

WEGC SP100 Internal Assessment

Achievement Standard Science 91921: Demonstrate understanding of the use of a range of scientific investigative approaches in a context

Resource title: Investigating Like Our Ancestors

Credits: 5

Level: 1

Version: 3

Achievement	Achievement with Merit	Achievement with Excellence
Demonstrate understanding of the use of a range of scientific investigative approaches in a context	Explain the use of a range of scientific investigative approaches in a context	Analyse the use of a range of scientific investigative approaches in a context

Student instructions

Introduction

This assessment activity requires you to plan and carry out three investigations that each answer a different question about using plants in our environment to fight infection.

You will be carrying out these investigations to attempt to answer the '**Big Question**':

"Which plants in our local environment can be used to fight infection?"

You may choose and design your own investigations and answers, and/or use those provided in the **Resources** section.

You must submit your work in the form of a portfolio (a collection of work over the term), as well as a final summary. Your reflections may be in the form of a recording (not a video). The final summary will be under open-book test conditions. You may not pre-prepare answers for the final summary.

For written work, the recommended word limit is **800 words**, and for recordings, the recommended limit is **4 minutes**.

Your submission is due on **Tuesday 21st October**.



What you will do

- ☐ Carry out three different investigations, each answering a different question ('Little Questions'). These investigations will help you answer your 'Big Question'.
The three scientific investigative approaches will be:

- ☐ exploring and observing
- ☐ classifying and identifying
- ☐ fair testing

Before we start, we will also consult whānau, books and online sources to help validate our findings..

- ☐ For EACH of your three investigations:
 - ☐ Provide proof that you carried out the investigation
 - ☐ Use the findings from your investigation to answer the 'Little Question'.
 - ☐ Describe the purpose of each investigative approach, supported by **evidence**.
 - ☐ Give an **evidence**-based reason why each investigative approach was or was not appropriate to answer the 'Little Question' (M).
- ☐ Validate your findings, using **evidence**, with reference to the range of investigative approaches used. This could involve doing ONE of the following (E):
 - ☐ Analysing the use of the range of scientific investigative approaches in relation to the 'Big Question'.
 - ☐ Linking the findings of multiple investigative approaches to explain how they contribute to learning about the 'Big Question'.
 - ☐ Explaining how the three different types of investigative approach support understanding of different aspects of the 'Big Question'

Examples of **evidence** could include (but are not limited to):

- experimental data
- observational data
- statistics or surveys
- consultation with a wider body of knowledge, discussion/wānanga.

Resources

Exploring & Observing:

What can we find in our local environment?

 Introduction to Scientific Sketching.pptx

Identifying and Classifying :

Which species of plants are in our local environment?

[Aotearoa Species Classifier on the App Store](#)

Fair Testing:

Which plant extracts prevent bacteria from growing?

[Investigation - Treating, curing and preventing disease - OCR Gateway - GCSE Biology \(Single Science\) Revision.](#)

You may use the following to help structure your working and/or final submission.

 91921 Investigations Boxes Template

Internal Assessment Evidence Gathering Template			
Learner Name			
Subject	Science	Level	1
Standard No.	91921	Version	3

Key requirements (list):	A✓	M✓	E✓
1. Carry out at least three different investigative approaches that each answer a question within a shared context			
2. Describe the purpose of each investigative approach for each question in the context, supported by evidence that shows the purpose of using each different approach.			
3. Refer to each of three different investigative approaches to provide an evidence-based reason why each investigative approach was or was not appropriate to be used to answer each question within the context.			
4. Use evidence from across three investigation approaches to validate findings within the context , analyse the purpose and use of a range of investigative approaches to better inform the learnings within the context.			

Sufficiency statement:				
Achieved	All of A must be ticked			
Merit	All of A and M must be ticked			
Excellence	All of A and M and E must be ticked			
TICK OVERALL GRADE	N	A	M	E