**NZQA**

**Approved**

Achievement standard: 91082 Version 3

Standard title: Implement basic procedures to process a specified product

**Level:** 1

**Credits:** 4

**Resource title:** From fresh to frozen

Resource reference: Processing Technologies VP-1.60 v2

Vocational pathway: Manufacturing and Technology

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| Quality assurance status | These materials have been quality assured by NZQA. NZQA Approved number A-A-02-2015-91082-02-7377 |
| Authenticity of evidence | Assessors/educators must manage authenticity for any assessment from a public source, because learners may have access to the assessment schedule or exemplar material.Using this assessment resource without modification may mean that learners’ work is not authentic. Assessors/ educators 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. |

Vocational Pathway Assessment Resource

Achievement standard: 91082

Standard title: Implement basic procedures to process a specified product

Level: 1

Credits: 4

Resource title: From fresh to frozen

Resource reference: Processing Technologies VP-1.60 v2

Vocational pathway: Manufacturing and Technology

Learner instructions

# Introduction

This assessment activity requires you to implement basic procedures to process fresh vegetables to make a packet of frozen vegetables.

You are going to be assessed on how efficiently you implement basic procedures to process fresh vegetables to produce a packet of frozen vegetables.

The following instructions provide you with a way to structure your work so you can demonstrate what you have learnt and achieve success in this standard.

Assessor/educator note: It is expected that the assessor/educator will read the learner instructions and modify them if necessary to suit their learners.

Preparing (you will not be assessed on these preparations)

## Step 1: A step-by-step guide

If your assessor/educator has provided a step-by-step guide, read it carefully and ask questions about requirements if you need to. If you have not been given a step-by-step guide, write your own guide for processing your vegetables and check it with your assessor/educator.

Your guide must include these processing operations:

* one or more of measuring, shaping or finishing
* one or more of contamination prevention or disposal
* one or more of mixing, extracting, separating or growing
* one or more of heating, cooling or reacting.

Make sure you know how to apply these processing operations in a way that complies with health and safety practices within your work place.

## Step 2: Getting ready

Selectyour materials/ingredients and practise the processing operations you will use until you can apply them efficiently and confidently. Make sure you are familiar with the testing required to ensure your final product meets your specifications.

Decide how you will keep evidence of what you did, how it worked, and how you addressed any problems. For example, this might include making notes on your step-by-step guide to show the results of the tests you carried out and taking photographs to show the process you followed.

# Task

## Make your frozen vegetables

Make your frozen vegetables to meet specifications by following your step-by-step guide.

Your assessor/educator will need to see evidence of:

* how accurately you follow your step-by-step guide and meet specifications
* the tests you carry out to make sure your product meets your specifications
* how independently you work as you carry out your processing operations and tests
* how well you make use of time, effort and materials/ingredients.

# Resource A

## Specifications

The frozen vegetables are:

* made using appropriate processing for the materials/ingredients selected
* made to an overall finished weight of 500gms +/- 10gms
* a mix of 4 different vegetables
* 2-3cm in length (for the cut beans)
* within the acceptable range of the colour chart
* free flowing.

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Assessor/Educator guidelines

# Introduction

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

As with all assessment resources, education providers will need to follow their own quality control processes. Assessors/educators must manage authenticity for any assessment from a public source, because learners may have access to the assessment schedule or exemplar material. Using this assessment resource without modification may mean that learners' work is not authentic. The assessor/educator may need to change figures, measurements or data sources or set a different context or topic. Assessors/educators need to consider the local context in which learning is taking place and its relevance for learners.

Assessors/educators need to be very familiar with the outcome being assessed by the achievement standard. The achievement criteria and the explanatory notes contain information, definitions, and requirements that are crucial when interpreting the standard and assessing learners against it.

# Context/setting

This activity requires learners to efficiently implement basic procedures (processes and tests) to produce a bag of frozen vegetables that meets a prescribed set of specifications. Alternatively, learners could negotiate a variation of product and specifications.

# Conditions

Ensure that learners are allowed time to experiment with and manipulate the processes to produce a quality final product.

This is an individual assessment activity but learners may be paired up to allow easier documentation of the procedures used. For example, a learner could get a partner to capture on their smart phone or iPad some evidence demonstrating the ‘mixing’ process.

Assessors/educators are required to assess the ways in which the processing operations and tests are implemented as well as the quality of the outcome.

It is expected that the assessor/educator will modify Resource A.

# Resource requirements

You will need to provide:

* access to a room with the necessary equipment to meet specifications
* materials and ingredients such as vegetables, water, seasonings, sauce requirements and packaging that are needed to meet specifications
* specifications and a step-by-step guide – or examples that learners can refer to when creating their own specifications
* access to a camera or video recorder (so that learners can take and annotate photographs or videos to use as evidence).

# Additional information

The work environment must provide the equipment and materials/ingredients that learners need in order to work safely to process their frozen vegetables.

The materials and the processing operations followed must provide sufficient scope for the learners to implement basic processing operations to make a product that meets specifications (or to make an alternative negotiated product). These specifications should be short statements that describe the finished product. They should not describe a particular skill or efficiency.

## Other possible contexts for this vocational pathway

Processing to make:

* ginger beer
* cheese
* wrapped boiled sweets
* photographs (using negatives).

# Assessment schedule: Processing Technologies 91082 – From fresh to frozen

|  |  |  |
| --- | --- | --- |
| Evidence/Judgements for Achievement | Evidence/Judgements for Achievement with Merit | Evidence/Judgements for Achievement with Excellence |
| The learner implements basic procedures to process a specified product by:* following a set of processing operations to make a packet of frozen vegetables that meets specifications

For example, the learner uses one or more processing operations from each of the following four categories:* measuring, shaping or finishingThe learner measures the pieces of beans and attempts to ensure they are the required length; the learner dries the vegetables before freezing to reduce clumping
* contamination prevention or disposalThe learner washes and blanches the vegetables to remove contaminants
* mixing, extracting, separating or growingThe learner mechanically peels the carrots to remove the skin and to shape them as required
* heating, cooling or reactingThe learner steams the vegetables and then plunges them into ice cold water.
* undertaking a range of appropriate tests to ensure that the packet of frozen vegetables meets specification

For example, the learner:* soaks the peas in a brine and rejects old and starchy ones (they will sink to the bottom)
* compares the steamed and cooled vegetables with the colour chart and they are generally in the acceptable range
* checks the length of the cut beans
* tests the moisture content of the dried vegetables
* makes the frozen vegetables to meet the specifications. However, not all bean pieces meet the size tolerances, and they need to be reminded to remove the cauliflower during blanching.
* applying processing operations that comply with relevant health and safety practices

For example:* the learner follows the work place safety practices, which are published on the wall, relating to safe use of machines and correct attire
* the hazards identified in the HACCP plan are avoided.

*The above expected learner responses are indicative only and relate to just part of what is required.* | The learner skilfully implements basic procedures to process a specified product by:* showing independence and accuracy when following a set of processing operations to make a packet of frozen vegetables that meets specifications

For example, with minimal assessor/educator support the learner accurately applies one or more processing operations from each of the following four categories:* measuring, shaping or finishingThe learner measures to ensure the pieces of beans are within the required length range; the learner thoroughly dries the vegetables before freezing to reduce clumping
* contamination prevention or disposalThe learner washes and blanches the vegetables to ensure contaminants are removed
* mixing, extracting, separating or growingThe learner mechanically peels the carrots to remove the skin and shape them as required
* heating, cooling or reacting The learner steams the vegetables and quickly plunges them into ice cold water to retain their colour.
* independently and accurately undertaking a range of appropriate tests to demonstrate that the packet of frozen vegetables meets specifications For example, with minimal support, the learner:
* soaks the peas in a brine to ensure there are none that are old and starchy (they will sink to the bottom)
* uses a colour chart to ensure the vegetables are within the acceptable range (any that are not are rejected)
* checks to ensure the length of the cut beans remains within tolerances
* tests to ensure the moisture content of the dried vegetables is low enough to prevent clumping
* makes the frozen vegetables to meet specifications (e.g. there is no clumping or discolouration and very few wrong-sized vegetables).
* applying processing operations that comply with relevant health and safety practices

For example:* the learner follows the work place safety practices, which are published on the wall, relating to safe use of machines and correct attire
* the hazards identified in the HACCP plan are avoided.

*The above expected learner responses are indicative only and relate to just part of what is required.* | The learner efficiently implements basic procedures to process a specified product by:* showing independence and accuracy when executing processing operations to make a packet of frozen vegetables that meets specifications, in a manner that economises time, effort and materials

For example, with minimal assessor/educator support (to guide decisions about material quantities and selection, methods, the use of equipment) the learner uses one or more processing operations from each of the following four categories:* + measuring, shaping or finishingThe learner uses a template to measure and ensure the pieces of beans are within the required length range; while doing another job, the learner uses a machine to thoroughly dry the vegetables before freezing to reduce clumping
	+ contamination prevention or disposalThe learner washes and blanches the vegetables to ensure contaminants are removed
	+ mixing, extracting, separating or growingThe learner adjusts the setting on the mechanical peeler so there is minimal wastage of carrots. The learner shapes the carrots as required
	+ heating, cooling or reacting The learner steams the vegetables and immediately plunges them into ice cold water
	+ the work space is kept tidy and organised so that utensils are always available and the work space is sufficient
	+ ingredients are accurately measured and used to produce frozen vegetables with minimal wastage of materials
	+ the learner’s responses to tests show a sound understanding of the specifications and therefore reduce the need for further testing in order to get the final product correct.
* independently and accurately carrying out a range of appropriate tests to demonstrate that the packet of frozen vegetables meets specifications, in a manner that economises times, effort and materials

For example, with minimal support, the learner:* soaks the peas in a brine to ensure there are none that are old and starchy (they will sink to the bottom)
* uses a colour chart to ensure the vegetables are within the acceptable range (any that are not are rejected)
* checks to ensure the length of the cut beans remains within tolerances
* tests to ensure the moisture content of the dried vegetables is low enough to prevent clumping
* the learner is timely in testing, and responses to tests show a sound understanding of the specifications, therefore reducing the need for further testing in order to get the final product correct
* makes the frozen vegetables to meet specifications (e.g. there is no clumping or discolouration and very few wrong-sized vegetables).
* applying processing operations that comply with relevant health and safety practices

For example:* the learner follows the work place safety practices, which are published on the wall, relating to safe use of machines and correct attire
* the hazards identified in the HACCP plan are avoided.

*The above expected learner responses are indicative only and relate to just part of what is required.* |

Final grades will be decided using professional judgement based on an examination of the evidence provided against the criteria in the Achievement Standard. Judgements should be holistic, rather than based on a checklist approach.