

<b>Teacher(s)</b>		<b>Subject group and discipline</b>	Year 7 Maths		
<b>Unit title</b>	Strand 2 Multiplication and Division	<b>MYP year</b>	1	<b>Unit duration (hrs)</b>	

**Inquiry: Establishing the purpose of the unit**

<b>Key concept</b>	<b>Related concept(s)</b>	<b>Global context</b>
Relationships	<b>Quantity, representation</b>	Orientations in space and time Displacement, Exchange
<b>Statement of inquiry</b>		
Relationships between quantities and representations allow for displacement and exchange		
<b>Inquiry questions</b>		
<p><b>Factual –</b> How do you multiply? How do you divide?</p> <p><b>Conceptual—</b> How are the ways that we represent quantities related? In what way are multiplication and division related? How can we represent a real distance of (say) 1km on a single sheet of paper?</p> <p><b>Debatable—</b> Why do different countries have different money systems? Should teachers pay to go on school trips? How accurate are assumptions made using estimation?</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>D i identify relevant elements of authentic real-life situations</p> <p>D ii select appropriate mathematical strategies when solving authentic real-life situations</p> <p>D iii apply selected mathematical strategies successfully to reach a solution</p> <p>D iv justify the degree of accuracy of a solution</p> <p>D v justify whether the solution makes sense in the context of the real-life situation</p>	<p>Outline of summative assessment task(s) including assessment criteria:</p> <p>Unit test:</p> <p>Investigative task:</p> <p>G: Relationships between quantities and representations allow for displacement and exchange</p> <p>R: Teachers in a school</p> <p>A: Students and parents of the school</p> <p>S: They are planning a trip and have a choice of 3 different trips. They analyse the different costs of the trip and then supervise the students in raising money to help fund the trip. Finally they start planning an overseas trip for next year with the added complication of currency exchange rates.</p> <p>P: Analysis of costs concerned with trips and fund raising activities</p> <p>S: Criterion D</p>	<p>Relationship between summative assessment task(s) and statement of inquiry:</p> <p>Students complete an assessment of the basic Maths skills studied in Unit 1 and 2.</p> <p>Students gain an appreciation of the relationships between costs of a trip and the travel distance and admission. They also investigate how units of currency in different countries allow for different representations of the same quantity and how the exchange rate can affect the ability to move around.</p>

## Approaches to learning (ATL)

### Communication skills:

Make inferences and draw conclusions – during the summative assessment, students will need to consider the evidence and decide what was happening (draw conclusions) and think why it was done in that way (make inferences)

Use and interpret a range of discipline-specific terms and symbols - in particular *multiplication, division factor, multiple, HCF, LCM, quotient, remainder, BIDMAS* ,

Understand and use mathematical notation

### Collaboration skills:

Students will listen actively to other perspectives and ideas.

### Organisation skills

Students will need to bring equipment to class (in particular calculators)

Students will need to use technology (in particular calculators) effectively and productively.

### 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,

### Critical thinking skills:

Students will rest generalisations and conclusions, in particular during the summative assessment task.