a sector description – the skills, knowledge, and key competencies valued by a broad sector of industry.

recommended assessment standards that recognise outcomes valued by the industries.

a work and study map which outlines possibilities beyond school - jobs, careers, and study options at all levels

Online May 2012.
Vocational Pathways provide:

Better information for learners about future possibilities.
A simpler and more coherent framework for the education system.
Better connections between education and employment.

leading to:

Improved relevance and motivation for students.
Improved programme design and clearer options.
Successful transitions to work and study.
This achievement standard involves demonstrating understanding of aspects of chemical reactions.

Mutual exclusion exists between this standard and AS90857.

Achievement Criteria

<table>
<thead>
<tr>
<th>Achievement</th>
<th>Achievement with Merit</th>
<th>Achievement with Excellence</th>
</tr>
</thead>
<tbody>
<tr>
<td>+ Demonstrate understanding of aspects of chemical reactions.</td>
<td>+ Demonstrate in-depth understanding of aspects of chemical reactions.</td>
<td>+ Demonstrate comprehensive understanding of aspects of chemical reactions.</td>
</tr>
</tbody>
</table>

Explanatory Notes

Version 1 of this achievement standard was republished to correct an error in the exchange reaction equations in explanatory note 6.


2. Demonstrate understanding typically involves describing, identifying, naming, drawing, giving an account of, and classifying chemical reactions. This typically requires the use of chemistry vocabulary, symbols, and conventions (including names and formulas), and completing word equations.
This achievement standard involves applying measurement in solving problems.

**Achievement Criteria**

- **Achievement:** Apply measurement in solving problems.
- **Achievement with Merit:** Apply measurement, using rational thinking, in solving problems.
- **Achievement with Excellence:** Apply measurement, using extended abstract thinking, in solving problems.

**Explanatory Notes**

   - Convert between metric units, using decimals
   - Derive and use formulae to find the perimeters and areas of polygons, and volumes of prisms
   - Find the perimeters and areas of circles and composite shapes, and the volumes of prisms, including cylinders
   - Apply the relationships between units in the metric system, including the units for measuring different attributes and derived measures
   - Calculate volumes, including prisms, pyramids, cones, and spheres, using formulae.
Contextualised Assessment Resources
 Achievement Standard

Subject Reference: Agricultural and Horticultural Science 1.10
Title: Demonstrate knowledge of horticultural plant management practices and related plant physiology
Level: 1
Credits: 5
Assessment: External

Subfield: Science
Domain: Agricultural and Horticultural Science
Status: Registered
Status date: 17 December 2010
Planned review date: 31 December 2014
Date version published: 17 December 2010

This achievement standard involves demonstrating knowledge of horticultural plant management practices and related plant physiology.

Achievement Criteria

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<tr>
<th>Achievement</th>
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<tbody>
<tr>
<td>Demonstrate knowledge of horticultural plant management practices and related plant physiology.</td>
<td>Demonstrate in-depth knowledge of horticultural plant management practices and related plant physiology.</td>
<td>Demonstrate comprehensive knowledge of horticultural plant management practices and related plant physiology.</td>
</tr>
</tbody>
</table>

Explanatory Notes


2. Demonstrate knowledge involves describing horticultural plant management practices and related plant physiology and/or growing conditions.

3. Demonstrate in-depth knowledge involves explaining why horticultural plant management practices or steps within practices are carried out.

4. Demonstrate comprehensive knowledge involves applying knowledge of horticultural plant management practices to given situations. This may involve comparing and contrasting or justifying management practices.

5. Horticultural plant management practices are actions carried out by the grower to enhance production. These may include cultivation, training, pruning, and others.
80 credits

- Primary industries: 12 credits
  - Ag/Hort 1.10: 5 credits
  - Chemistry 1.5: 4 credits
  - Maths 1.5: 3 credits

- Social & community services: 3 credits
  - 3 credits

- Manufacturing & technology: 7 credits
  - 3 credits
  - 4 credits

- Construction & infrastructure: 7 credits
  - 4 credits
  - 3 credits

- Service industries: 3 credits
  - 3 credits

"I'm going to uni."

"I want to be a chef."

"I dunno."
Currently proposed that:

NCEA L1 Literacy and Numeracy Requirement

plus

60 Level 2 credits from recommended standards (including a minimum of 20 credits from sector-related standards)

equals

Vocational Pathway
Learning networks encouraging secondary-tertiary-work partnerships and authentic learning.

Online “matching” facility for learners, teachers and careers advisors.

Improving “Connections and Pathways” sections in Teaching and Learning Guidelines.

Growing inventory of contextualised assessment resources.