cut out the cards (laminating them makes them reusable), then add Velcro to the back. This lets participants place each food item into the correct category. More details about this game can be found in the *Intro to Composting* section later on.

We usually get green materials by asking local grocery stores, like Raley's, for items they're about to throw away. It's best to go a few days before the workshop in case multiple trips are needed and store it in a fridge to avoid it from rotting before the workshop. Coffee grounds are another great option and are often free at local coffee shops, including Starbucks. For brown materials, dried leaves, old yard clippings, shredded cardboard, or shredded paper all work well. Two-liter containers can be purchased at a dollar store for a low cost, or you can use gallon-sized bags as an alternative.



As a courtesy, it's always nice to provide name tags for participants. While not necessary, offering snacks and refreshments is also a thoughtful touch that participants will appreciate.

|                                                                                                                                               |                                                                                                                         |
|-----------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| <p>Trowel</p>  <p><a href="#">Lowes: \$7 each</a></p>        | <p>Clear Container</p>               |
| <p>Brown material</p>  <p>Dried leaves, wood chips, etc</p> | <p>Alternative Gallon size bags</p>  |
| <p>Coffee Grounds</p>                                      | <p>Green Material</p>               |
| <p>Tray Bins</p>                                                                                                                              | <p>Velcro</p>                                                                                                           |



Lowes: \$7 each



Amazon: \$8

Vermicomposting unit



Vermi-Leachate



Vermi-Compost



Bokashi Composting Bin



Bokashi: \$72

Bokashi Bran

Bokashi Leachate





## Building a One-bin Compost pile

A week or two before the workshop, we recommend building a compost pile to demonstrate how hot a pile can get. On the day of the workshop, you can then build another pile to show the compost recipe in action and highlight how simple it is to make one.

To build a compost pile, you'll need plenty of brown feedstock, such as dried leaves, twigs, dried grass, or shredded paper, and a good amount of green material, which can include scraps collected from a grocery store. If the green material pieces are too large, cut them into smaller chunks to speed up decomposition.



When assembling the pile, start with two layers of brown material, followed by one layer of green. Repeat this layering process two more times, then add water to help kickstart the breakdown process.

## Miscellaneous Materials

- Different size gloves,
- Name tags
- Pens / Pencils

|                                                                                                                        |                                                                                                                                                                                                                                                                                                                                               |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Latex and or gardening gloves</p>  | <p>It always nice to have Latex or plastic gloves of different sizes available for folks who would like to touch the worms but do not wish to get dirty. Similarly, the gardening gloves are for folks who wish to use gloves for some of outdoor activities. You can offer these right before the activity.</p>                              |
| <p>Name tags</p>                     | <p>Name tags to are nice to have to be able to call out people names when they have a question. It is a nice way to be more personal with folks. In the past we have used sticky name tags but inorder to try to be more sustainable we switch to reusable lanyards and seed paper, but you can always use regular paper and safety pins.</p> |
| <p>Pens/Pencils</p>                 | <p>Because you will give out surveys at the beginning and end of the survey, a pen or pencil should be provided.</p>                                                                                                                                                                                                                          |

Tri-fold



Depending on how the posters were made, you may need tri-folds or a large cardboard poster to present your posters.



# Introduction and Set Up

After much anticipation, today is the day of the workshop!!

## Workshop setup

Setting up the workshop takes about an hour to an hour and a half if folders are assembled and feedstock ratio activity materials are gathered. It's better to have those done prior to the workshop day so you're not scrambling.

Start by setting up the brown and green materials you have collected. Make sure the green materials are cut into smaller pieces so they are easy to scoop up and can break down faster. Make sure there is a variety of browns and greens and plenty of them!! These materials will be used for the feedstock ratio activity. Extra materials can be used to build a new compost pile during the workshop if applicable.

La Milpa,  
2024 workshop



Wukchumni Farm  
2024 Workshop



FoodLink  
2024 Workshop



## Welcome: Introduction to Compost

As people start arriving, direct them to the welcoming table. Here they will receive their name tag, pre-workshop survey, folder, and a cutout from the *Can it be Composted?* Game. If snacks were provided now is a good time to allow participants to eat and relax as they wait for the workshop to start.

Once everyone has settled in, collect the pre-workshop surveys and begin with an icebreaker. Introduce yourselves, share who you are, your role, and why you enjoy composting. Then, move on to the *Can it be Composted?* game.

This activity is a great way to gauge participants' composting knowledge, spark curiosity about unfamiliar composting systems, and start the workshop on a fun note. This is how you play:

### Step 1:

Start by setting up the tri-fold. Make sure there is enough space to clearly label the categories: **“Yes, it can be composted”** and **“No, it cannot be composted”** without bold separating lines.



### Step 2:

Invite participants to place their cutouts where they think they belong. It's okay if some people get it wrong or are confused about where the item goes. Simply encourage participants to try their best. If there are extra cutouts, you can use them for a group activity or hand them out again so participants have another chance to join in.

### Step 3:

Now that all cutouts have been put up on the board it's time to put out the **"It Depends"** category and go over the answers. Feel free to go over the [answer key](#) to check the answers. Why does it depend? There can be different factors for what converts a compostable item into an uncompostable one.

| Item                                                                                               | Why does it depend?                                                                                                                                                                                                                                                                                                     |
|----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hair Clipping<br> | Hair by itself is compostable but if the hair is dyed with harsh chemicals then it won't decompose as plain hair                                                                                                                                                                                                        |
| Bones<br>         | Some composting systems will not be able to decompose large bones, if small enough the bokashi might.                                                                                                                                                                                                                   |
| Dairy<br>       | Unless you want critters, most composting systems cannot break down dairy except for the Bokashi.                                                                                                                                                                                                                       |
| Landry Lint<br> | Lint is compostable when you know the lint came from 100% cotton. If the lint contains polyester then it becomes uncompostable.                                                                                                                                                                                         |
| Pumpkin<br>     | <p>Pumpkins are compostable, if you cut them into smaller pieces they will decompose faster. If the pumpkin is painted, depending on the type of paint used, then the pumpkin can become uncompostable.</p> <p>Remind participants if they want to compost a pumpkin it would be best to cut it into smaller pieces</p> |
| Meat                                                                                               | Meat if thrown into a 1-bin or the tumbler, it                                                                                                                                                                                                                                                                          |





will attract unwanted critters. Meat cannot be broken down in vermicompost, but a Bokashi, yes. Through fermentation the Bokashi can break down meat.

## Questions

After going over the *Can It Be Composted* and all the posters, now is a good time to answer any question participants may have.

## Introduction Informational Posters

After going over the Can it be Composted game it is time to go over “**Why Compost?**” and “**Benefits of Community Composting**”.. To get through these two posters you can either read straight from them or go over them briefly but it is important to touch on their 4 main ideas. Then you can circle back to the topic of the workshop by going over “**What is Composting?**”.

### Why Compost? and Benefits of Community Composting

Highlight how composting reduces food waste, mitigates climate change by lowering CO<sub>2</sub> and methane emissions, and improves soil health by enhancing water and nutrient retention. They also show how composting strengthens communities by creating educational opportunities, empowering neighborhoods, and increasing food security and sovereignty.



### What is Composting?

This poster provides a brief explanation of key composting terms; describe how composting works and what it needs to succeed. It also introduces four common composting methods and gives examples of feedstocks (ingredients) you can add to a composting system. At this point folks will start asking questions and



most often than not, they will ask questions related to feed stocks, which will be a great transition to the next part of the workshop, the One-bin system overview.



## Outdoor Composting

This part of the workshop will be one of the longest parts of the workshop as it does go over two big hands-on activities and will have lots of questions.

To begin this part of the workshop you will start with the **Outdoor Composting** poster. Introduce the one bin system as one of the outdoor composting systems.

- Why is it an outdoor system
- The compost recipe 1 part greens to 2-3 parts browns by volume.
  - Not all “greens” are the color green
  - Green -> high in nitrogen
  - Brown -> high in carbon



## Mixing Ratio Activity

The Ratio activity is designed to visualize the compost recipe: **2 parts brown to 1 part green material by volume**. It is important to note and inform participants that the point of this activity is to see what that 2 to 1 ratio looks like when there is a variability in materials as shown in step two.

It is also important to mention how just because we are classifying the materials or feedstocks as greens and browns, does not mean all green material will always be green. Coffee grounds are a good example, despite their brown color coffee grounds are high in nitrogen therefore it is considered a green material.

A question that gets asked very often is how materials like leaves go from being considered greens to brown





materials. The best way to answer this is by explaining that as leaves dry up they lose their nitrogen content resulting in a higher carbon to nitrogen ratio.

### **Mixing Ratio Activity:**

#### **Step One:**

Hand each participant a clear container with a lid.

#### **Step Two:**

Instruct participants to layer feedstock materials into their container starting with a brown layer first to build on. State that the brown first layer needs to be sturdy as it will separate the compost from the ground.

#### **Step Three:**

Layer green feedstock materials on top of browns. **IMPORTANT:** add feedstock materials to a ratio of 2 parts browns to 1 part green by volume.



EXAMPLE: 2 scoops of woodchips followed by 1 scoop of lettuce.

Continue this layering process. Encourage folks to use different feedstocks as green and brown materials to see how layering is supposed to look like.

#### **Step Four:**

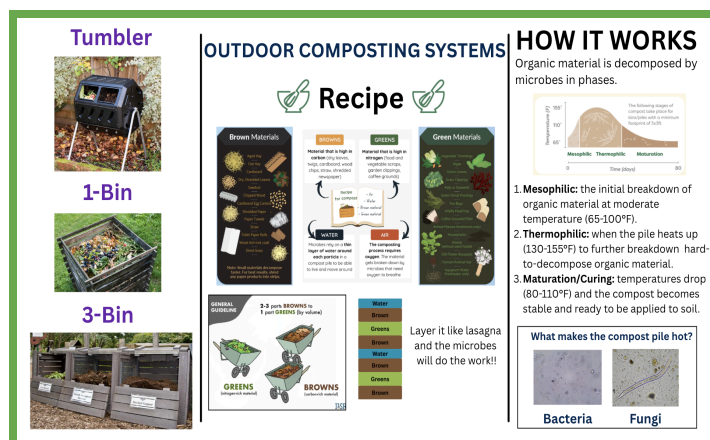
Have participants cover the container and shake it to simulate the materials mixing when you turn the pile. Optional: add water to simulate watering the compost pile.

#### **Step Five:**

Containers and extra feedstock materials can be discarded during the building of a new compost pile or into a tumbler.

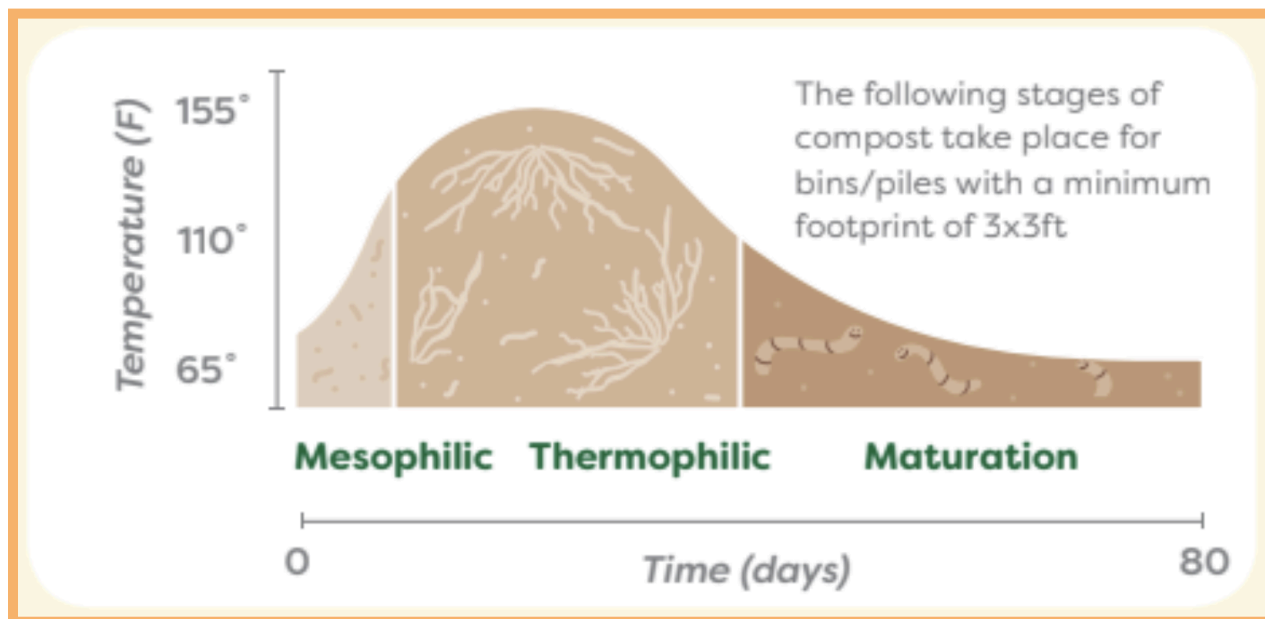
## Bin Overview

To begin this activity guide folks to where the already existing pile is and refer to the **Outdoor Composting** poster. “The **One-Bin** compost system is the one of the most known forms of composting. It is an outdoor composting system that is commonly used when people can process larger amounts of green and brown waste materials.”



To begin this activity going over the three different phases a one-bin system goes through. Explain how the higher the temperature the more microbial activity there is. In order to visually see this, have participants go read the temperature probe in an already existing pile if there is one.

If the temperature reads between **65°F to 100°F**, the pile is starting its **mesophilic phase**, where microbes begin breaking down the materials. When the pile has reached **130°F to 155°F**, it enters the **thermophilic phase**. At this point, the pile often gives off visible vapor as heat and moisture are released. The **curing/maturation phase** is the final phase where the compost has cooled and ready to be sieved and used.





## How to maintain it your compost pile

Recall the composting recipe on the poster: The 4 ingredients are: Browns, Greens, Water, Air.

To check if the compost pile has enough moisture, perform the “squeeze test” by grabbing a handful of compost and squeezing it. If nothing comes out, it needs more water; if water runs down your hand, it’s too wet, but if only a few drops appear, the moisture level is just right.



## Building a Compost Pile Activity

After reviewing the different stages of a compost pile and answering attendees’ questions, it’s time to go over the ideal compost recipe: two parts brown to one part green by volume. The next activity will help participants understand this recipe and how to maintain a one-bin compost pile.

In this activity, we will build a compost pile using the lasagna method, alternating layers of brown and green, with the brown layers being thicker than the green ones.

### Step One:

Using the chopped food waste, participants will work together to start by





adding a base layer of brown material. Ideally, it's best to provide a variety of brown materials for them to choose from. As the host, you can guide them on how thick this layer should be.

### **Step Two:**

Next, have participants add a thicker layer of green material. Pro tip: adding coffee grounds can help reduce potential odors.

## **Avoid**

Things to mention: The one-bin compost system is a heavy-duty composting method, but there are certain things to avoid. To keep pests and scavengers away, do not add fish, meat, or dairy products. While eggshells are fine, avoid putting in whole eggs, as they can create a very strong and unpleasant odor.

## **SIDE-NOTE**

By this point you will be about 1 hour into the workshop. Try not to dwell too much into each detail unless asked. It is important to keep track of time.

## **Common Questions**

### **How long does the process take?**

It can vary but generally at least 90 days.

### **Will this attract any scavengers or unwanted pests?**

By avoiding meat and dairy, the chances of attracting any unwanted pest is very small. However, it is common to see a couple critters like roaches or ants while turning the pile but it usually doesn't become a problem.

### **Will it smell?**

No, your compost shouldn't smell. But if it should, that usually tells me that something is off. This could be the recipe is off, which can easily be fixed by adding more browns material. Compost can smell if it is too wet/or not well



aerated which can be fixed by turning more often. We like to add coffee grounds to decrease the smell!

### **Where can I put my bin/pile?**

You want to put your bin outside.

### **Do i have to worry about it getting too hot, if so what do I do?**

You do not have to worry about your pile getting too hot.

### **When and how much water do I add?**

More water should be added during the beginning of the compost process. Water should be added if moisture content is too dry during the "hand squeeze test". Water should be added until the compost pile looks completely wet, glistens, and water is starting to leak and pool out the bottom.

### **When and how much do I turn?**

Generally at least twice a week during the first month. Then can decrease turning afterwards and have very little turning during the curing/maturing phase.

Should be turned if pile start to smell bad or if compost is too wet.

You can also mention that if people have ever heard of compost piles catching fire, it's usually because the pile was in this high-heat stage without sufficient moisture.

## **Tumbler Compost System**

The tumbler section will be the smallest part of the workshop because it is very similar to the One-Bin system just in a smaller size so you can spend 5 to 10 minutes talking about it.

“The tumbler composting system is an enclosed composting bin or drum. As it rotates, it mixes the composting material. A tumbler is a great alternative for people who still want an outdoor system, as it can handle large amounts of organic matter. The tumbler works similarly to a one-bin compost pile, going





through the mesophilic, thermophilic, and maturation phases. It is also an aerobic composting process so it will need turning but thanks to the handle on the side, turning the compost is a lot easier. “

## Feeding your Tumbler

The tumbler can handle a wide variety of feedstock, but it is still important to follow the 2-to-1 compost recipe. This ratio ensures the finished compost is nutrient-rich with a balanced carbon-to-nitrogen mix. Similar to the one-bin compost system, it is crucial to avoid adding meat, fish, dairy products, and whole eggs to prevent attracting pests and scavengers.



It is important to note the tumbler's limited capacity, be sure not to overfill it. Without enough space for air circulation, the compost will not aerate properly and may fail to decompose as intended.

## Components of the Tumbler

The tumbler we like to display and use has two chambers. One side is meant to store and continue through the composting process while the other side can be used to collect newly added materials. (This would be a good time to discard the material from the Mixing Ratio Activity if it hasn't already been discarded yet.)



The tumbler also has a handle for easier turning and small holes for drainage, which is why the tumbler may need more watering than the one bin system.



During this demonstration it is important to note the tumbler may not reach as high temperatures compared to a bin system so it may take longer. It may only get up to 120°F.

## Common Questions

How long will it take the tumbler to process the material into compost?

The tumbler will take longer than the one-bin system so usually anywhere from 4 to 6 months. This is because the tumbler is usually smaller, may not reach as high of temperature, and is in an enclosed space and does not get as aeration as a one-bin system.

# Indoor Composting Systems

## Vermicomposting System

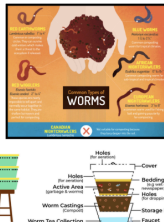
### Informational Poster

In this section you will start with the left side of the [Indoor Composting System](#) poster. “Vermicomposting is a method of composting that uses worms to break down organic feedstock. The worms digest the material and produce nutrient-rich compost. While it may sound unappealing, worm castings (worm poop) are highly valuable as it can improve soil structure, increase fertility, and promote healthy plant growth. Vermicomposting also produces a liquid byproduct called leachate, which, when diluted with water, can be used as a natural fertilizer by spraying it on plant leaves or pouring it into the soil.”



### Vermicomposting

- A method of recycling organic waste into vermicompost (worm poop).
- A nutrient rich soil amendments made by worm species.



### Unique Features

- Produces worms casts and compost tea.
- Worm bins can be easily and cheaply made.
- They can be set up indoors or outdoors.

### INDOOR COMPOSTING SYSTEM



|                | Worms | Vermicomposting | Benefits |
|----------------|-------|-----------------|----------|
| Aerobic        |       |                 |          |
| Thermophilic   |       |                 |          |
| Psychrophilic  |       |                 |          |
| Neutrophilic   |       |                 |          |
| Acidophilic    |       |                 |          |
| Alkaliphilic   |       |                 |          |
| Halophilic     |       |                 |          |
| Barophilic     |       |                 |          |
| Radioresistant |       |                 |          |
| Long lived     |       |                 |          |
| Small space    |       |                 |          |
| Low cost       |       |                 |          |
| Low risk       |       |                 |          |

What do I feed the worms?

Worms love to eat:



Fruit and vegetable scraps, eggshells, tea bags

Worms should NOT eat:



Meat, fish, dairy products, oily food, salty food

Worms dislike (but will eat small amounts of):



Citrus, onions, garlic, bread, pasta, cereal

What do I feed fermenting microbes?

Food waste that ferments well:



All scraps, eggshells, grains, meat, dairy

Food waste that does NOT ferment well:



Avoid liquids, rot, mold, salty foods, large bones

Non-fermentable items:



Do not include plastic, metal, or glass

### Getting to Know Your Worms Activity

For this activity, have participants gather around the vermicomposting bin. Invite them to interact with the worms if they wish, the worms are often a big hit, especially with younger audiences. Share that a worm can eat about half its body weight each day, which means this system is not ideal for handling large amounts of waste.





Encourage participants to compare the smaller scale of the vermicomposting system to the tumbler or one-bin compost pile. Explain that because of its size, vermicomposting is limited ver, they happily devour most fruits and vegetables. Since they are vegetarians, they can also help break down eggshells, though it's best to crush the shells and all the food given to them first to make the process easier.

## Common Questions

### **Can I put my worms outside?**

Yes, you can but be mindful of the weather outside. Because the vermicompost has live worms they are sensitive the outside temperatures. Worms like to stay in that 60 to 80°F, anything outside of those parameters you run that chance of killing your worms.

### **What happens if I feed worms pieces of onions or garlic?**

The worms might nibble on it but they will simply avoid it.

### **If they don't like acidic feedstock can I not put coffee grounds?**

You can put coffee grounds!! The grit from the coffee is actually helps the worms digest food as well as offers nutrients.

### **Can I add some of my yard waste?**

You can but not as much as you would in an outdoor system. The worms will not processes as fast but it can definitely be used as bedding.

### **How much can a vermicompost cost? Can I make my own bin?**

The vermicompost unit we have cost \$120

### **Where can I get these worm? How much can it cost?**

The worms can be purchased on Amazon or a local fishing shop, just make sure the worms are red wigglers.

# Bokashi Composting System

The Bokashi part of the workshop will focus on the right hand side of the [Indoor Composting System](#) poster. You can begin by explaining that the Bokashi composting unit is the most different from the other systems you may have discussed in the workshop. “Unlike traditional composting, the Bokashi method uses anaerobic fermentation to break down organic matter, resulting in a highly concentrated solid and liquid fertilizer. While other composting methods require avoiding certain foods, Bokashi can handle almost everything, it is only limited by the size of the unit.”

### INDOOR COMPOSTING SYSTEM



|                   | Worms | Microbes | Both |
|-------------------|-------|----------|------|
| Food waste        | Yes   | Yes      | Yes  |
| Grass             | No    | Yes      | Yes  |
| Stumps            | No    | Yes      | Yes  |
| Manure            | No    | Yes      | Yes  |
| Household waste   | No    | Yes      | Yes  |
| Flammable liquids | No    | No       | No   |
| Flammable solids  | No    | No       | No   |
| Flammable gases   | No    | No       | No   |
| Flammable dusts   | No    | No       | No   |
| Flammable liquids | No    | No       | No   |
| Flammable solids  | No    | No       | No   |
| Flammable gases   | No    | No       | No   |
| Flammable dusts   | No    | No       | No   |

### Bokashi

- A method of food waste fermentation.



### Unique Features

- Fermented pre-compost can be buried directly into garden soil or finished in a “soil factory”.
- Bokashi bins can handle food waste that are typically difficult to compost.
- Produces pre-compost and liquid fertilizer.



What do I feed the worms?

**Worms love to eat:**

Fruit and vegetable scraps, eggs, shells, tea bags

**Worms should NOT eat:**

Meat, fish, dairy products, oily food, salty food

**Worms dislike (but will eat small amounts of):**

Citrus, onions, garlic, bread, pasta, cheese

What do I feed fermenting microbes?

**Food waste that ferments well:**

All scraps, eggs, shells, grains, meat, dairy

**Food waste that does NOT ferment well:**

Avoid liquids, oil, meat, dairy, bones, large bones

**Non-fermentable items:**

Do not include plastic, metal, or glass

## SIDE-NOTE

Be wary of time!! Remember you don’t have to go into detail by this time you are in your last 45 to 30 minutes of the workshop. There are extra details to ensure you are equipped for the questions that may come up.

## But it's just a Bucket Activity

For this activity, have everyone gather around the Bokashi unit once again, and explain that the Bokashi method is more than just a bucket, it is a full composting system that converts food scraps into leachate and pre-compost material. However, to create finished compost, an additional step may be required, depending on how you choose to use it. You can pass around the Bokashi bin for people to get a sense of how big it is, the amount of food it can hold, or for them to get a feel of how it may look in their kitchen.

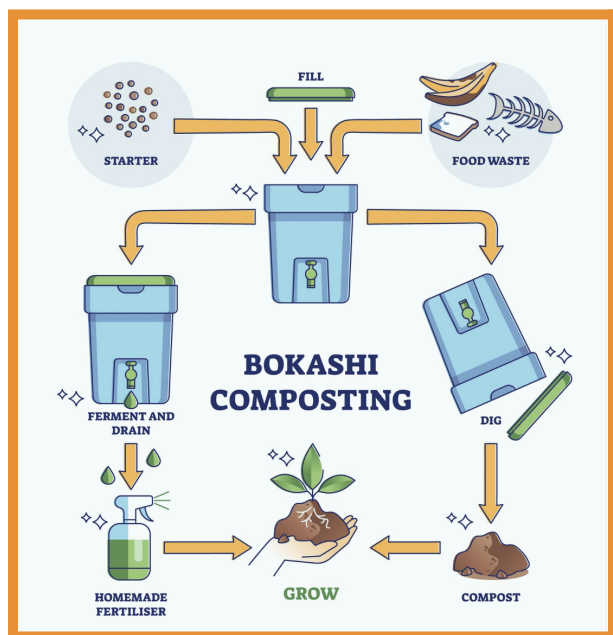




## The Bran:

After going over the Bokashi bin it's time to go over the bran. "The bran or the starter is a mixture of materials like grains, water, effective microorganism (EM) and molasses. The microorganism is what starts the fermentation process. Although it is a fermentation process, you do not have to burp the bokashi bin or worry about the smell." Allow participants to smell and even touch the brand. Remember to stop and answer questions participants may have.

## How it works:



**Step One:** Cut the food scraps into smaller pieces (they don't need to be tiny, just manageable).

**Step Two:** Press the scraps down firmly with a potato masher or similar tool to remove air pockets.

**Step Three:** Sprinkle Bokashi bran or starter over the scraps, then seal the lid tightly.

\*You can do this process with an actual bokashi demonstration or simply by simulating it. \*

## Step Four:

Once the bin is full, seal it and, let it sit for 2 to 4 weeks to allow the microbes to fully ferment and stabilize the food. It's normal if the food still looks somewhat like its original form.







## Step 5:

After this fermentation period, you have options for what to do with the pre-compost material in the bucket:

**Bury:** you can dig a trench or hole about 6-8 inches deep and bury the fermented material directly into soil or a garden bed. It is best to bury the material and let it break down fully 2-4 weeks before planting any seeds or plants.

**Soil Factory:** A soil factory allows the fermented material to continue breaking down while mixing with soil, boosting the soil's nutrient content and making it more suitable for plants. A soil factory is made out of a 1:1 ratio of soil and bokashi mixture, and let it sit for another 2 to 4 weeks until food is no longer visible.

**Add to existing compost pile:** Pre-compost material will easily breakdown in an existing and active compost pile, bin, or tumbler and will provide lots of nutrients and beneficial microorganisms.

## Leachate:

If you have a jar or bottle of leachate, now is a good time to pass it around. Depending on how it has been stored, you may allow participants to smell it, though be aware that it usually has an unpleasant odor. Leachate forms from the moisture released by food scraps in the bokashi system, making it highly concentrated and in need of dilution. While it can be poured directly onto garden soil, it may be too strong to apply directly to house plants.

## Common Questions

When do I add the Bran?

The bran is added every time you add food.

How long does it take?



Once the bin has been filled to the brim it must stay shut for about 3 to 4 weeks for the fermentation really take effects.

Can I make a bin myself?

Yes!! You can make a bin at home just make sure the bin is air-tight and you add a faucet to be able to collect the leachate.

Will it stink up my kitchen?

It should not, at least not while it is just sitting in your kitchen. If it does it probably means it might not be shut correctly, the leachate may need to be drained, or it has some sort of leak.

Where can I buy the buckets and bran? How much does it cost?

Depending on the brand the Bokashi can be purchased from \$50 to \$150. The bokashi presented is from Bokashi living which cost, \$85 with 2 bags of bran included.



## End of The Workshop

You've made it to the end of this workshop!! Now that all four composting systems have been introduced, it's time to wrap up by addressing any remaining questions and handing out the end-of-workshop surveys. After completing the survey, participants may choose to stay behind to ask additional questions or seek advice on starting their own composting system at home. Feel free to share your thoughts and experiences. If you're unsure how to respond, you can always direct them to our website, where they'll find helpful resources to get started.

You may consider handing out a certificate to workshop participants. In our experience, participants appreciate the token to document that they are now experts too! We also like to take a group photo of participants holding their certificates if they are ok with photography.



And most importantly, don't forget to thank everyone for taking the time out of their day to join the workshop!

We thank you for following our guide and hope it helps you run a successful compost workshop. Please feel free to reach out to us with additional questions or needs.

