

Statement of inquiry		
Using number systems allows us to understand relationships that describe our climate, so we are able to acknowledge human impact on global climate change.		
Inquiry questions		
Factual	Conceptual	Debatable
What are negative numbers?	How do you add and subtract integers?	Why do we have directed numbers?
What is the order of operations?		Why is it important to have order of operations?
Aims		
<ul style="list-style-type: none"> To appreciate the international dimension of mathematics through an awareness of the universality of mathematics and its multicultural and historical perspectives. 		
Summative assessment tasks		
Objectives	Outline of summative assessment tasks	Relate to the statement of inquiry
<p>A: Knowing and understanding</p> <p>i) select appropriate mathematics when solving problems in both familiar and unfamiliar situations</p> <p>ii) apply the selected mathematics successfully when solving problems</p> <p>iii) solve problems correctly in a variety of contexts.</p> <p>B: Investigating patterns</p> <p>i) select and apply mathematical problem-solving techniques to discover complex patterns</p> <p>ii) describe patterns as general rules consistent with findings</p> <p>iii) prove, or verify and justify, general rules.</p>	<p><u>Unit test</u></p> <p>Teachers can use the Check your knowledge questions at the end of the chapter as a model to prepare a unit test. Students will solve problems in both familiar and unfamiliar situations in a variety of contexts. Problems will range in difficulty from simple to complex. Problems will relate to natural numbers, integers and the four operations.</p> <p><u>Investigation 1.1 (page 18)</u></p> <p>In this task, students will research global temperatures, sea levels and carbon dioxide emissions. They will then organise their research logically to communicate what the data shows and justify whether the data makes sense in</p>	<p>The unit test will give students the opportunity to demonstrate their learning from the unit.</p> <p>The climate change investigation will help students to understand climate change and to communicate and justify their understandings using data and appropriate mathematical representations. Students will specifically look at</p>