



Connected Classrooms Lesson

School	
Phone	
Contact Teacher	
Teacher Mobile	
Date	
Time	
Class	
Student Numbers	
Anticipated Cost	
Theme	Interactive Earthworms

- Thank you for registering for a Connected Classrooms Lesson. Please read through this document so you are familiar with the program, resources and materials needed on the day.
- This program costs **\$5.00** per student. No GST is payable. **Your school will be invoiced based on student numbers at the time of booking.** Please contact the centre immediately if there is any major variation to these numbers..
- **Cancellations** with less than two week's notice will incur a \$50 administrative fee.
- During this session students will be building a mini worm farm. **Details of the equipment your school needs to provide** are on the third page.
- Please **use the exact details below** when you dial in and log on.
- We highly recommend you **begin connecting at least 20min before** the session is due to start. If you have never used the equipment before it would be beneficial to practise before hand. Details of how to set up your Video Conference are on the following page.
- If you experience **technical issues** the presenter may not be able to assist you. Please follow these steps:
 1. Notify the presenter of the trouble.
 2. Call 1800 824 737 from a normal phone or
 3. Pick up the IP phone in the Connected Classroom box and speak to IT support.
- Once connected, **please turn your microphone to MUTE** until it is your turn to speak. If microphones are not muted, they may be remotely muted by IT Support and unfortunately you will not be able to answer questions.

How to set up your Video Conference:

- Dial the virtual meeting room number on your Tandberg VC remote. This will connect you to the Video Conference.
- Please PRESS MUTE ON YOUR REMOTE when you are not contributing to the VC.
- Using the connected classrooms computer, logon to your DEC portal. Click on the 'My Applications' tab.
- Find Bridgit and click to download. Follow the on-screen instructions to download and run.
- Once Bridgit is running, look for the meeting name for your session and select 'Join'. Enter the relevant password.
- Always have 2-3 students waiting at the IWB as part of the VC.
- It helps to have a school banner with your school's name on it visible in field of view.

Things to think about before the VC starts:

- This is an interactive video conference. Are you and your students familiar with VC etiquette?
- There may be other schools dialing in. Consider asking them a question or planning another collaborative VC together.
- Interactive video conferences are a core part of teaching and learning. How can you make this experience part of the student's assessment? You are welcome to contact Field of Mars EEC to discuss ways of integrating VCs into learning.

Syllabus Foundation Statements (Stage 1) - Refer to syllabus documents for stage statements and outcomes.

Science and Technology

Students conduct guided investigations by following a series of steps that include questioning, making and testing predictions, collecting and recording data, observing patterns and suggesting possible explanations.

Students select and safely use a range of equipment, computer-based technology and other resources to investigate and explore.

They select and safely use a range of equipment, computer-based technology and other resources when designing and making.

Students identify and describe ways in which living things grow and change.

Students describe ways in which living things depend on the Earth and its environment.

They communicate messages using a variety of media and technologies.

Human Society and its Environment

Students make comparisons between natural, heritage and built features of the local area and examine the human interaction with these features.

English

Students communicate with a wide range of people on familiar and introduced topics to achieve a variety of purposes.

They listen to instructions and share ideas with peers to complete tasks.

Environmental Education Objectives

Students will develop:

knowledge and understandings about:

- the nature and function of ecosystems and how they are interrelated (K1)
- the impact of people on environments (K2)
- the principles of ecologically sustainable development (K4)
- career opportunities associated with the environment (K5)

skills in:

- applying technical expertise within an environmental context (S1)
- identifying and assessing environmental problems (S2)
- communicating environmental problems to others (S3)
- resolving environmental problems (S4)
- adopting behaviours and practices that protect the environment (S5)
- evaluating the success of their actions (S6)

values and attitudes relating to:

- a respect for life on Earth (V1)
- a commitment to act for the environment by supporting long term solutions to environmental problems (V3).

Interactive Earthworms

Overview

What do we want the students to learn?

- The students will be looking at some of the features of composting worms and why they are helpful to the environment.

Background

Why does it matter?

Worms have been converting organic residues to a usable form for over 300 million years.

Worms provide a simple, yet effective means to convert organic waste into nutrient-rich material capable of supporting plant growth. They do it quietly and efficiently. Because worms can do it where the garbage is produced, no hauling and processing is required. Plants grown on the castings from a worm farm make use of the nutrients present in the organic waste, thus reducing the need for artificial fertilisers. What better way to contribute in a positive way to our environment than to have worms eat our garbage?

Sample Outcome: (Stage 1)

LT S1.3 *Identifies and describes ways in which living things grow and change.*

A student:

- Describes why worms are beneficial
- Describes the requirements for worm survival.



Learning Activities

In this indoor and outdoor video conference students will explore the features and life cycles of earthworms. The students' attention will be directed to:

- the similarities and the differences between different types of earthworms
- the body parts of worms: mouth, clitellum, bristles, segments, bristles, and castings
- the method of making a worm farm and live worms
- the benefits of worms and worm likes and dislikes.

Construction of a mini worm farm:

During this video conference students will build a mini worm farm.

1. Cut off the top of the PET bottles. Create drainage holes in the bottom. (This needs to be done before the Video Conference).
2. Cover the bottom of the bottle with about 3 cm of potting mix/soil.
3. Place a layer of shredded paper (optional) on top.
4. Add another layer of potting mix/soil then another of shredded paper.
5. Water the wormery to make sure it is damp but not drowned using the spray bottles. The wormery must be kept damp at all times.
6. Put a few worms on the surface (approx. 10)
7. Depending upon whether the worm farms will be kept at school or taken home, a small piece of fruit or vegetable can be given either in the classroom or once the children get home. Do not feed the worms again until the fruit/veg food given is gone.
8. Cover the wormery with newspaper and an elastic band to make it dark. Remember worms don't like light. Cardboard, newspaper or black plastic could be wrapped around the worm farm to make it dark.

School Provides:

- Compost/earthworms (available from your garden or garden or hardware stores)
- Clear PET soft drink or milk bottles, cut in half with holes in the base (prepared before the Video Conference)
- Garden soil or seed raising/potting mix
- Shredded paper (optional)
- Spray bottles filled with water
- Trowels or equivalent
- Re-usable gloves for handling soil/potting mix
- Newspaper for "lid" and to wrap around bottle/worm farm to make it dark
- Elastic bands for securing the "lid"