





Internal Assessment Resource

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| Agricultural and Horticultural  This resource supports assessment against:  Achievement Standard 91528  Carry out an investigation into an aspect of a New Zealand primary product or its production |
| Resource title: Lamb Chops Anyone? |
| 4 credits |
| This resource:   * Clarifies the requirements of the standard * Supports good assessment practice * Should be subjected to the school’s usual assessment quality assurance process * Should be modified to make the context relevant to students in their school environment and ensure that submitted evidence is authentic |

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| Date version published by Ministry of Education | December 2012  To support internal assessment from 2013 |
| Quality assurance status | These materials have been quality assured by NZQA.  NZQA Approved number A-A-12-2012-91528-01-6008 |
| Authenticity of evidence | Teachers must manage authenticity for any assessment from a public source, because students may have access to the assessment schedule or student exemplar material.  Using this assessment resource without modification may mean that students’ work is not authentic. The teacher may need to change figures, measurements or data sources or set a different context or topic to be investigated or a different text to read or perform. |

Internal Assessment Resource

Achievement Standard Agricultural and Horticultural Science 91528: Carry out an investigation into an aspect of a New Zealand primary product or its production

Resource reference: Agricultural and Horticultural Science 3.1B

Resource title: Lamb Chops Anyone?

Credits: 4

Teacher guidelines

The following guidelines are supplied to enable teachers to carry out valid and consistent assessment using this internal assessment resource.

Teachers need to be very familiar with the outcome being assessed by Achievement Standard Agricultural and Horticultural Science 91528. The achievement criteria and the explanatory notes contain information, definitions, and requirements that are crucial when interpreting the Standard and assessing students against it.

Context/setting

This activity requires students to carry out an investigation to determine the optimum application rate of gibberellic acid for pasture growth. The students keep a research logbook while planning and carrying out the investigation and then use it to write a report. Both will be submitted for assessment purposes.

Although this assessment involves lamb, it can be adapted to other primary products, such as beef, salmon, capsicums, kiwifruit, and wool. It is important that the product chosen by students will enable them to carry out a comprehensive investigation into an aspect of a primary product or its production, and that the commercial significance of their findings can be used to make recommendations.

Conditions

This assessment task will take place over four weeks of in-class and out-of-class time.

This is an individual investigation, although the students can work in groups to collect relevant data.

Resource requirements

You will need to provide students with the materials and equipment required for trialling and carrying out the investigation, such as sheep pasture,

Additional information

None.

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| Achievement | Achievement with Merit | Achievement with Excellence |
| Carry out an investigation into an aspect of a New Zealand primary product or its production. | Carry out an in-depth investigation into an aspect of a New Zealand primary product or its production. | Carry out a comprehensive investigation into an aspect of a New Zealand primary product or its production. |

Student instructions

Introduction

This assessment activity requires you to carry out an investigation to determine the preferences for different external and internal **lamb** attributes.

You will keep a research logbook while carrying out the investigation and then write a report on your findings. Both need to be submitted for assessment.

You will be assessed on the thoroughness with which you evaluate your investigation and the comprehensiveness of the support you provide for your conclusions and recommendations.

You may work in groups to collect relevant data, but your research logbook and report must be completed individually.

This assessment task will take place over four weeks of in-class and out-of-class time.

Task

Follow the steps below to conduct an investigation into the determine the preferences for different external and internal lamb attributes. and to write a report based on your findings.

Plan your investigation

Write a plan for your investigation in a research logbook. Include in your planning:

* a statement of purpose
* a method that allows for the collection of reliable primary data relevant to the investigation by including:
* a valid range (three or more) for a key variable
* a valid measurement of the effect of the range of the key variable
* a valid description and management of other variables
* control of potential sources of error
* consideration of sampling bias
* the reliable collection of primary data
* the steps needed to carry out the investigation.

Carry out the investigation

Collect, process, and interpret your investigative data and document this in your research logbook. Include how you:

* collected and recorded primary data consistent with the final method (make note of any changes you made to your original planned method)
* processed the primary data relevant to your purpose
* interpreted the processed data and draw valid conclusions that are relevant to the purpose of the investigation.

Write the report

Write a report discussing the findings from your investigation. Include in your report:

* conclusions you have drawn from the data that relate to the purpose of the investigation and a discussion of key agricultural concepts or scientific principles, theories, or models that support your conclusions
* an evaluation of the validity of your method and/or the reliability of the data you collected and a justification of choices you made throughout the investigation
* recommendations based on the commercial significance of the findings. Your recommendations should be proposed courses of action undertaken by the farmer in order to achieve a specific outcome. Commercial significance could include breeding policy and selection to create more desirable fat content.
* a comparison of your findings to findings from another source that relate to the agricultural context.

When you have completed your report, hand it in to your teacher along with your research logbook.