

Learning outcomes

Students will:

- ✓ Understand and know how a Worm Farm recycles organic matter into rich fertiliser
- ✓ Recognise worm juice and worm casting.

Harvest Your Worm Farm

Skills

Students will:

- Undertake a hands-on experiment
- Work collaboratively.

Values and Attitudes

Students will:

- Develop enthusiasm for recycling.

Materials Needed

- Active worm bin
- Two tarps
- Two 20 litre/ five-gallon buckets
- Colander
- Water
- Paper bags or re-use plastic bags to fill with worm castings for students
- Empty plastic beverage bottles
- Three to six hand-held garden forks or trowels
- Extra worm castings.

Background Information

There are several ways to harvest a worm farm – we have described three ways here.

When you harvest a worm farm your students will experience nature's life cycle. By remembering the kinds of foods or other materials that were placed in the bin, they can marvel at the compost (or castings) worms have made.

Remind students that worm composting is a way of recycling food scraps.

Compost worms eat the food we would otherwise throw away. The worm castings that are left behind can be used as fertiliser to enrich the soil and feed plants.

Management Skills

To undertake this activity, you'll need to have access to a worm bin which has been fed for at least three months.

Participants will harvest worm castings from a bin using three different techniques. One 20 litre/five-gallon bucket will be used for the bucket method, and the other bucket will be used for both the sunlight and hand-picking methods. The finished compost can be used around school or taken home.

**TIME TO
HARVEST!**



Activity

In preparation for this activity, it is necessary to set up three harvesting stations. Alternatively, choose one of the following harvesting methods:

- Bucket method (requires a tarp, bucket, and water).
- Sunlight method (requires a tarp, bucket, and a sunny day or bright light)
- Hand-picking (requires a tarp and bucket).

During this activity, students will:

- Review worm composting as a class: What do worms eat? How do they help us? How do they help nature? Why is worm composting important?
- If it is a classroom worm bin, discuss what they have been putting in the bin and predict what they think has happened to the items they named.
- Brainstorm uses for the compost they will harvest, including putting it on the lawn, around trees, or on classroom plants.
- Harvest as follows:
 - **Bucket Method:** Participants place all contents of the worm bin in a bucket. Gently pour cool water in the bucket. The worms will be okay for a minute or two. Pour the contents of the bucket through the colander. Retrieve the worms, uneaten food and bedding and return them to the bin. The brown liquid is compost tea that can be used to water plants.

- **Sunlight Method:** Mound compost in small piles on the tarp and let them sit in the sun or under a bright light for a few minutes. The worms will move to the centre of the pile to avoid the light. The outer part of each pile, now without worms, can be removed and put in the bucket. As the castings are removed, the newly exposed worms will head to the middle out of the light. Repeat the process until only a ball of worms remains. Return these worms to the worm bin.

- **Hand-Picking:** Sort through one big pile of compost on the tarp, picking out worms and returning them to the bin. Continue until the pile seems to be relatively worm free.

- When the harvesting is complete, compare the various methods, discussing the level of difficulty, efficiency, speed etc.
- Share the harvested worm castings with class members to take school or home. Leave the castings to sit for two or three days before applying directly to plants. Decant the compost tea into empty beverage bottles for immediate use.



**WHAT IS
YOUR FAVOURITE
HARVEST METHOD?**

