

Level 2 Biology



2017

Welcome to Level 2 Biology 2017

Student Course Information:

There are FIVE Achievement standards in the course. The credits contribute towards the NCEA and assessment methods are as follows:

Standard number	Credits	Version	Title	Status	Internal/ External	Timing/ Due date	FAO?
91155	3	2	Demonstrate understanding of adaptation of plants or animals to their way of life	Registered	Internal	Term 1 Week 11	No
91153	4	2	Carry out a practical biological investigation in a biology context, with supervision	Registered	Internal	Term 3 Week 5/6	No
91156	4	2	Demonstrate understanding of life processes at the cellular level	Registered	External	Nov	NA
91157	4	2	Demonstrate understanding of genetic variation and change	Registered	External	Nov	NA
91159	4	2	Demonstrate understanding of gene expression	Registered	External	Nov	NA

The **three external Achievement Standards** will be assessed by **one 3 hour examination** at the end of the year.

You can gain the following grades in the Achievement Standards:

Standard not Attempted	SNA	Did not sit the standard
Not achieved	NA	Did not meet the standard
Achieved	A	The standard was achieved
Achieved with Merit	M	The standard was achieved demonstrating very good work
Achieved with Excellence	E	The standard was achieved demonstrating excellent work

External Achievement Standards – A derived grade process will be followed as outlined in the Waikato Diocesan School for Girls 2012 Policy on Assessment in accordance with NZQA guidelines.

FURTHER ASSESSMENT OPPORTUNITIES

It is NOT feasible and/or practicable to offer a further assessment opportunity.

Internal Assessment Policy and Procedures

The Science Department will follow the procedures in the Waikato Diocesan School for Girls Assessment Policy booklet. Please ensure that you have read carefully the guidelines on **Authenticity, Appeals, Course completion, Deadlines and Absences**.

Internal Achievement Standards – A student who is absent from an internal assessment may be provided with another assessment opportunity **where feasible**. A Medical Certificate **must** be provided for any illness/accident.

For all of the following Internal Assessments, Waikato Diocesan School for Girls Science Department has decided that:

Internal Achievement Standard 2.1 (91153)

Conditions: 2.1 will be assessed by an in-class investigation individually under examination conditions

Planning: All drafting and final submissions in class

Carrying out: In class

Interpretation and Reporting: All drafting and final submissions in class

- ❖ Students will have one opportunity for a summatively assessed investigation. A further assessment opportunity will be available if there is significant evidence of further learning.
- ❖ Formative practice will take place in Week 4, Term 3.
- ❖ The Summative assessment will take place in Week 6, Term 3.
- ❖ Students will be told their grade for this Achievement Standard as soon as the quality assurance process has been completed for the final part of the Investigation.

Achievement Standard 2.3 (91155)

Conditions: 2.3 will be assessed by a portfolio contrasted during a field trip and in class time and a report written in your own words in class time only.

- ❖ Students will have one opportunity for a summatively assessed report in the year.
- ❖ Please note - **It is neither practical nor feasible to offer a further assessment opportunity for this Achievement Standard**
- ❖ The assessment will involve:
 - a) data collection on a whole day field trip in Term 1
 - b) the collection of information from a range of sources and the processing, presenting and interpretation of the information in a report in Term 1
- ❖ Electronic reports must be emailed to your teacher, and handwritten reports handed in at the beginning of the lesson in which they are due.
- ❖ All assessed work will be kept on file.

ALL Internal Assessments are assessed by the following Assurance Process:

- Assessed by class/assigned teacher.
- Three samples across range 'Not Achieved, Achieved, Achieved with Merit, Achieved with Excellence of assessed work per class submitted for assurance to teacher in charge of Level 2 Biology.
- Samples are compared to exemplars.
- Samples indicate assessment decisions made by the teacher across the whole class.
- Students' results confirmed once assurance process has occurred.

Plagiarism and consequence: All assessed work will be kept on file and can be easily checked if there is any suggestion of plagiarism.

Anything over 10% will be a concern and will be thoroughly checked for referencing. Should the references be lacking, or no quotation marks supporting the quote, then the consequence will be a Not Achieved grade without any possibility of rewriting or resubmitting

Verifying Grades

Students are required to verify the final grades awarded by checking and signing the recorded results.

Retention of Student Work

ALL student internal assessment material will be retained by the Department.

STUDENT OBLIGATIONS

1. Ensure you understand the assessment programme and policy.
2. Ensure you understand the requirements of each assessment being completed.
3. Ensure you keep a record of each assessment grade on your student tracking sheet.
4. Discuss problems/concerns with your Teacher/Head of Department.

HOME STUDY

It is expected that you will need to supplement your knowledge by doing home study from textbooks, write-on workbooks and suggested websites. This will entail: your own note-taking, learning words and definitions, completing exercises, answering NCEA-type questions. You should review each lesson daily. If formal homework has not been set it is expected that you will review your topic or week's work to ensure that the concepts are understood. If in doubt, seek help quickly. Do NOT leave it as this can cause a considerable problem to catch up and may be too late. Many concepts are built on accumulated understanding. It can be difficult to catch up if concepts are left unattended for too long.

Achievement Standard - Biology 2.1 (91153)

Title: Carry out a practical investigation in a biology context, with supervision

Level 2	Credits 4	Assessment Internal
Subfield Science	Domain Biology	Status Registered
Status date 17 November 2011	Planned review date 31 December 2018	Date version published 20 November 2014

This achievement standard involves carrying out a practical investigation in a biology context, with supervision.

Achievement Criteria

Achievement	Achievement with Merit	Achievement with Excellence
Carry out a practical investigation in a biology context, with supervision.	Carry out an in-depth practical investigation in a biology context, with supervision.	Carry out a comprehensive practical investigation in a biology context, with supervision.

Explanatory Notes

This achievement standard is derived from *The New Zealand Curriculum*, Learning Media, Ministry of Education, 2007, Level 7. It is aligned with the following achievement objectives in the Nature of Science stand:

- Investigating in Science - Develop and carry out investigations that extend their science knowledge, including developing their understanding of the relationship between investigations and scientific theories and models
- Understanding about Science - Understand that scientists have an obligation to connect their new ideas to current and historical scientific knowledge and to present their findings for peer review and debate; and is related to the material in the *Teaching and Learning Guide for Biology*, Ministry of Education, 2010 at <http://seniorsecondary.tki.org.nz>.

Investigations must be based on contexts arising from content at Level 7 of *The New Zealand Curriculum*, Learning Media, Ministry of Education, 2007, Living World strand.

Procedures outlined in *Safety and Science: a Guidance Manual for New Zealand Schools*, Learning Media, Ministry of Education, 2000, must be followed. Investigations must comply with the Animal Welfare Act 1999, as outlined in *Caring for Animals: a Guide for Teachers, Early Childhood Educators, and Students*, Learning Media, Ministry of Education, 1999.

Carry out a practical investigation involves:

- developing a statement of the purpose written as a hypothesis linked to a scientific concept or idea
- using a method that describes:
 - for a fair test: a range for the independent variable, the measurement of the dependent variable and the control of some other key variables
 - for a pattern seeking or modelling activity: the data that will be collected, range of data/samples, and consideration of some other key factors
- collecting, recording, and processing data relevant to the purpose of the investigation
- interpreting and reporting on the findings
- reaching a conclusion based on the student's processed data which is relevant to the purpose of the investigation
- identifying and including relevant findings from another source.

Carry out an in-depth practical investigation involves:

- using a method that describes:
 - for a fair test: a valid range for the independent variable, the valid measurement of the dependent variable and the control of other key variables with consideration of factors such as sampling bias and sources of errors
 - for a pattern seeking or modelling activity: a valid collection of data with consideration of factors such as sampling bias and sources of errors
- collecting, recording, and processing data which enables a trend or pattern (or the absence of a trend or pattern) to be determined
- reaching a valid conclusion based on the student's processed data which is relevant to the purpose of the investigation
- a discussion of the biological ideas relating to the investigation that is based on the student's findings and those from other source(s).

Carry out a comprehensive practical investigation involves justification of the choices made during the sound investigation, ie evaluating the validity of the method or reliability of the data and explaining the conclusion in terms of the biology ideas relevant to the investigation.

A *practical investigation* is an activity covering the complete investigation process: planning and carrying out the investigation, collecting primary data, processing and interpreting data, and reporting on the investigation. Students may make changes to their initial method as they work through the investigation.

Assessment against this standard may be based on a stand-alone or an individual investigation that can contribute findings to a larger group or class investigation. In a group or class investigation, individual findings may be discussed and individual students may interpret their own findings in the light of other students' investigations and findings. Findings from outside the group or class such as published information or historical findings relevant to the investigation may also be used.

The nature of the investigation could be the manipulation of variables (fair test), the investigation of a pattern or relationship or the use of models.

It is intended that this investigation be carried out with supervision. This means that the teacher provides guidelines for the investigation such as the context for the investigation, instructions that specify the requirements for a comprehensive investigation, and broad experimental conditions such as the availability of equipment or chemicals. Students then develop and complete the investigation from the initial guidelines given by the teacher. Supervision may involve discussion between teachers and individual students in order to clarify the students' ideas and may also involve teachers managing the process of sharing findings.

Conditions of Assessment related to this achievement standard can be found at www.tki.org.nz/e/community/ncea/conditions-assessment.php.

Achievement Standard - Biology 2.3 (91155)

Title: Demonstrate understanding of adaptation of plants or animals to their way of life

Level 2	Credits 3	Assessment Internal
Subfield Science	Domain Biology	Status Registered
Status date 17 November 2011	Planned review date 31 December 2018	Date version published 20 November 2014

This achievement standard involves demonstrating understanding of adaptation of plants or animals to their way of life.

Achievement Criteria

Achievement	Achievement with Merit	Achievement with Excellence
Demonstrate understanding of adaptation of plants or animals to their way of life.	Demonstrate in-depth understanding of adaptation of plants or animals to their way of life.	Demonstrate comprehensive understanding of adaptation of plants or animals to their way of life.

Explanatory Notes

This achievement standard is derived from *The New Zealand Curriculum*, Learning Media, Ministry of Education, 2007, Level 7. It is aligned with the following achievement objective in the Living World strand: Life Processes - Explore the diverse ways in which animals and plants carry out the life processes and is related to the material in the *Teaching and Learning Guide for Biology*, Ministry of Education, 2010 at <http://seniorsecondary.tki.org.nz>.

Demonstrate understanding involves describing the adaptations and identifying the aspects of the adaptations that enable each organism to carry out its life process(es) in order to survive in its habitat.

Demonstrate in-depth understanding involves providing a biological reason that explains how or why the adaptations enable each organism to carry out its life process(es) in order to survive in its habitat.

Demonstrate comprehensive understanding involves showing understanding by linking several biological ideas. The linking of ideas may involve justifying, evaluating, comparing and contrasting, or analysing, and must include consideration of the two points from below appropriate to the chosen context.

In the context of *understanding of adaptation* related to one life process over three taxonomic or functional groups of multi-cellular plants or animals:

- comparing diversity of adaptation in response to the same demand across different taxonomic or functional groups
- limitations and advantages involved in each feature within each organism

In the context of *understanding of adaptation* across two related life processes within one taxonomic or functional group:

- connections between two life processes within each organism which enhance the effectiveness of both processes
- limitations and advantages involved in each feature within each organism.

Understanding of adaptation is demonstrated in relation to one life process over three taxonomic or functional groups of multi-cellular plants or animals, or across two related life processes within one taxonomic or functional group.

Adaptation involves the range of ways in which organisms have developed strategies to carry out the life processes. An adaptation refers to a feature and its function as it enables an organism to carry out a life process and thus occupy a specific ecological niche. It may include structural, behavioural, or physiological features of an organism. An adaptation provides an advantage for the organism in its specific habitat and ecological niche.

Way of life encompasses the ways in which an organism carries out all its life processes. It includes:

- relationships with other organisms – competition, predation, parasitism, mutualism
- reproductive strategies
- adaptations to the physical habitat.

Life processes are selected from:

- internal transport
- gas exchange
- transpiration
- nutrition
- excretion
- support and movement
- sensitivity and coordination
- reproduction

Conditions of Assessment related to this achievement standard can be found at

www.tki.org.nz/e/community/ncea/conditions-assessment.php.

Achievement Standard - Biology 2.4 (91156)

Title: Demonstrate understanding of life processes at the cellular level

Level 2	Credits 4	Assessment External
Subfield Science	Domain Biology	Status Registered
Status date 30 November 2010	Planned review date 31 December 2018	Date version published 20 November 2014

This achievement standard involves demonstrating understanding of life processes at the cellular level.

Achievement Criteria

Achievement	Achievement with Merit	Achievement with Excellence
Demonstrate understanding of life processes at the cellular level.	Demonstrate in-depth understanding of life processes at the cellular level.	Demonstrate comprehensive understanding of life processes at the cellular level.

Explanatory Notes

This achievement standard is derived from *The New Zealand Curriculum*, Learning Media, Ministry of Education, 2007, Level 7. It is aligned with the following achievement objective in the Living World strand:

Life Processes: Explore the diverse ways in which animals and plants carry out the life processes and is related to the material in the *Teaching and Learning Guide for Biology*, Ministry of Education, 2010 at <http://seniorsecondary.tki.org.nz>.

Demonstrate understanding involves defining, using annotated diagrams or models to describe, and describing characteristics of, or providing an account of, life processes at the cellular level.

Demonstrate in-depth understanding involves using biological ideas to give reasons how or why life processes occur at the cellular level.

Demonstrate comprehensive understanding involves linking biological ideas about life processes at the cellular level. The discussion of ideas may involve justifying, relating, evaluating, comparing and contrasting, analysing.

Life processes at the cellular level include:

- Photosynthesis
- Respiration
- cell division (DNA replication and mitosis as part of the cell cycle).

Biological ideas, as they relate to each of the life processes at the cellular level, are selected from:

- movement of materials (including diffusion, osmosis, active transport)
- enzyme activity (specific names of enzymes are not required)
- factors affecting the process
- details of the processes only as they relate to the overall functioning of the cell (specific names of stages are not required)
- reasons for similarities and differences between cells such as cell size and shape, and type and number of organelles present.

Cells include plant cells and animal cells.

Assessment Specifications for this achievement standard can be accessed through the Biology Resources page found at <http://www.nzqa.govt.nz/qualifications-standards/qualifications/ncea/subjects/>.

Achievement Standard - Biology 2.5 (91157)

Title: Demonstrate understanding of genetic variation and change

Level 2	Credits 4	Assessment External
Subfield Science	Domain Biology	Status Registered
Status date 17 November 2011	Planned review date 31 December 2018	Date version published 20 November 2014

This achievement standard involves demonstrating understanding of genetic variation and change.

Achievement Criteria

Achievement	Achievement with Merit	Achievement with Excellence
Demonstrate understanding of genetic variation and change.	Demonstrate in-depth understanding of genetic variation and change.	Demonstrate comprehensive understanding of genetic variation and change.

Explanatory Notes

This achievement standard is derived from *The New Zealand Curriculum*, Learning Media, Ministry of Education, 2007, Level 7. It is aligned with the following achievement objective in the Living World strand: Ecology and Evolution - Explain how the interaction between ecological factors and natural selection leads to genetic changes within populations and is related to the material in the *Teaching and Learning Guide for Biology*, Ministry of Education, 2010 at <http://seniorsecondary.tki.org.nz>.

Demonstrate understanding involves defining, using annotated diagrams or models to describe, and describing characteristics of, or providing an account of, genetic variation and change.

Demonstrate in-depth understanding involves providing reasons as to how or why genetic variation and change occurs.

Demonstrate comprehensive understanding involves linking biological ideas about genetic variation and change. The discussion of ideas may involve justifying, relating, evaluating, comparing and contrasting, or analysing.

Genetic variation and change involves the following concepts:

- sources of variation within a gene pool
- factors that cause changes to the allele frequency in a gene pool.

Biological ideas and processes relating to sources of variation within a gene pool are selected from:

- mutation as a source of new alleles
- independent assortment, segregation and crossing over during meiosis
- monohybrid inheritance to show the effect of co-dominance, incomplete dominance, lethal alleles, and multiple alleles
- dihybrid inheritance with complete dominance
- the effect of crossing over and linked genes on dihybrid inheritance.

Biological ideas and processes relating to factors affecting allele frequencies in a gene pool are selected from:

- natural selection
- migration
- genetic drift.

Assessment Specifications for this achievement standard can be accessed through the Biology Resources page found at <http://www.nzqa.govt.nz/qualifications-standards/qualifications/ncea/subjects/>.

Achievement Standard - Biology 2.7 (91159)

Title: Demonstrate understanding of gene expression

Level 2	Credits 4	Assessment External
Subfield Science	Domain Biology	Status Registered
Status date 17 November 2011	Planned review date 31 December 2018	Date version published 20 November 2014

This achievement standard involves demonstrating understanding of gene expression.

Achievement Criteria

Achievement	Achievement with Merit	Achievement with Excellence
Demonstrate understanding of gene expression.	Demonstrate in-depth understanding of gene expression.	Demonstrate comprehensive understanding of gene expression.

Explanatory Notes

This achievement standard is derived from *The New Zealand Curriculum*, Learning Media, Ministry of Education, 2007, Level 7. It is aligned with the following achievement objective in the Living World strand: Evolution - Understand that DNA and the environment interact in gene expression and is related to the material in the *Teaching and Learning Guide for Biology*, Ministry of Education, 2010 at <http://seniorsecondary.tki.org.nz>.

Demonstrate understanding involves defining, using annotated diagrams or models to explain, and giving characteristics of, or an account of, gene expression.

Demonstrate in-depth understanding involves providing a reason as to how or why biological ideas and processes affect gene expression.

Demonstrate comprehensive understanding involves linking biological ideas and processes about gene expression. The explanation may involve justifying, relating, evaluating, comparing and contrasting, or analysing.

Gene expression involves a selection from the following biological ideas and processes:

- nucleic acid structure and nature of the genetic code
- significance of proteins
- protein synthesis
- the determination of phenotype via metabolic pathways
- effect of environment on genotype through mutations
- effect of environment on expression of phenotype

Biological ideas and processes relating to nucleic acid structure and nature of the genetic code are selected from:

- molecular components and their role in carrying the genetic code: nucleotide monomers, deoxyribose and/or ribose sugar, phosphate, nitrogenous bases, complementary base pairing resulting in coding and template strand
- nature of the genetic code including triplets, codons and anticodons
- redundancy due to degeneracy within the code

Biological ideas and processes relating to the significance of proteins are selected from:

- proteins as the products of gene expression: DNA → mRNA → polypeptide or protein
- identification of one gene → one polypeptide relationship
- significance of proteins is limited to their structural and catalytic role in living things

Biological ideas and processes relating to protein synthesis are selected from:

- the role of DNA sequence in determining the structure of a protein and how that protein is produced (transcription and translation)
- the role of enzymes in controlling the process (specific names of enzymes are not required).

Biological ideas and processes relating to the determination of phenotype via metabolic pathways are selected from:

- biochemical reactions are catalysed by specific enzymes and every enzyme is coded for by a specific gene(s)
- biochemical reactions do not occur in isolation but form part of a chain reaction so that the product of one becomes the substrate of another step in metabolism
- phenotype is determined by the presence, absence, or amount of specific metabolic products.

Biological ideas and processes relating to the effect of the environment on genotype through mutations are selected from:

- mutagens (specific mutagens are recognised but their effect at molecular level is not required)
- the potential effect on genotype and phenotype of gene mutations at the gene level

Biological ideas and processes relating to the effect of environment on expression of phenotype involve ways that environmental factors may change phenotype without changing genotype.

Assessment Specifications for this achievement standard can be accessed through the Biology Resources page found at <http://www.nzqa.govt.nz/qualifications-standards/qualifications/ncea/subjects/>.

Teaching and Assessment Programme 2017

TERM ONE (11 weeks)			
Week	Teaching Programme	Achievement Standard	Assessment
1	Admin		
2	2.7 Demonstrate understanding of gene expression <ul style="list-style-type: none"> ● Introduction ● Significance of proteins ● Review of DNA structure 	Biology 2.7 (91159) EXTERNAL	
3	Protein synthesis <ul style="list-style-type: none"> ● Transcription ● Translation ● Redundancy 		
4	Mutations <ul style="list-style-type: none"> ● Mutagens ● Gametic vs somatic ● Gene vs frameshift ● Importance of mutations 		
5	Metabolic pathways <ul style="list-style-type: none"> ● Importance of enzymes ● Reading MP diagrams 		
6	Phenotype <ul style="list-style-type: none"> ● Genotype and phenotype ● Environment effect on phenotype 		Biology 2.7 (91159) TEST
7	2.3 Internal Assessment Content Teaching Adaptations of animals related to their way of life <ul style="list-style-type: none"> ● Introduction ● Digestion in animals - carnivores/herbivores/omnivores 	Biology 2.3 (91155) INTERNAL	
8	<ul style="list-style-type: none"> ● Digestion in animals - carnivores/herbivores/omnivores 		
9	<ul style="list-style-type: none"> ● Digestion in animals - carnivores/herbivores/omnivores 		
10	Monday April 3rd - Field Trip – Hamilton Zoo 2.3 Internal Assessment Commences <ul style="list-style-type: none"> ● Portfolio construction (1 week permitted) ● Instructions handed out in class ● Research should be conducted in and out of class time 		
11	<ul style="list-style-type: none"> ● 2.3 Report Write-up (in class) 		Biology 2.3 (91155) due Week 11 via Electronic Submission on Turnitin

TERM TWO (10 weeks)			
Week	Teaching Programme	Achievement Standard	Assessment
1	CAMP		
2	2.4 Demonstrate understanding of life processes at the cellular level <ul style="list-style-type: none"> ● Introduction ● Cell Structure and Function (plants and animals) ● Reasons for similarities and differences between size, shape, number of organelles present 	Biology 2.4 (91156) EXTERNAL	
3	Cellular transport <ul style="list-style-type: none"> ● Passive Transport ● Diffusion /Osmosis <ul style="list-style-type: none"> ○ Osmosis practical (2.1 practice) ● Active Transport ATP 		
4	Enzyme action <ul style="list-style-type: none"> ● Enzyme structure and function ● Factors affecting enzyme action <ul style="list-style-type: none"> ○ Enzymes practical (2.1 practice) 		
5	Respiration <ul style="list-style-type: none"> ● Aerobic vs. anaerobic process ● Mitochondria structure and function ● Factors affecting rate of respiration 		
6	Photosynthesis <ul style="list-style-type: none"> ● Process of photosynthesis ● Chloroplast structure and function ● Factors affecting rate of photosynthesis 		
7	Cell cycle <ul style="list-style-type: none"> ● Mitosis phase ● Interphase (including DNA replication) + Revision + Formative assessment (test) 		Biology 2.4 (91156) TEST
8	2.5 Demonstrate Understanding of Genetic Variation and Change <ul style="list-style-type: none"> ● Introduction / monohybrid cross review Monohybrid crosses <ul style="list-style-type: none"> ● Incomplete and co-dominance ● Lethal and multiple alleles 	Biology 2.5 (91157) EXTERNAL	
9	Meiosis <ul style="list-style-type: none"> ● Process of meiosis ● Independent assortment ● Crossing over ● Segregation ● How these increase genetic variation 		
10	Dihybrid crosses <ul style="list-style-type: none"> ● Dihybrid Inheritance / punnett squares ● Test Crosses ● Linked Genes 		

TERM THREE (10 weeks)			
Week	Teaching Programme	Achievement Standard	Assessment
1	Genetic variation <ul style="list-style-type: none"> Gene pools – allele frequency Factors affecting allele frequency Natural selection Mutations 		
2	<ul style="list-style-type: none"> Gene flow - migration Genetic drift – founder and bottleneck effect 		Biology 2.5 (91157) TEST
3	2.1 Internal Assessment Fair Testing (teaching) <ul style="list-style-type: none"> Working through workbook 	Biology 2.1 (91153) INTERNAL	
4	2.1 Internal Assessment formative (practice) assessment <ul style="list-style-type: none"> Planning/Carrying out/Processing/Reporting 		
5	Formative review / clarify anything (2-3 lessons) Begin 2.1 Summative assessment (4 hours/periods total)		Biology 2.1 (91153) due Week 6 <i>Via Electronic Submission on Turnitin</i>
6	<ul style="list-style-type: none"> Planning and trialing (1 period) Carrying out (1 period) Processing and reporting (2 periods) 		
7	+ Revision for preliminary examinations		
8	<ul style="list-style-type: none"> Prelims 	Biology 2.4 (91156), Biology 2.5 (91157) and Biology 2.7 (91159) Prelims	
9	<ul style="list-style-type: none"> Prelims 		
10	Preliminary Exam Review		

TERM FOUR (8 weeks)			
Week	Teaching Programme	Achievement Standard	Assessment
1	+ Revision		
2	+ Revision		
3	+ Revision <i>NCEA Examinations begin 9th November</i>		
4	NCEA Examinations		
5	NCEA Examinations		
6	NCEA Examinations		
7			
8			