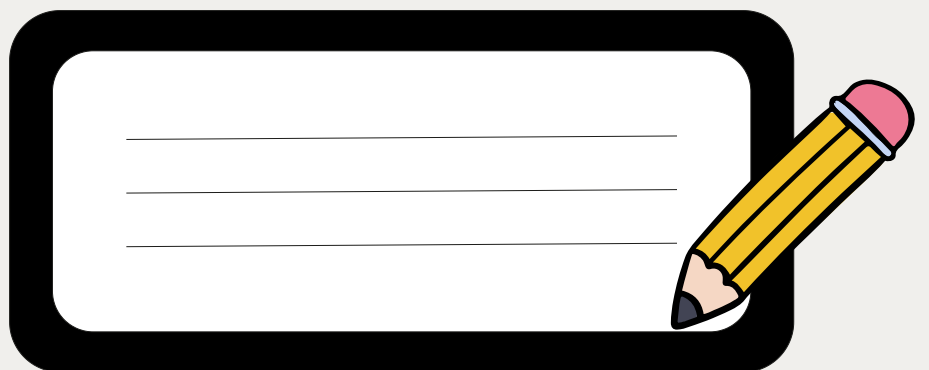
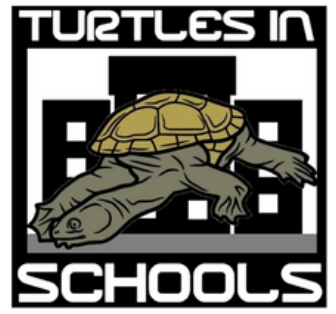


TURTLES IN SCHOOLS

TERM 2 WORKBOOK





TURTLES IN SCHOOLS

Produced by the
1 Million Turtles Community
Conservation Program
and funded by
The Foundation for National
Parks and Wildlife.

In the pages that follow, you will find a comprehensive set of lesson plans.

Our initiative is not just about imparting knowledge but fostering a deep connection between students and their natural environment and instilling a sense of responsibility and awareness of freshwater turtles and their conservation.

As we embark on this educational venture, we extend our gratitude to educators, students, and all those who champion the cause of conservation. The Turtles in Schools Program is not just a curriculum; it is a movement to inspire the next generation of environmental custodians.

Thank you,

**1 Million Turtles Community
Conservation Program**

CWILLESSON

TERM TWO

PREPARATION FOR THE NATIONAL NEST PREDATION SURVEY

- Learning Intentions
- Background
- Activities
- Curriculum Mapping

Photo credit: Dr Donald McKnight

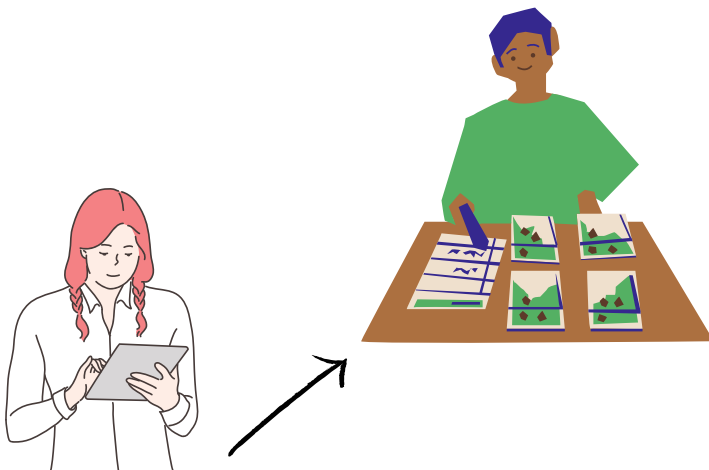


Learning Intentions

(1) Define an experimental design;

(2) Explain the 3 R's Principle and how it is used in scientific research;

(3) Participate in the National Nest Predation Survey.



Define



Explain



Participate

Background Information

Experiment design and the 3 R Principle

Experimental Design:

Experimental design refers to the process of planning and organising an experiment in order to gather data and draw conclusions to answer a research question.

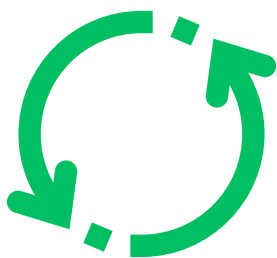
The 3 R Principle:

The 3Rs is a concept that refers to the guiding principles for the ethical use of animals in scientific research. The 3Rs stand for Replacement, Reduction, and Refinement. These principles aim to minimise the use of animals in research, reduce their suffering, and improve their welfare.

1) Replacement – the principle of replacement aims to find alternative scientific methods that can replace the use of animals in research where possible.

2) Reduction – the principle of reduction focuses on minimising the number of animals used in research.

3) Refinement – the principle of refinement aims to improve the welfare of the animals used in research, through refining experimental procedures and protocols to minimise pain, distress or suffering.



Replace



Reduce



Refine

National Nest Predation Survey (NNPS)

The National Nest Predation Survey encourages communities to measure nest predation rates. Nest predation rates on turtle nests are very high in many parts of the country. Introduced foxes are the major predator. By conducting the National Nest Predation Survey throughout Australia the 1 Million Turtles Community Conservation Program, aims to develop a national interactive 'hotspot' map to determine region specific estimates of predation rates.

As part of the National Nest Predation Survey, users will be trained as citizen scientists conducting the survey in their region. The survey involves the creation of artificial nests by placing chicken eggs underground and monitoring predation rates. The NNPS must be done on private land or under the guidance or approval from local land management agencies (e.g., Local Council). Ideally the survey is done near a wetland (e.g. river, creek, lagoon, pond) and outside of the month of November.



Classroom Activities

ACTIVITY 1

(1A) Complete the Experimental Design worksheet to test your knowledge on experimental designs and the 3R principle.



Worksheet

ACTIVITY 2

(2A) Coordinate with the local council to organise class involvement in the NNPS. This is a requirement of participating in the NNPS.



Coordinate

Experimental Design & 3R's

Define an experimental design:

Draw a line to connect the words with their definitions

Replacement

Focuses on minimising the number of animals used in research.

Reduction

Aims to find alternative scientific methods that replace the use of animals in research.

Refinement

Aims to refine experimental procedures and protocols to minimise pain, distress or suffering.

Classroom Activities

ACTIVITY 3

(3A) Complete a risk assessment, as per the 1 Million Turtles website.

(3B) Complete the National Nest Predation Survey quiz prior to participating in the survey.

Link to risk assessment and survey on the website: [Copy and paste into browser] <https://1millionturtles.com/nnp-survey>).

ACTIVITY 4

(4A) Watch the following videos -

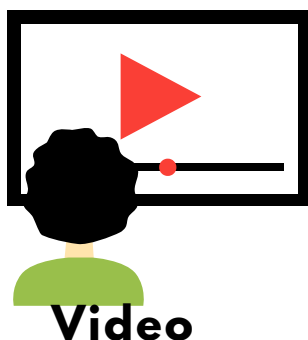
Video 1 provides an overview of how to conduct the National Nest Predation Survey.

Link to video: [<https://youtu.be/624skxfMhYM>] (Copy and paste into browser)

Video 2 explains how to dig artificial nests.

Link to video: [<https://www.youtube.com/watch?v=4C1nvkzylq4&t=2s>] (Copy and paste into browser).

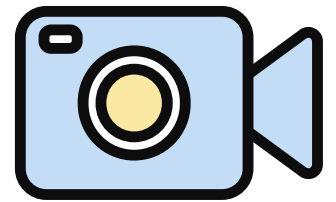
(4B) Reflect on the information in the two videos and complete the Video Reflection Handout.



Video Reflection

Three things I learnt while watching

3



Two questions I have from the video

2



One fact I found most interesting

1

