Criterion A: Knowing and understanding

Maximum:

At the end of year 3, students should be able to:

- i. select appropriate mathematics when solving problems in both familiar and unfamiliar situations
- ii. apply the selected mathematics successfully when solving problems
- iii. solve problems correctly in a variety of contexts.

Achievement level	Level descriptor
0	The student does not reach a standard described by any of the descriptors below.
1-2	The student is able to: i. select appropriate mathematics when solving simple problems in familiar situations ii. apply the selected mathematics successfully when solving these problems iii. generally solve these problems correctly.
3-4	The student is able to: i. select appropriate mathematics when solving more complex problems in familiar situations ii. apply the selected mathematics successfully when solving these problems iii. generally solve these problems correctly.
5-6	The student is able to: i. select appropriate mathematics when solving challenging problems in familiar situations ii. apply the selected mathematics successfully when solving these problems iii. generally solve these problems correctly.
7-8	The student is able to: i. select appropriate mathematics when solving challenging problems in both familiar and unfamiliar situations ii. apply the selected mathematics successfully when solving these problems iii. generally solve these problems correctly.

Criterion A: Knowing and understanding

Maximum: 8

Feedback: ___

At the end of year 3, students should be able to:

- i. select appropriate mathematics when solving problems in both familiar and unfamiliar situations
- ii. apply the selected mathematics successfully when solving problems
- iii. solve problems correctly in a variety of contexts.

Achievement level	Level descriptor
0	The student does not reach a standard described by any of the descriptors below.
1-2	The student is able to: i. select appropriate mathematics when solving simple problems in familiar situations ii. apply the selected mathematics successfully when solving these problems iii. generally solve these problems correctly.
3-4	The student is able to: i. select appropriate mathematics when solving more complex problems in familiar situations ii. apply the selected mathematics successfully when solving these problems iii. generally solve these problems correctly.
56	The student is able to: i. select appropriate mathematics when solving challenging problems in familiar situations ii. apply the selected mathematics successfully when solving these problems iii. generally solve these problems correctly.
7-8	The student is able to: i. select appropriate mathematics when solving challenging problems in both familiar and unfamiliar situations ii. apply the selected mathematics successfully when solving these problems iii. generally solve these problems correctly.

Feedback:	·	 	 	

Criterion A: Knowing and understanding

Maximum:

At the end of year 3, students should be able to:

- i. select appropriate mathematics when solving problems in both familiar and unfamiliar situations
- ii. apply the selected mathematics successfully when solving problems
- iii. solve problems correctly in a variety of contexts.

Achievement level	Level descriptor
0	The student does not reach a standard described by any of the descriptors below.
1-2	The student is able to: i. select appropriate mathematics when solving simple problems in familiar situations ii. apply the selected mathematics successfully when solving these problems iii. generally solve these problems correctly.
3-4	The student is able to: i. select appropriate mathematics when solving more complex problems in familiar situations ii. apply the selected mathematics successfully when solving these problems iii. generally solve these problems correctly.
5-6	The student is able to: i. select appropriate mathematics when solving challenging problems in familiar situations ii. apply the selected mathematics successfully when solving these problems iii. generally solve these problems correctly.
7-8	The student is able to: i. select appropriate mathematics when solving challenging problems in both familiar and unfamiliar situations ii. apply the selected mathematics successfully when solving these problems iii. generally solve these problems correctly.

Criterion A: Knowing and understanding

Aavimum: 8

Feedback: ____

- i. select appropriate mathematics when solving problems in both familiar and unfamiliar situations
- ii. apply the selected mathematics successfully when solving problems
- iii. solve problems correctly in a variety of contexts.

Achievement level	Level descriptor
0	The student does not reach a standard described by any of the descriptors below.
1-2	The student is able to: i. select appropriate mathematics when solving simple problems in familiar situations ii. apply the selected mathematics successfully when solving these problems iii. generally solve these problems correctly.
3-4	The student is able to: i. select appropriate mathematics when solving more complex problems in familiar situations ii. apply the selected mathematics successfully when solving these problems iii. generally solve these problems correctly.
5-6	The student is able to: i. select appropriate mathematics when solving challenging problems in familiar situations ii. apply the selected mathematics successfully when solving these problems iii. generally solve these problems correctly.
7-8	The student is able to: i. select appropriate mathematics when solving challenging problems in both familiar and unfamiliar situations ii. apply the selected mathematics successfully when solving these problems iii. generally solve these problems correctly.

Feedback:			

Criterion B: Investigating patterns

Maximum: 8

At the end of year 3, students should be able to:

- select and apply mathematical problem-solving techniques to discover complex patterns
- ii. describe patterns as relationships and/or general rules consistent with findings
- iii. verify and justify relationships and/or general rules.

Achievement level	Level descriptor
0	The student does not reach a standard described by any of the descriptors below.
1-2	apply, with teacher support, mathematical problem-solving techniques to discover simple patterns state predictions consistent with patterns.
3-4	The student is able to: i. apply mathematical problem-solving techniques to discover simple patterns ii. suggest relationships and/or general rules consistent with findings.
5-6	The student is able to: i. select and apply mathematical problem-solving techniques to discover complex patterns ii. describe patterns as relationships and/or general rules consistent with findings iii. verify these relationships and/or general rules.
7-8	The student is able to: i. select and apply mathematical problem-solving techniques to discover complex patterns ii. describe patterns as relationships and/or general rules consistent with correct findings iii. verify and justify these relationships and/or general rules.

Feedback:	 	 	

Criterion B: Investigating patterns

Maximum: 8

At the end of year 3, students should be able to:

- i. select and apply mathematical problem-solving techniques to discover complex patterns
- ii. describe patterns as relationships and/or general rules consistent with findings
- iii. verify and justify relationships and/or general rules.

Achievement level	Level descriptor
0	The student does not reach a standard described by any of the descriptors below.
1-2	The student is able to: i. apply, with teacher support, mathematical problem-solving techniques to discover simple patterns ii. state predictions consistent with patterns.
3-4	The student is able to: i. apply mathematical problem-solving techniques to discover simple patterns ii. suggest relationships and/or general rules consistent with findings.
5-6	The student is able to: i. select and apply mathematical problem-solving techniques to discover complex patterns ii. describe patterns as relationships and/or general rules consistent with findings iii. verify these relationships and/or general rules.
7-8	The student is able to: i. select and apply mathematical problem-solving techniques to discover complex patterns ii. describe patterns as relationships and/or general rules consistent with correct findings iii. verify and justify these relationships and/or general rules.

Feedback:	 	

Criterion B: Investigating patterns

Maximum:

At the end of year 3, students should be able to:

- i. select and apply mathematical problem-solving techniques to discover complex patterns
- ii. describe patterns as relationships and/or general rules consistent with findings
- iii. verify and justify relationships and/or general rules.

Achievement level	Level descriptor
0	The student does not reach a standard described by any of the descriptors below.
1-2	The student is able to: i. apply, with teacher support, mathematical problem-solving techniques to discover simple patterns ii. state predictions consistent with patterns.
3-4	The student is able to: i. apply mathematical problem-solving techniques to discover simple patterns ii. suggest relationships and/or general rules consistent with findings.
5-6	The student is able to: i. select and apply mathematical problem-solving techniques to discover complex patterns ii. describe patterns as relationships and/or general rules consistent with findings iii. verify these relationships and/or general rules.
7-8	The student is able to: i. select and apply mathematical problem-solving techniques to discover complex patterns ii. describe patterns as relationships and/or general rules consistent with correct findings iii. verify and justify these relationships and/or general rules.

Feedback:			

Criterion B: Investigating patterns

Maximum: 8

- i. select and apply mathematical problem-solving techniques to discover complex patterns
- ii. describe patterns as relationships and/or general rules consistent with findings
- iii. verify and justify relationships and/or general rules.

Achievement level	Level descriptor				
0	The student does not reach a standard described by any of the descriptors below.				
1-2	The student is able to: i. apply, with teacher support, mathematical problem-solving techniques to discover simple patterns ii. state predictions consistent with patterns.				
3-4	The student is able to: i. apply mathematical problem-solving techniques to discover simple patterns ii. suggest relationships and/or general rules consistent with findings.				
5-6	The student is able to: i. select and apply mathematical problem-solving techniques to discover complex patterns ii. describe patterns as relationships and/or general rules consistent with findings iii. verify these relationships and/or general rules.				
7-8	The student is able to: i. select and apply mathematical problem-solving techniques to discover complex patterns ii. describe patterns as relationships and/or general rules consistent with correct findings iii. verify and justify these relationships and/or general rules.				

Feedback:	 	 	

Criterion C: Communicating

Maximum:

At the end of year 3, students should be able to:

- use appropriate mathematical language (notation, symbols and terminology) in both oral and written explanations
- ii. use different forms of mathematical representation to present information
- iii. move between different forms of mathematical representation
- iv. communicate complete and coherent mathematical lines of reasoning
- v. organize information using a logical structure.

Achievement level	Level descriptor			
0	The student does not reach a standard described by any of the descriptors below.			
1-2	The student is able to: i. use limited mathematical language ii. use limited forms of mathematical representation to present information iii. communicate through lines of reasoning that are difficult to interpret.			
3-4	The student is able to: i. use some appropriate mathematical language ii. use different forms of mathematical representation to present information adequately iii. communicate through lines of reasoning that are able to be understood, although these are not always clear iv. adequately organize information using a logical structure.			
5-6	The student is able to: i. usually use appropriate mathematical language ii. usually use different forms of mathematical representation to present information correctly iii. move between different forms of mathematical representation with some success iv. communicate through lines of reasoning that are clear although not always coherent or complete v. present work that is usually organized using a logical structure.			
7-8	The student is able to: i. consistently use appropriate mathematical language ii. use different forms of mathematical representation to consistently present information correctly iii. move effectively between different forms of mathematical representation iv. communicate through lines of reasoning that are complete and coherent v. present work that is consistently organized using a logical structure.			

Criterion C: Communicating

Feedback:

At the end of year 3, students should be able to:

- use appropriate mathematical language (notation, symbols and terminology) in both oral and written explanations
- ii. use different forms of mathematical representation to present information
- iii. move between different forms of mathematical representation
- iv. communicate complete and coherent mathematical lines of reasoning
- v. organize information using a logical structure.

Achievement level	Level descriptor
0	The student does not reach a standard described by any of the descriptors below.
1-2	The student is able to: i. use limited mathematical language ii. use limited forms of mathematical representation to present information iii. communicate through lines of reasoning that are difficult to interpret.
3-4	The student is able to: i. use some appropriate mathematical language ii. use different forms of mathematical representation to present information adequately iii. communicate through lines of reasoning that are able to be understood, although these are not always clear iv. adequately organize information using a logical structure.
5-6	The student is able to: i. usually use appropriate mathematical language ii. usually use different forms of mathematical representation to present information correctly iii. move between different forms of mathematical representation with some success iv. communicate through lines of reasoning that are clear although not always coherent or complete v. present work that is usually organized using a logical structure.
7-8	The student is able to: i. consistently use appropriate mathematical language ii. use different forms of mathematical representation to consistently present information correctly iii. move effectively between different forms of mathematical representation to communicate through lines of reasoning that are complete and coherent v. present work that is consistently organized using a logical structure.

Feedback:	 	 	

Criterion C: Communicating

Maximum:

At the end of year 3, students should be able to:

- use appropriate mathematical language (notation, symbols and terminology) in both oral and written
 explanations
- ii. use different forms of mathematical representation to present information
- iii. move between different forms of mathematical representation
- iv. communicate complete and coherent mathematical lines of reasoning
- v. organize information using a logical structure.

Achievement level	Level descriptor
0	The student does not reach a standard described by any of the descriptors below.
1-2	The student is able to: i. use limited mathematical language ii. use limited forms of mathematical representation to present information iii. communicate through lines of reasoning that are difficult to interpret.
3-4	The student is able to: i. use some appropriate mathematical language ii. use different forms of mathematical representation to present information adequately iii. communicate through lines of reasoning that are able to be understood, although these are not always clear iv. adequately organize information using a logical structure.
S6	The student is able to: i. usually use appropriate mathematical language ii. usually use different forms of mathematical representation to present information correctly iii. move between different forms of mathematical representation with some success iv. communicate through lines of reasoning that are clear although not always coherent or complete v. present work that is usually organized using a logical structure.
7-8	The student is able to: i. consistently use appropriate mathematical language ii. use different forms of mathematical representation to consistently present information correctly iii. move effectively between different forms of mathematical representation iv. communicate through lines of reasoning that are complete and coherent v. present work that is consistently organized using a logical structure.

Criterion C: Communicating

Maximum: 8

Feedback: _____

- use appropriate mathematical language (notation, symbols and terminology) in both oral and written explanations
- ii. **use** different forms of mathematical representation to present information
- iii. move between different forms of mathematical representation
- iv. communicate complete and coherent mathematical lines of reasoning
- v. organize information using a logical structure.

Achievement level	Level descriptor				
0	The student does not reach a standard described by any of the descriptors below.				
1-2	The student is able to: i. use limited mathematical language ii. use limited forms of mathematical representation to present information iii. communicate through lines of reasoning that are difficult to interpret.				
3-4	The student is able to: i. use some appropriate mathematical language ii. use different forms of mathematical representation to present information adequately iii. communicate through lines of reasoning that are able to be understood, although these are not always clear iv. adequately organize information using a logical structure.				
5-6	The student is able to: i. usually use appropriate mathematical language ii. usually use different forms of mathematical representation to present information correctly iii. move between different forms of mathematical representation with some success iv. communicate through lines of reasoning that are clear although not always coherent or complete v. present work that is usually organized using a logical structure.				
7-8	The student is able to: i. consistently use appropriate mathematical language ii. use different forms of mathematical representation to consistently present information correctly iii. move effectively between different forms of mathematical representation iv. communicate through lines of reasoning that are complete and coherent v. present work that is consistently organized using a logical structure.				

Feedback:	 	

Criterion D: Applying mathematics in real-life contexts

At the end of year 3, students should be able to:

- identify relevant elements of authentic real-life situations
- select appropriate mathematical strategies when solving authentic real-life situations
- apply the selected mathematical strategies successfully to reach a solution
- iv. explain the degree of accuracy of a solution
- explain whether a solution makes sense in the context of the authentic real-life situation.

Achievement level	Level descriptor			
0	The student does not reach a standard described by any of the descriptors below.			
1-2	The student is able to: i. identify some of the elements of the authentic real-life situation ii. apply mathematical strategies to find a solution to the authentic real-life situation, with limited success.			
3~4	The student is able to: i. identify the relevant elements of the authentic real-life situation ii. select, with some success, adequate mathematical strategies to model the authentic real-life situation iii. apply mathematical strategies to reach a solution to the authentic real- life situation iv. describe whether the solution makes sense in the context of the authentic real-life situation.			
5-6	The student is able to: i. identify the relevant elements of the authentic real-life situation ii. select adequate mathematical strategies to model the authentic real-life situation iii. apply the selected mathematical strategies to reach a valid solution to the authentic real-life situation iv. describe the degree of accuracy of the solution v. discuss whether the solution makes sense in the context of the authentic real-life situation.			
Achievement level	Level descriptor			
	The student is able to:			

reedback:	 	 	

explain the degree of accuracy of the solution

identify the relevant elements of the authentic real-life situation select appropriate mathematical strategies to model the authentic real-life situation apply the selected mathematical strategies to reach a correct solution

explain whether the solution makes sense in the context of the authentic real-life situation.

Criterion D: Applying mathematics in real-life contexts

At the end of year 3, students should be able to:

- identify relevant elements of authentic real-life situations
- select appropriate mathematical strategies when solving authentic real-life situations
- apply the selected mathematical strategies successfully to reach a solution
- explain the degree of accuracy of a solution
- explain whether a solution makes sense in the context of the authentic real-life situation.

Achievement level	Level descriptor				
0	The student does not reach a standard described by any of the descriptors below.				
1-2	The student is able to: i. identify some of the elements of the authentic real-life situation ii. apply mathematical strategies to find a solution to the authentic real-life situation, with limited success.				
3-4	The student is able to: i. identify the relevant elements of the authentic real-life situation ii. select, with some success, adequate mathematical strategies to model the authentic real-life situation iii. apply mathematical strategies to reach a solution to the authentic real- life situation iv. describe whether the solution makes sense in the context of the authentic real-life situation.				
S6	The student is able to: i. identify the relevant elements of the authentic real-life situation ii. select adequate mathematical strategies to model the authentic real-life situation iii. apply the selected mathematical strategies to reach a valid solution to the authentic real-life situation iv. describe the degree of accuracy of the solution v. discuss whether the solution makes sense in the context of the authentic real-life situation.				
Achievement level	Level descriptor				
	The student is able to:				

	 explain whether the solution makes sense in the context of the authentic real-life situation.
Feedback:	

explain the degree of accuracy of the solution

identify the relevant elements of the authentic real-life situation select appropriate mathematical strategies to model the authentic real-life situation apply the selected mathematical strategies to reach a correct solution

Criterion D: Applying mathematics in real-life contexts

At the end of year 3, students should be able to:

- identify relevant elements of authentic real-life situations
- select appropriate mathematical strategies when solving authentic real-life situations apply the selected mathematical strategies successfully to reach a solution
- iv. explain the degree of accuracy of a solution

Achievement level	Level descriptor			
o	The student does not reach a standard described by any of the descriptors below.			
1-2	The student is able to: i. identify some of the elements of the authentic real-life situation ii. apply mathematical strategies to find a solution to the authentic real-life situation, with limited success.			
3~4	The student is able to: i. identify the relevant elements of the authentic real-life situation ii. select, with some success, adequate mathematical strategies to model the authentic real-life situation iii. apply mathematical strategies to reach a solution to the authentic real- life situation iv. describe whether the solution makes sense in the context of the authentic real-life situation.			
5-6	The student is able to: i. identify the relevant elements of the authentic real-life situation ii. select adequate mathematical strategies to model the authentic real-life situation iii. apply the selected mathematical strategies to reach a valid solution to the authentic real-life situation iv. describe the degree of accuracy of the solution v. discuss whether the solution makes sense in the context of the authentic real-life situation.			

Feedback:	 	 	

Criterion D: Applying mathematics in real-life contexts

- i. identify relevant elements of authentic real-life situations
- ii. select appropriate mathematical strategies when solving authentic real-life situations
- iii. apply the selected mathematical strategies successfully to reach a solution
- iv. explain the degree of accuracy of a solution

Achievement level	Level descriptor				
0	The student does not reach a standard described by any of the descriptors				
•	below.				
	The student is able to:				
1-2	i. identify some of the elements of the authentic real-life situation				
	ii. apply mathematical strategies to find a solution to the authentic real-life				
	situation, with limited success.				
	The student is able to:				
	i. identify the relevant elements of the authentic real-life situation				
	ii. select, with some success, adequate mathematical strategies to model				
3-4	the authentic real-life situation				
	 apply mathematical strategies to reach a solution to the authentic real- life situation 				
	iv. describe whether the solution makes sense in the context of the authentic real-life situation				
	authentic real-life situation.				
	The student is able to:				
56	i. identify the relevant elements of the authentic real-life situation				
	ii. select adequate mathematical strategies to model the authentic real-life situation				
	iii. apply the selected mathematical strategies to reach a valid solution to the authentic real-life situation				
	iv. describe the degree of accuracy of the solution				
	 discuss whether the solution makes sense in the context of the authentic real-life situation. 				

Feedback:			