







Connected Classrooms Lesson

School	School
Phone	
Contact Teacher	
Teacher Mobile	
Date	
Time	
Class	
Student Numbers	
Anticipated Cost	
Theme	Invertebrate Ink

- 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. Combine this VC with Interactive Invertebrates during the morning time slot for a discounted cost of \$8 per student.
- Cancellations with less than two week's notice will incur a \$50 administrative fee.
- Before this session students will need to conduct an invertebrate collection in the grounds of their school. **Details of the equipment** your school needs to provide are on page three.
- 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 practice 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.

Field of Mars Environmental Education Centre Field of Mars Reserve

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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 VCs in learning.

Syllabus Foundation Statements (Stage 3) - Refer to syllabus docs for additional stage statements and outcomes.

Creative Arts

Students make artworks for a variety of audiences using different forms and techniques to convey meaning and represent the likeness of things in the world.

They discuss artworks in terms of how subject matter is used and represented, artists' intention and audience interpretation and make reasoned judgements about these artworks.

Science and Technology

Students use, select and evaluate equipment, computerbased technology and other resources to meet the requirements and constraints of investigations.

Students identify, describe and evaluate interdependent relationships between living things and the environment within ecosystems.



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).

Invertebrate Ink

Overview

What do we want the students to learn?

This activity should provide the students with an understanding that:

• Invertebrates are some of the most important and diverse species on this planet. They come in all sorts of shapes, colours, patterns and textures, each representing a particular adaptation to the environment in which they live.

Background

Why does it matter?

Invertebrate diversity is one of the indicators of ecosystem health. This diversity can be used as an inspiration to create amazing artwork that explores the forms, structures and patterns of invertebrates.

Sample Outcomes: (Stage 3)

VAS3.1 Investigates subject matter in an attempt to represent likenesses of things in the world.

Students:

- Study invertebrates in their environment and look at the details which often go unnoticed.
- Observe and study from nature the characteristics of invertebrates and focus on details including size, shape, colour and texture.

VAS3.2 Makes artworks for different audiences, assembling materials in a variety of ways.

- Students will be able to explore a variety of art-making conventions related to observation drawing and printing.
- Extend the students' knowledge and understanding of a variety of media.
- Students will have the opportunity to look at the art making practices of other artists, from a variety of cultures, who have explored invertebrates as their subject matter e.g. Ancient Egypt, Chinese painting, Dutch Still-life, and Aboriginal painting.

Learning Activities

In this video conference students will discover amazing invertebrate biology by closely examining invertebrates they have collected before the lesson. To collect invertebrates students will need a collection container and a paint brush. One recommended collection method is a tree shake.

Students hold a sheet or tarp under a branch while an adult vigorously shakes or beats the branch. Invertebrates should be dislodged and fall onto the sheet for collection. Collect into specimen jars using a small brush. Students will need at least one invertebrate each for the session.

During the video conference students will be introduced to invertebrate biology while building a virtual invertebrate. Students will be taught how to draw their collected invertebrate using observational drawing techniques.

These drawings will be transferred to scratch foam and are used as the basis to create incredible invertebrate ink prints.

When complete, students will be able to create a gallery and display artworks to their peers across the state.

Scratch Foam Print:

- Draw the chosen invertebrate on plain paper making sure the drawing fills the page.
- 2. Transfer the image from paper to foam using a pencil. Add plenty of detail and texture directly to foam (eg, dots print well).
- 3. Roll out the ink onto laminated A3 instruction sheet. Roll in two directions to get an even spread (portrait and landscape).
- 4. Roll ink onto foam. Cover all the foam but don't keep rolling or you will remove the ink or force the ink into the groves.
- 5. Place inked scratchboard face down onto the paper, then turn over both the paper and foam together. Rub on the back of the paper with your hand to transfer the ink.
- 6. Peel the paper from the scratch foam (not the scratch foam from the paper as it cracks the foam) and allow to dry.

Scratch foam printing is a type of block printing that can be printed again many times.

School Provides:

- Collection containers (eg, plastic specimen jars)
- Paintbrushes to collect specimens into jars
- Invertebrates, collected from the school grounds
- A4 paper or coloured paper
- Groups of tables for creating prints
- Art aprons/shirts

Field of Mars EEC provides:

Scratch foam, black paper, printing ink and a printing ink roller for the session will be mailed to your school. The roller must be returned to the centre or an additional cost of \$30 will be charged to your school.

