

Decomposer scavenger hunt



Background information

This activity allows students to learn about the decomposers that live in compost. Decomposers are bacteria and insects that help breakdown animal and plant matter. Further research can be done into the importance of decomposers in order to learn about the crucial part they play in nature's life cycle. This activity can be undertaken with materials from a compost bin or a worm farm.

When students are picking up and studying the animals and insects they find in the compost, they should follow a few simple rules, such as not handling them too much and not squeezing or poking them too hard. This will help ensure the decomposers make it safely back to their home in the compost.

The following activity table can be adjusted to suit your students' different learning capabilities. You may also choose to let the students lead their own investigations using the Landcare Research website (www.landcareresearch.co.nz) in order to identify and research the decomposers they find.

Equipment needed

- » Small containers such as yoghurt pots
- » Newspaper to spread out the soil
- » Toothpicks or tweezers
- » Magnifying glasses
- » Compost freshly collected from the lower layers of the compost or worm bin
- » Identification sheet below

Activity instructions

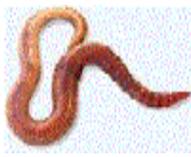
1. Take about ½ cup of material from the compost bin using the container and empty the contents onto newspaper. Move the material around with the toothpick/tweezers to find some decomposers. Use a magnifying glass to help identify what they are.
2. Use the identification sheet below to record how many of each kind of decomposer is found. Alternatively, use the following website to identify the decomposers: www.landcareresearch.co.nz/research/biosystematics/invertebrates/invertid/
3. When finished, please remember to return the insects and other organisms to the worm farm or compost bin so that they can carry on their good work!

Key questions:

- » Can you predict what kinds of insects you will find in compost?
- » What insects do you think should not be in compost?
- » The insects and animals found in compost are called decomposers. What does this mean and what function do they have in compost?
- » Can you find any ants? These shouldn't be in there – what can be done to help get rid of them?
- » Do the decomposers appear to like certain kinds of organic waste? You might be able to tell from old uneaten food in the compost.
- » Can you identify a particular decomposer and investigate more about its lifecycle?

Visit www.createyourownceden.org.nz for more information, facts and additional learning activity ideas, as well as a guide to setting up a school compost bin, worm farm or bokashi system.

How many decomposers can you find?

Picture of bug	Type of bug	Number of bugs found	Special features
	Tiger worm		
	Ant		
	Earwig		
	Centipede		
	Slater		
	Slug		
	Snail		
	Millipede		
	Others		