

Teacher(s)		Subject group and discipline			
Unit title	Introduction to Algebra	MYP year	MYP 1	Unit duration (hrs)	

Inquiry: Establishing the purpose of the unit

Key concept	Related concept(s)	Global context
Form	Representation, models	Natural world From scientific and technical innovation
Statement of inquiry		
Use of different representations allow the formation of models of the natural world		
Inquiry questions		
<p>Factual— What is a sequence? What are different types of sequences? How can you use letters to represent numbers? What does it mean to simplify?</p> <p>Conceptual— How do we model pattern and make predictions? What does it mean to be equivalent? How does simplification produce equivalent forms?</p> <p>Debatable— Does every puzzle have a solution?</p>		

Objectives	Summative assessment	
<p>A i: select appropriate mathematics when solving simple problems in familiar situations</p> <p>A ii apply the selected mathematics successfully when solving these problems</p> <p>A iii solve problems correctly in a variety of contexts.</p> <p>Ci use appropriate mathematical language (notation, symbols and terminology) in both oral and written statements</p> <p>Cii use different forms of mathematical representation to present information</p> <p>Ciii Communicate coherent mathematical lines of reasoning</p> <p>Civ organise information in a logical structure</p>	<p>Outline of summative assessment task(s) including assessment criteria:</p> <p>Unit test (Criterion A)</p> <p>In this task, students will answer a wide range of questions, from simple to complex to challenging (in both familiar and unfamiliar situations), all related to forming and manipulating algebraic expressions. The test will be done individually in class during one period</p> <p>Investigative task</p> <p>G: Use of different representations allow the formation of models of the natural world</p> <p>R: Students are entomology researchers investigating the morphology of insects.</p> <p>A: other entomologists</p> <p>S: Centipedes and millipedes are often mistaken for one another. Both have segmented bodies and share a similar classification in biology. They can be differentiated by the differences in the relationships between their body segments and the number of legs they have.</p> <p>P: A report on the relationship between body segments and legs or centipedes, millipedes and (imaginary) numeruspedes.</p> <p>S: Criterion C</p>	<p>Relationship between summative assessment task(s) and statement of inquiry:</p> <p>By using different representations (pictures, words, tables and algebraic expressions), students create a model of insects which allows for better understanding of their form and structure.</p>

Approaches to learning (ATL)

Communication skills:

Make inferences and draw conclusions –

Use and interpret a range of discipline-specific terms and symbols (in particular *term, expression, equation, simplify, expand, factorise*),

Understand and use mathematical notation

Collaboration skills:

Students will listen actively to other perspectives and ideas.

Affective Skills

Students will need to practice 'bouncing back' after they make mistakes

Information literacy skills:

Students will collect and analyse to identify solutions and make informed decisions.

Students will present information in a variety of formats (for example different ways of writing $2x$)

Critical thinking skills:

Students will rest generalisations and conclusions,