



Connected Classrooms Lesson

School	School
Phone	
Contact Teacher	
Teacher Mobile	
Date	
Time	
Class	
Student Numbers	
Anticipated Cost	x \$7 = \$
Theme	Arachnid

- 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 **\$7.00** 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 conducting an invertebrate investigation in the grounds of their school. **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 2) - Refer to syllabus documents for stage statements and outcomes

Science and Technology

Students independently implement aspects of a scientific investigation, such as observing, questioning, predicting, testing, recording accurate results, analysing data and drawing conclusions.

Students select and safely use equipment, computer-based technology and other resources throughout the processes of investigation.

Students identify and describe structures and functions in living things and how they interact with each other and their environment.

Human Society and its Environment

Students identify, locate and describe natural, heritage and built features in the local area and in other parts of Australia and explain their significance and management.

Creative Arts

Students make artworks that represent a variety of subject matter and make choices about the forms and techniques used to best represent the qualities of the subject matter.

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).

Arachnid

Overview

What do we want the students to learn?

This activity should provide the students with an understanding that:

- Arachnids are incredibly diverse and are found in variety of different habitats.

Background

Why does it matter?

Spiders, scorpions, mites, and ticks all belong to the Arachnid family. There are more than 30,000 known species of spiders. Scientists have found spiders in amber that dates back to about 2 million years.

The existence of spiders is vital to the earth. Spiders eat many types of harmful insects, helping to keep gardens free of pests. Spiders are also a food source for many small mammals, birds and fish. Loss of habitat and inappropriate use of pesticides have an impact on arachnid populations.

Sample Outcomes: (Stage 2)

INV S2.7 *Conducts investigations by observing, questioning, predicting, testing, collecting and recording and analysing data, and drawing conclusions.*

- identifies and describes examples of evidence of arachnids.
- uses arachnid trapping and collecting equipment to collect arachnids.

VAS 2.1 *Represents the qualities of experiences and things that are interesting or beautiful by choosing among aspects of subject matter.*

- focus on details of the subject matter including size, shape, colour and texture.

VAS2.2 *Uses the forms to suggest the qualities of subject matter.*

- experiments with drawing techniques to create an observational drawing of an arachnid.

Learning Activities

In this indoor and outdoor video conference students will explore the incredible world of arachnids that live in their school.

Students will learn about the importance of arachnids, their features and habitats and how to safely collect them. Students will conduct an investigation in the grounds of their school for arachnids.

Collected arachnids will be identified with the help of a digital microscope lent to your school for use during this session. The microscope must be returned to the centre or an additional cost of \$350 will be charged to your school.

To conclude student will create a dramatic observational drawing of an arachnid on black drawing paper using white drawing medium.

Arachnid Investigation Instructions:

One methods of collecting arachnids, safety aspects and possible dangers will be described during the video conference. The students will be instructed not to pick up any animals with their hands. The collection method used for this activity is a tree shake.

To collect arachnids from branches, a tree shake is used.

1. Students hold a sheet under a branch while an adult vigorously shakes or beats the branch.
2. Invertebrates should be dislodged and fall onto the sheet for collection.
3. Collect into specimen jars using a small brush.

Collected arachnids will be identified during the second part of the session with the help of a digital microscope.

All arachnids will then be returned to the place they were found.

School Provides:

- Old sheets, tarps or large pieces of light-coloured plastic
- Paint brushes
- Collection containers (eg, white margarine containers are ideal)

Field of Mars Provides: digital microscopes on loan, black drawing paper and white drawing medium for each student.

