



25min Can You Dig It? Grade 4 Facilitator Notes

Objective: Students will explore soil and compost as a habitat for living organisms and the ways in which humans can impact them through composting behaviours.



Recipe Category: Soil & Composting



Cooking Time: 25 mins



Level of Difficulty: Grade 4



Recipe Ingredients:

Introduction to Habitat:

- Worm Bin from FoodShare (Rubbermaid or Bucket)

Worm Restaurant:

- Worm restaurant menu (Tabloid sized, for facilitator)
- Pencil crayons or coloured pens
- Boards or something to lean on
- Blank restaurant “specials” handouts (>60) (worm restaurant menu on other side)



Curriculum Links:

Grade	Subject Area	Ontario Curriculum Links
4	Science & Technology	<p><i>Understanding Life Systems – Habitats & Communities</i></p> <p>Demonstrate an understanding of habitats and communities and the relationships among the plants and animals that live in them. (O)</p> <ul style="list-style-type: none"> • Demonstrate an understanding of habitats as areas that provide plants and animals with the necessities of life. (S) • Identify factors that affect the ability of plants and animals to survive in a specific habitat. (S)
	The Arts	<p><i>Visual Arts</i></p> <p>Creating and Presenting: apply the creative process to produce a variety of two and three dimensional artworks, using elements, principles, and techniques of visual arts to communicate feelings, ideas and understandings. (O)</p> <ul style="list-style-type: none"> • Use elements of design in works to communicate ideas, messages, and understandings. (S)

Introduction to Habitats: (5 mins)

Introduce yourself to the group.

Have the group sit in a circle.

Today’s workshop is about “habitats”. Can anyone share what they think a habitat might be?

- A home for plants and animals
- It is the natural environment that provides the necessities of life such as food, water and shelter for a plant or animal species

I actually have a habitat for worms right here in this “vermicompost” bin!

****Before getting started, ensure students are aware of the worm “etiquette”...**

1. They’re very delicate and will break if you’re rough with them
2. Worms prefer no loud noises, because they breathe through their skin and “hear” vibrations (so yelling is like giving them a sharp shake).

3. Be sure to ask the person beside you if they would like to hold a worm before passing it to them. If they don't want to, skip them to the next person.
4. If possible, have an adult supervise the holding and passing of worms between students (so they don't get dropped or thrown).

Spend some time looking inside the bin and passing around some worms. Discuss what elements make up the "habitat"

- *Moisture*
- *Darkness*
- *Bits of cardboard or paper to hide under*
- *Food scraps to eat*
- *Other microorganisms*
- *Soil and compost to live in*
- *Protection from predators (e.g. birds)*

Worm Restaurant Menu: (20 mins)

Distribute the handouts (back to back sheets with the menu and blank specials board). There should be enough for one sheet per student (or, if they prefer, they can work in pairs).

Read the "Compost Café" restaurant menu together (or have students take turns reading aloud). *This is a menu for worms! Do you think you'd like to eat at this restaurant?*

Note the different menu sections and discuss the following points:

- **Green Items:** Nitrogen-rich for a quick breakdown
- **Brown Items:** Carbon-rich to balance out the fast decomposition of the Green items and make the final compost really nutritious
- **Moisture:** the compost pile needs to remain nice and moist, but not wet in order to break down properly and provide the best *habitat* for the creatures within
- **Oxygen:** The compost pile needs to be "aerated" which basically means mixed up to make sure that oxygen is spread throughout. This also helps to reduce bad smells!
- **"Policy":** the Compost Café's "policy" is for foods that should not be composted. High protein foods such as meat and dairy are very smelly when they break down. Excessive liquids will make

the compost pile too wet and diseased plants for weeds might infest the pile and spread unwanted pests.

- **“Worm Castings”**: another word for worm poop = nutrient-rich compost!

Define confusing terms on the menu as you go, for example:

- “Exquisite” – beautiful and special
- “Repelling” – keeping away
- “Free-Range” – refers to chickens that are able roam free
- “Indigestion” – not digesting your food properly (e.g. stomach aches, gas etc.)
- “Aerated” – mixing in air or oxygen

1. After reviewing the menu side, flip over to the “specials” board. Many restaurants like to have daily specials, something that isn’t usually on the regular menu.
2. Make sure they have access to colouring pencils or coloured pens and something to lean on
3. Ask students to create their own **worm restaurant specials board**. They need to come up with a **restaurant name** first.
4. Next they should list some **enticing menu items** – remember to add some **browns and greens!** They should focus on using their best creative skills and descriptive words to make the menu items sound appetizing. It’s up to them how many special items they want to promote.
5. Have students **share** their worm specials either with the whole group or in triads.



Serving Suggestions:

Compost Café Poster:

The Compost Cafe
Worm Restaurant

Green Items (Nitrogen-Rich)

Fruit Peels & Cores (use our exquisite range of local fruit scraps (seasonal))	\$5
Fresh or Cooked Vegetables (a delicate medley of vegetarian leftovers)	\$6
Green Leaves (crisp and crunchy, fresh from the garden (served with a side of soil))	\$6
Egg Shells (calcium-rich, free-range cracked egg shells sourced from a local farm)	\$7
Grass Clippings (for a moisture & nitrogen boost (best served with something carbon-rich))	\$8
Coffee Grounds, filters & Tea Leaves (perfect for repelling pests and restoring nitrogen-balance)	\$8

Brown Items (Carbon-Rich)

Wood Chips & Sawdust (to add some the toughest of digestion)	\$10
Shredded Yard Waste (generous servings recommended for those with large appetites)	\$11
Pine & Fir Needles (well known for it's refreshing, sharp flavour)	\$11
Straw & Hay (dry on the palate, suitable for speeding up compost digestion)	\$12
Dry Grass & Dry Leaves (essential for balancing out a nitrogen-rich meal)	\$13
Nut Shells (broken first for your convenience & ease of digestion)	\$16
Scale Bread (baker's bread aged at least one day for maximum flavour development)	\$17
Shredded Cardboard & Paper (to create a cozy habitat that reminds you of home!)	\$18

Chef's Recommendations

2:1 Ratio for a healthy compost, the chef recommends you order twice as many greens as browns
 Moisture: your compost will remain as damp as a swamp (keeping your dining experience)
 Shade for your optimal dining pleasure, this restaurant will be kept in the shade to avoid drying out
 Oxygen to minimize embarrassing odours, your compost will be aerated regularly by our friendly staff

Compost Cafe Policy

For your dining safety & pleasure, the meals served at the Compost Cafe will never contain:

- Meat, bones & fatty foods
- Diseased plants
- Excessive liquids
- Cats or carrots
- Dairy products
- Weeds

*15% of your worm savings will be automatically added to the cheque for groups larger than 6.

Specials Board Worksheet:

← Restaurant name/ logo

⎵ Daily Specials items