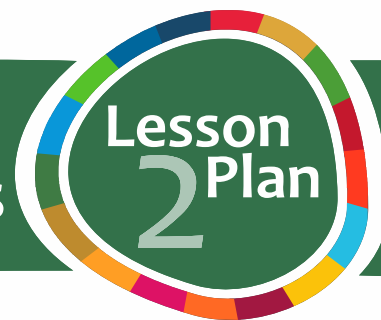


# Nature Walk - Decomposers



## INTRODUCTION

Decomposition is one of the most important processes by which nutrients are recycled in nature. It is the reason why there is no concept of waste in nature. The decomposition is carried out by decomposers that break down dead organisms or organic matter.

Decomposers are heterotrophic, meaning that they use organic substrates to get their energy, carbon and nutrients for growth and development.

The lesson familiarise the students with some of the common macro decomposers and initiates them in observing the process of decomposition happening all the time around them.

### Objectives:

Students will be able to

- identify some macro decomposers.
- provide examples of some macro decomposers.
- describe the importance of macro decomposers.

**Eco-Schools Steps:** Audit, Curriculum linkages, Inform and Involve

**Curriculum Linkage:** Science/ Environmental Studies/Social Science



### Time required:

- **Classroom Session 1:** 90 minutes to set the context and brainstorm with students followed by Nature Walk to identify decomposers and sketch some of these.
- **Classroom Session 2:** 45 min for classroom interaction wherein students display sketches of the different decomposers each of the groups came across and a wrap up discussion by the teacher.

### Resources Required:

- Gloves, shoes, rake/ stick and other safety equipment for going through a compost pile/ leaf litter.
- Resource - 2 (Macro decomposer reference chart)
- Resource - 3 (Decomposer sketch sheet).
- Magnifying glass



# Activity

## Classroom session 1

- With the background of importance of cycling nutrients in nature, the teacher should introduce students to the importance of decomposers.
  - Decomposers are significant to the ecosystem as they recycle nutrients after the organisms. These nutrients are then released into the ecosystem and available again for use.
  - Decomposers play the role of recyclers in the ecosystem.
- Brainstorm with students to help them recall and identify some of the macro decomposers they are already aware of.
- Introduce students to some more macro decomposers. The macro decomposers reference chart could be used as an example. You can prepare your own chart as per your region.
- Divide students into groups of 4-5 members for the nature walk. Assign different areas to different groups.
- Students should be guided to carefully go through the leaf litter or a pile of compost using a rake/ stick and study and sketch the different types of macro decomposers that they come across. A magnifying glass would be a useful tool.
- Guide the students to use the macro decomposer reference chart as a reference for identifying some of the decomposers that they come across. (Resource - 2)
- Ask students to use the decomposer sketch sheet for this purpose.

## Classroom session 2

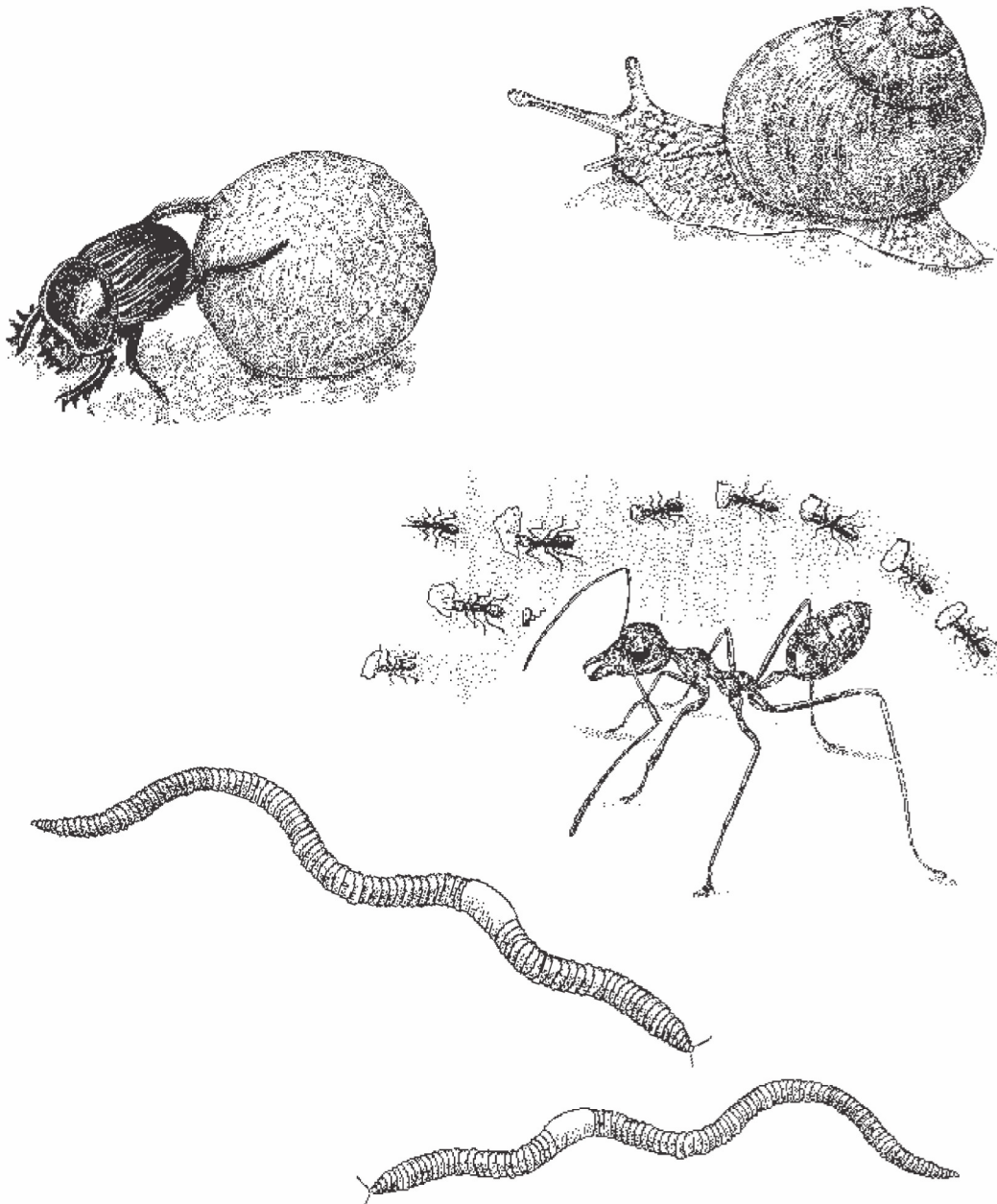
- Facilitate students to consolidate the different types of macro decomposers they came across during the nature walk.
- Ask the students to label the different macro decomposers by making use of the macro decomposers reference chart.
- Facilitate a classroom discussion following the nature walk to help students list the different types of non-biodegradable items they came across and whether they decomposed.
- Student sketches, prepared during the nature walk should be displayed on the Eco-Schools bulletin boards.

### Evaluation:

Conduct a quiz to understand whether students are able to identify the different macro decomposers.

## Resource 2

### Macro decomposers reference chart



## Resource 3

### Decomposer sketch sheet