



DE LA SALLE COLLEGE
STUDENT HANDBOOK 2022
Learning Area / Subject:
FOUNDATION SCIENCE

SCI103
Year Level: 11

Curriculum
Levels: 6-7

NCEA LEVEL
ONE

FACULTY OF SCIENCE
De La Salle College, 81 Gray Avenue, Mangere East, Manukau City



WEEK		1	2	3	4	5	6	7	8	9	10	11	
DATE		24-Jan	31-Jan	7-Feb	14-Feb	21-Feb	28-Feb	7-Mar	14-Mar	21-Mar	28-Mar	4-Apr	11-Apr
TERM 1		Research and Investigation upskills sessions		AS 90946 (1.7) Investigate the implications of the properties of metals in their use in society [4]								Easter	
	WEEK	1	2	3	4	5	6	7	8	9	10		
DATE		2-May	9-May	16-May	23-May	30-May	6-Jun	13-Jun	20-Jun	27-Jun	4-Jul		
TERM 2		AS 90954 (1.5) Demonstrate understanding of the effects of astronomical cycles on planet Earth			AS 90950 (1.1) Investigate biological ideas relating to interactions between humans and micro-organisms [4 credits]								
	WEEK	1	2	3	4	5	6	7	8	9	10		
DATE		25-Jul	1-Aug	8-Aug	15-Aug	22-Aug	29-Aug	5-Sep	12-Sep	19-Sep	26-Sep		
TERM 3		AS 90926 (1.2) Report on a biological issue [3 credits]			AS 90925 (1.1) Carry out a practical investigation in a biological context, with direction [4 credits]					Senior Exam Week			
	WEEK	1	2	3	4	5	6	7	8				
DATE		17-Oct	24-Oct	31-Oct	7-Nov	14-Nov	21-Nov	28-Nov	5-Dec		INTERNAL	EXTERNAL	
TERM 4					NCEA Exams begin				NCEA Exams end				
	WEEK	1	2	3	4	5	6	7	8				
DATE		17-Oct	24-Oct	31-Oct	7-Nov	14-Nov	21-Nov	28-Nov	5-Dec				



Science

SCI103 Assessment Statement 2022

Not Eligible for Course Endorsement

Year : 11

Course : Applied Science

Ms T Faireka

Total Credits : 19

This course is an Internal Science Course based on Level 6 of the New Zealand Curriculum. A total of 19 credits are offered to the students enrolled for this course. Students will develop a broad range of Scientific Skills and Knowledge. Topics include: Earth and Space Science, Metallurgy, and Life Processes, biological investigation and researching on biological issue. in context. Students will be expected to complete a practical investigation and write a scientific report. Students who have completed this course will be beginning to appreciate the role of Science in society, and will be able to continue into SCI201 in the following year.

No	Standard Number	Version	Level	Credits	Lit / Num	Full Title	Method of Assessment	Assessment Opportunities Offered	Approximate Date	Grade	Teacher Signature
1	90946	3	1	4		Science 1.7 - Investigate the implications of the properties of metals for their use in society	Assignment	1	Week 11 Term 1		
2	90954	3	1	4	L1 Lit	Science 1.15 - Demonstrate understanding of the effects of astronomical cycles on planet Earth	Assignment	1	Week 5 Term 2		
3	90950	3	1	4		Science 1.11 - Investigate biological ideas relating to interactions between humans and micro-organisms	Assignment	1	Week 1 Term 3		
4	90925	3	1	4	Num	Biology 1.1 - Carry out a practical investigation in a biological context, with direction	Practical	1	Week 4 Term 4		
5	90926	3	1	3	L1 Lit	Biology 1.2 - Report on a biological issue	Assignment	1	Week 6 Term 3		

School Assessment Procedures - You can view your rights and obligations in the school's assessment procedures in the **Student Assessment Handbook**

Record your internal grades and ask your teacher to sign it off as correct. You can then use this as evidence of your achievement.

2022 Course Outline – Y11 Foundation Science (SCI103)

Subject: Foundation Science

NCEA Level: One

Entry Requirements: General Science skills from Y10

Number of credits gained: 21

Method of assessment:

- Internal assessment only
- Internal assessments are given after a series of mock practice runs

Looking Ahead:

- Level 2 and 3 General Science (SCI201/301), Earth & Space Science (ESS201/301)
- Tertiary level study
- A diverse range of careers stem from the Sciences....
e.g. biosecurity officer, pharmacist, nursing, chemical and mechanical engineering, GP, electrician, ecologist, climatologist, (this is just a fraction of what is possible!).

Course Description

Course aims:

This course is aimed at all lower ability students entering from Year 10 and who may wish to pursue a career that may still require knowledge of science based fields such as general chemistry and/or physics / biology / earth science.

The course consists of units from the separate Level One Chemistry and Science subjects and provides a sound preparation for Level 2 General Science and Earth and Space courses.

2022 Course Assessment Statement – Y11 Foundation Science (SCI103)

HOW WILL I BE ASSESSED IN THIS SUBJECT?

Achievement Standard	Level and Credit Value	Internal or External Assessment	Brief Description	My grade for prelims	My final grade for internals
SCI AS1.7 (90946) Investigate the implications of the properties of metals for their use in society	Level 1 4 Credits	Internal	Students will use observations to explain the physical and chemical properties of metals. Students will discuss how these properties determine the uses of metals in society.	N/A	
SCI AS1.11 (90950) Investigate biological ideas relating to interactions between humans and micro-organisms	Level 1 4 Credits	Internal	Students will use observations or findings to explain biological ideas relating to interactions between humans and microorganisms.	N/A	
BIO AS1.1 (90925) Carry out a practical investigation in a biological context, with direction	Level 1 4 Credits Numeracy	Internal	Students will carry out a practical investigation, with direction in the context of enzymes. This relates to microorganisms standard.	N/A	
BIO AS 90926 (1.2) Report on a biological issue [3 credits]	Level 1 4 Credits Literacy	Internal	Students will investigate on a biological issue by researching on secondary information and justifying viewpoints and stating their viewpoints.	N/A	
SCI AS1.15 (90954) Demonstrate understanding of the effects of astronomical cycles on planet Earth	Level 1 4 Credits	Internal	Students will investigate the causes and effects of astronomical cycles including tides, day and night and seasons.	N/A	



Subject: 11 Foundation Science Teacher in charge: Ms. Tangitua Faireka Year Level: 11 Curriculum Levels: 5-6

Unit Title: AS90946 (AS1.7 Science Internal) – Investigate the implications of the properties of metals for their use in society

Achievement objectives:

- *To investigate* involves showing awareness of how science is involved in an issue that students encounter in their everyday lives. This requires at least one of the following:
- the collection of primary evidence from an investigation and relating it to the scientific theory relevant to the issue
- the collection of secondary data and the identification of the scientific theory relevant to the issue under investigation.

Learning outcomes/skills:

- To be able to describe the *implications of the properties of metals* relating to issues involving individuals, groups of people, society in general, the environment, or natural phenomena.

Assessment tasks/method:

- Undertaking a Science Investigation (planning, collecting, and processing data, interpreting, reporting, template, and instructions).
- Metals will be limited to: Lead, Copper, Zinc, Aluminium, Magnesium, and Calcium
- The physical and chemical properties investigated are: reactivity with oxygen and dilute hydrochloric acid, relative conductivity, lustre, and density.
- Students may choose how the format for the processing of data, such as a portfolio or logbook. Other options for the final presentation could include a wall chart, poster, PowerPoint presentation, blog, wiki, or other format that allows for sufficiently comprehensive answers. Students must also hand in any notes, worksheets, and draft materials created in earlier work. Final written report.

Key competencies: Thinking, managing self, using language, symbols, and texts, Participating, and contributing.

Values: Inquiry and curiosity, Excellence.

Approximate time required: 9 weeks

Unit Title: AS90925 (AS1.1 Biology Internal) – Carry out a practical investigation in a biological context, with direction

Achievement objectives:

- *To investigate* involves showing awareness of how science is involved in an issue that students encounter in their everyday lives. This requires at least one of the following:
- the collection of primary evidence from an investigation and relating it to the scientific theory relevant to the issue
- the collection of secondary data and the identification of the scientific theory relevant to the issue under investigation.

Learning outcomes/skills:

- To be able to carry out a comprehensive practical investigation in a biological context, with direction.

Assessment tasks/method:

- Undertaking a Science Investigation (planning, collecting, and processing data, interpreting, reporting, template, and instructions).
- Carry out an in-depth practical investigation in a biological context involves:
 - a statement of purpose written as a hypothesis
 - a method that includes: a valid range for the independent variable (or sample); a description of, and where possible control of, other significant variables that may affect the results; accurate measurement of the dependent variable (or collection of field data) with units and consideration of factors such as sampling bias, and/or sources of error
 - a method of collecting, recording, and processing data that enables a trend or pattern (or its absence) to be determined
 - a valid conclusion based on interpretation of the processed data that links to the purpose of the investigation.
- Students will work in small groups to complete an investigation in the context of enzymes.
- With direction means that general instructions for the investigation will be specified in writing and direction will be given in the form of a purpose, an outline of the method, and the equipment and/or organisms from which to choose. A template or suitable format for planning the investigation will be provided for the student to use.

Key competencies: Thinking, managing self, using language, symbols, and texts, Participating, and contributing.

Values: Inquiry and curiosity, Excellence.

Approximate time required: 5 weeks

Unit Title: AS90954 (AS1.15 v3 Science Internal) – Demonstrate understanding of the effects of astronomical cycles on planet Earth

Achievement objectives:

- explaining thoroughly links between astronomical cycles and the effects on planet Earth
- using information which could include visual representations and data present well-reasoned, complete reports supported by relevant data in ways, and forms, appropriate to nominated audiences.

Learning outcomes/skills:

- To be able to describe the *implications of astronomical events or earth science events in everyday life* relating to issues involving individuals, groups of people, society in general, the environment, or natural phenomena.

Assessment tasks/method:

- Undertaking a Science Investigation (planning, collecting, and processing data, interpreting, reporting, template, and instructions).
- Astronomical cycles may include: spin of the Earth, orbit of the Earth around the Sun, orbit of the Moon around the Earth, effect of the tilt of the Earth and the heating effect of the Sun.
- Effects on the earth: day and night; seasons; changes of temperature during day and night; changes of temperature with seasons at North and South Poles, the Tropics of Cancer and Capricorn, and the equator; formation and direction of winds in southern hemisphere; direction of surface ocean current flows in the Pacific Ocean; phases of the Moon; formation of tides; neap and spring tides.
- Students will produce a visual resource which may include but is not limited to a poster, PowerPoint, brochure, or blog. Images and diagrams are to be accompanied by written notes, to demonstrate understanding.

Key competencies: Thinking, managing self, using language, symbols, and texts, Participating, and contributing.

Values: Inquiry and curiosity, Excellence.

Approximate time required: 3 weeks

<p>Unit Title: AS90950 (AS1.11 Science Internal) – Investigate biological ideas relating to interactions between humans and micro-organisms</p> <p>Achievement objectives:</p> <ul style="list-style-type: none"> Investigate, comprehensively, biological ideas relating to interactions between humans and micro-organisms. <p>Learning outcomes/skills:</p> <ul style="list-style-type: none"> To be able to investigate biological ideas relating to how humans use and are affected by micro-organisms. <p>Assessment tasks/method:</p> <ul style="list-style-type: none"> Undertaking a Science Investigation (planning, collecting, and processing data, interpreting, reporting, template, and instructions). This investigation involves collecting information about interactions between humans and micro-organisms. The information could come from a variety of sources such as direct observations, collection of experimental data, resource sheets, photos, videos, websites, and reference texts. Investigate comprehensively involves using findings and biological ideas to make significant links about the interactions between humans and micro-organisms, including the impacts of this knowledge on human's personal actions or everyday life. It may involve explaining, elaborating, applying, justifying, relating, evaluating, comparing, and contrasting, and analysing. Micro-organisms will be selected from: bacteria, fungi, and viruses. The ways that humans use and are affected by micro-organisms may include: disposal of organic wastes, sewage treatment, composting, food production and preservation, food poisoning, microbial action on everyday materials (helpful and harmful micro-organisms), disease in humans and animals they are in contact with, antibiotics, resistance to antibiotics, and origins and control of pandemics. Biological ideas relating to how humans use and are affected by micro-organisms may include the following: <ul style="list-style-type: none"> structure and life processes of micro-organisms; culturing of micro-organisms; factors that affect the life processes of micro-organisms. <p>Key competencies: Thinking, managing self, using language, symbols, and texts, Participating, and contributing.</p> <p>Values: Inquiry and curiosity, Excellence.</p> <p>Approximate time required: 5 weeks</p>	<p>Unit Title: BIO AS 90926 (1.2) Report on a biological issue [3 credits]</p> <p>Achievement objectives:</p> <p>Apply their understandings of science to evaluate both popular and scientific texts (including visual and numerical literacy).</p> <p>Understand that scientists' investigations are informed by current scientific theories and aim to collect evidence that will be interpreted through processes of logical argument.</p> <p>Assessment tasks/method</p> <ul style="list-style-type: none"> -refining a given or agreed question or purpose -explaining the biological ideas that are related to the question or purpose -collecting and processing primary or secondary data and/or information from a range of sources -identifying at least two different points of view supported by evidence -taking and justifying a position on the issue presenting findings. <p>For higher grade:</p> <p>identifying multiple links between the biological ideas that are related to the question or purpose</p> <ul style="list-style-type: none"> <input type="checkbox"/> collecting and processing primary or secondary data and/or information from a range of sources <input type="checkbox"/> evaluating sources of information/data in respect to the question or purpose <input type="checkbox"/> identifying at least two different points of view supported by evidence <input type="checkbox"/> taking and justifying a position on the issue with a recommendation for action <input type="checkbox"/> presenting findings. <p>An <i>issue</i> is a subject on which people hold different opinions or viewpoints</p> <p>Key competencies: Thinking, managing self, using language, symbols, and texts, Participating, and contributing.</p> <p>Values: Inquiry and curiosity, Excellence.</p> <p>Approximate time required: 5 weeks</p>	

Achievement Standard

Subject Reference	Biology 1.2		
Title	Report on a biological issue		
Level	1	Credits	3
Assessment	Internal		
Subfield	Science		
Domain	Biology		
Status	Registered	Status date	30 November 2010
Planned review date	31 December 2020	Date version published	20 November 2014

This achievement standard involves collecting and processing data and/or information to report on a biological issue.

Achievement Criteria

Achievement	Achievement with Merit	Achievement with Excellence
<ul style="list-style-type: none"> Report on a biological issue. 	<ul style="list-style-type: none"> Report in depth on a biological issue. 	<ul style="list-style-type: none"> Report comprehensively on a biological issue.

Explanatory Notes

1 This achievement standard is derived from *The New Zealand Curriculum*, Learning Media, Ministry of Education, 2007, Level 6. It is aligned with the Participating and Contributing achievement objective in the Nature of Science strand, and is related to the material in the *Teaching and Learning Guide for Biology*, Ministry of Education, 2010 at <http://seniorsecondary.tki.org.nz>.

This standard is also derived from Te Marautanga o Aotearoa. For details of Te Marautanga o Aotearoa achievement objectives to which this standard relates, see the [Papa Whakaako](#).

- 2 *Report* involves:
- refining a given or agreed question or purpose
 - describing the biological ideas that are related to the question or purpose
 - collecting and processing primary or secondary data and/or information from a range of sources
 - taking a position on the issue
 - presenting findings.

- 3 *Report in depth* involves:
- refining a given or agreed question or purpose
 - explaining the biological ideas that are related to the question or purpose
 - collecting and processing primary or secondary data and/or information from a range of sources
 - identifying at least two different points of view supported by evidence
 - taking and justifying a position on the issue
 - presenting findings.
- 4 *Report comprehensively* involves:
- refining a given or agreed question or purpose
 - identifying multiple links between the biological ideas that are related to the question or purpose
 - collecting and processing primary or secondary data and/or information from a range of sources
 - evaluating sources of information/data in respect to the question or purpose
 - identifying at least two different points of view supported by evidence
 - taking and justifying a position on the issue with a recommendation for action
 - presenting findings.
- 5 An *issue* is a subject on which people hold different opinions or viewpoints. The biological ideas and processes related to the issue must be derived from the Living World strand, Level 6 of *The New Zealand Curriculum*.
- 6 **Data or information for processing must be collected from a range of sources. Sources may be provided to the student. Sources of data and information must be recorded in a way that can be accessed by others.**
- 7 *Processing* information could involve listing, sorting, collating, highlighting, or summarising relevant scientific information.
- 8 Conditions of Assessment related to this achievement standard can be found at <http://ncea.tki.org.nz/Resources-for-Internally-Assessed-Achievement-Standards>.

Quality Assurance

- 1 Providers and Industry Training Organisations must have been granted consent to assess by NZQA before they can register credits from assessment against achievement standards.
- 2 Organisations with consent to assess and Industry Training Organisations assessing against achievement standards must engage with the moderation system that applies to those achievement standards.

Achievement Standard

Subject Reference	Science 1.7		
Title	Investigate the implications of the properties of metals for their use in society		
Level	1	Credits	4
		Assessment	Internal
Subfield	Science		
Domain	Science - Core		
Status	Registered	Status date	30 November 2010
Planned review date	31 December 2020	Date version published	20 November 2014

This achievement standard involves carrying out practical activities to investigate the implications of the properties of metals for the way that they are used in society.

Mutual exclusion exists between this standard and AS90933.

Achievement Criteria

Achievement	Achievement with Merit	Achievement with Excellence
<ul style="list-style-type: none"> Investigate the implications of the properties of metals for their use in society. 	<ul style="list-style-type: none"> Investigate, in depth, the implications of the properties of metals for their use in society. 	<ul style="list-style-type: none"> Investigate, comprehensively, the implications of the properties of metals for their use in society.

Explanatory Notes

- 1 This achievement standard is derived from *The New Zealand Curriculum*, Learning Media, Ministry of Education, 2007, Level 6. It is aligned with the Nature of Science and the Material World strands, and is related to the material in the *Teaching and Learning Guide for Science*, Ministry of Education, 2010 at <http://seniorsecondary.tki.org.nz>.

This standard is also derived from Te Marautanga o Aotearoa. For details of Te Marautanga o Aotearoa achievement objectives to which this standard relates, see the [Papa Whakaako](#).

- 2 This investigation involves collecting information about the implications of the properties of metals for their use in society. The information could come from a variety of sources such as direct observations, collection of experimental data, resource sheets, photos, videos, websites and reference texts.

The procedures outlined in *Safety and Science: A Guidance Manual for New Zealand Schools*, Learning Media, Ministry of Education, 2000, must be followed during any practical component of the investigation.

- 3 *Investigate* involves gathering primary data, making and recording experimental observations of the physical and chemical properties of metals, and also typically includes describing, gathering, processing, interpreting, identifying, classifying and giving an account of the properties of metals and the implications for their use in society. This requires the use of chemistry vocabulary, symbols and conventions (including names and formulae), and writing word equations.
- 4 *Investigate in depth* involves making links between the physical and chemical properties of metals and the implications for their use in society. This requires explanations that use chemistry vocabulary, symbols and conventions (including names and formulae), and completing symbol equations.
- 5 *Investigate comprehensively* typically involves explaining, elaborating, justifying, relating, evaluating, comparing and contrasting, or analysing the links between the chemical and physical properties of metals and the implications of their use in society. This includes the activity series of metals and requires explanations that consistently use chemistry vocabulary, symbols and conventions (including names and formulae), including writing balanced symbol equations.
- 6 *Implications* include the consequences of particular properties for the ways that metals are extracted from their ores, treated to prevent corrosion, or used for specific purposes.
- 7 *Properties* include:
- Physical properties may include - melting point, colour, lustre, hardness, ductility and malleability, electrical and thermal conductivity, density.
 - Chemical properties may include - reaction with oxygen, water and acids (HCl, H₂SO₄).
- 8 Conditions of Assessment related to this achievement standard can be found at <http://ncea.tki.org.nz/Resources-for-Internally-Assessed-Achievement-Standards>.

Quality Assurance

- 1 Providers and Industry Training Organisations must have been granted consent to assess by NZQA before they can register credits from assessment against achievement standards.
- 2 Organisations with consent to assess and Industry Training Organisations assessing against achievement standards must engage with the moderation system that applies to those achievement standards.

Achievement Standard

Subject Reference	Science 1.11		
Title	Investigate biological ideas relating to interactions between humans and micro-organisms		
Level	1	Credits	4
		Assessment	Internal
Subfield	Science		
Domain	Science - Core		
Status	Registered	Status date	30 November 2010
Planned review date	31 December 2020	Date version published	20 November 2014

This achievement standard involves investigating biological ideas relating to how humans use and are affected by micro-organisms.

Mutual exclusion exists between this standard and AS90927.

Achievement Criteria

Achievement	Achievement with Merit	Achievement with Excellence
<ul style="list-style-type: none"> Investigate biological ideas relating to interactions between humans and micro-organisms. 	<ul style="list-style-type: none"> Investigate, in depth, biological ideas relating to interactions between humans and micro-organisms. 	<ul style="list-style-type: none"> Investigate, comprehensively, biological ideas relating to interactions between humans and micro-organisms.

Explanatory Notes

- This achievement standard is derived from *The New Zealand Curriculum*, Learning Media, Ministry of Education, 2007, Level 6. It is aligned with the Life Processes achievement objective in the Living World strand and the Investigating in Science, Communicating in Science, and the Participating and Contributing achievement objectives in the Nature of Science strand, and is related to the material in the *Teaching and Learning Guide for Science*, Ministry of Education, 2010 at <http://seniorsecondary.tki.org.nz>.

This standard is also derived from Te Marautanga o Aotearoa. For details of Te Marautanga o Aotearoa achievement objectives to which this standard relates, see the [Papa Whakaako](#).

- This investigation involves collecting information about interactions between humans and micro-organisms. The information could come from a variety of sources such as direct observations, collection of experimental data, resource sheets, photos, videos, websites, and reference texts.

The procedures outlined in *Safety and Science: A Guidance Manual for New Zealand Schools*, Learning Media, Ministry of Education, 2000, must be followed during any practical component investigation.
- Investigate* involves using observations or findings to describe how humans use or are affected by micro-organisms.
- Investigate in depth* involves using findings and biological ideas to explain how or why humans use or are affected by micro-organisms.
- Investigate comprehensively* involves using findings and biological ideas to make significant links about the interactions between humans and micro-organisms, including the impacts of this knowledge on human's personal actions or everyday life. It may involve explaining, elaborating, applying, justifying, relating, evaluating, comparing and contrasting, and analysing.
- Micro-organisms* will be selected from: bacteria, fungi and viruses.
- The ways that humans use and are affected by micro-organisms may include: disposal of organic wastes, sewage treatment, composting, food production and preservation, food poisoning, microbial action on everyday materials (helpful and harmful micro-organisms), disease in humans and animals they are in contact with, antibiotics, resistance to antibiotics, and origins and control of pandemics.
- Biological ideas* relating to how humans use and are affected by micro-organisms may include the following:
 - structure and life processes of micro-organisms
 - culturing of micro-organisms
 - factors that affect the life processes of micro-organisms.
- Conditions of Assessment related to this achievement standard can be found at <http://ncea.tki.org.nz/Resources-for-Internally-Assessed-Achievement-Standards>.

Replacement Information

This achievement standard and achievement standard 90927 replaced unit standard 6298.

Achievement Standard

Subject Reference	Science 1.15				
Title	Demonstrate understanding of the effects of astronomical cycles on planet Earth				
Level	1	Credits	4	Assessment	Internal
Subfield	Science				
Domain	Science - Core				
Status	Registered	Status date	30 November 2010		
Planned review date	31 December 2020	Date version published	20 November 2014		

This achievement standard involves demonstrating understanding of the effects of astronomical cycles on planet Earth.

Achievement Criteria

Achievement	Achievement with Merit	Achievement with Excellence
<ul style="list-style-type: none"> Demonstrate understanding of the effects of astronomical cycles on planet Earth. 	<ul style="list-style-type: none"> Demonstrate in-depth understanding of the effects of astronomical cycles on planet Earth. 	<ul style="list-style-type: none"> Demonstrate comprehensive understanding of the effects of astronomical cycles on planet Earth.

Explanatory Notes

- This achievement standard is derived from *The New Zealand Curriculum*, Learning Media, Ministry of Education, 2007, Level 6. It is aligned with the Astronomical Systems achievement objective in the Planet Earth and Beyond strand, and the Nature of Science strand, and is related to the material in the *Teaching and Learning Guide for Science*, Ministry of Education, 2010 at <http://seniorsecondary.tki.org.nz>.

This standard is also derived from Te Marautanga o Aotearoa. For details of Te Marautanga o Aotearoa achievement objectives to which this standard relates, see the [Papa Whakaako](#).

- Demonstrate understanding* involves describing astronomical cycles and the effects on planet Earth using information, visual representations, and data.
- Demonstrate in-depth understanding* involves explaining astronomical cycles and the effects on planet Earth using information, visual representations, and data.

- Demonstrate comprehensive understanding* involves explaining thoroughly links between astronomical cycles and the effects on planet Earth using information, visual representations, and data. It may involve elaborating, applying, justifying, relating, evaluating, comparing and contrasting, or analysing.
- Astronomical cycles* are:
 - Spin of the Earth
 - Orbit of Earth around Sun
 - Orbit of Moon around Earth
 - Effect of the Earth's tilt and the heating effect of the Sun.
- Effects on planet Earth* may be selected from:
 - Day and night
 - Seasons
 - Changes of temperature during the day and night
 - Seasonal changes at the North and South poles, latitude of New Zealand, Tropics of Cancer and Capricorn, and the Equator
 - Formation and direction of winds in the Southern hemisphere - direction of surface ocean current flows in the Pacific Ocean
 - Phases of the Moon
 - Formation of tides
 - Neap and Spring tides.
- Conditions of Assessment related to this achievement standard can be found at <http://ncea.tki.org.nz/Resources-for-Internally-Assessed-Achievement-Standards>.

Replacement Information

This achievement standard replaced AS90192.

Quality Assurance

- Providers and Industry Training Organisations must have been granted consent to assess by NZQA before they can register credits from assessment against achievement standards.
- Organisations with consent to assess and Industry Training Organisations assessing against achievement standards must engage with the moderation system that applies to those achievement standards.

Consent and Moderation Requirements (CMR) reference

0233

2022 Foundation Science (SCI103) – Student Guide to Bibliographies / Referencing

A bibliography is the ‘trail’ of reading that you did to inform your thinking for your essay or assignment. A bibliography is organised alphabetically by the author’s last name.

Setting up a bibliography

- (a) Books
- Author’s last name and initial
 - Date published – in brackets
 - Name of book underlined
 - Place of publication
 - Publisher
- Single Author

Eg. Ward, M. (1995) Celebrating Women Cambridge, University Press

More than one author

Eg Edwards, B., Horrocks, N. (1992) Reporting for Television Palmerston North, Dunmore Press

- (b) Journals, Magazines, Newspapers
- Author’s name and initial
 - Date published – in brackets
 - Title of the article in quotation marks
 - Name of paper or magazine –underlined
 - Place of publication
 - Volume (if applicable)
 - Page number

Eg Booth, P. (1986) “The Arthur Thomas Case Revisited” NZ Herald Feb 11, 2: 13

- (c) Internet
- Author’s name and initial if available
 - Article name if appropriate
 - Full date of resource if available
 - Date of access
 - Site address

Eg Midbon, M (2000), Jan 13 2004 A Day Without Yesterday: George Lemaitre and the Big Bang
<http://catholiceducation.org/articles/science/sc0022.html>

To create automatically correct references, the following website is useful. It will create references for ISBN numbers and webpages.

www.harvardgenerator.com

**De La Salle College 2022
Assessment Result Appeal Form**

Name: _____

Class: _____

Name/number of standard being appealed: _____

Subject: _____

Teacher who marked work: _____

Grade awarded for standard: _____

Date work returned to student: _____ Date of appeal: _____

Reason for appeal:

Student signature: _____

Caregiver's signature: _____

OFFICE USE ONLY

Teacher response:

HOF response:

Principal's Nominee response:

Final decision:

De La Salle College 2022
Absence from Internal Assessment
Application for Extension

Student: _____ Class: _____

Subject: _____ Teacher: _____

Assessment title: _____

Standard number: _____

Type of assessment activity (*test, practical, assignment etc*).

Date of assessment or due date: _____

Reason for application:

- Illness or injury: *medical certificate or a letter from parent / caregiver* must be attached.
- Family / personal trauma: documentation must be attached (*e.g. a letter from parent / caregiver, counsellor, or Dean*).
- School activity (*sporting or cultural*) _____

Signature of the teacher-in-charge of the activity: _____

Decision by Principal's Nominee:

- Extension granted, new due date: _____
- New assessment granted, new date: _____
- Compassionate consideration will be used to determine a grade. HOD / TIC to attach documentation of evidence used to determine the grade and the grade awarded.
- Application denied. Comment: _____
- _____

The reason for this has been explained to me and I accept the decision.

Signed: _____ (Student) _____ (Teacher)