

<b>Teacher(s)</b>	Year 8 team	<b>Subject group and discipline</b>			
<b>Unit title</b>	Multiplicative change	<b>MYP year</b>	2	<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	Modelling.change	Markets, commodities and commercialisation
<b>Statement of inquiry</b>		
Modelling proportional relationships as multiplicative change can help us understand markets, commodities and commercialisation		
<b>Inquiry questions</b>		
<b>Factual –</b> What methods are there for working out a percentage? How can we use ratio to represent unequal sharing?		
<b>Conceptual—</b> What is a percentage and how can we present it? What is ratio and how can we represent it? What does it mean for ratios to be equivalent? How can we represent multiplicative change?		
<b>Debatable—</b> Which methods are best in which situations for working with proportional reasoning/multiplicative change?		
<b>Objectives</b>	<b>Summative assessment</b>	

<p>Assessment 1:</p> <p>B i: apply mathematical problem solving techniques to recognise patterns B ii: describe pattern as relationships or general rules consistent with findings B iii: verify whether the pattern works for other examples</p>	<p>Assessment 1:</p> <p>Outline of summative assessment task(s) including assessment criteria:</p> <p>G: the goal is to explore patterns in similar shapes and advise based on those patterns. R: You are exploring patterns in similar shapes and then using those patterns to advise how to continue a sequence. A: the audience is that of the mathematical community. S: the situation is that a sequence of similar shapes is investigated and then recommendations are made as to how to continue it. P: the product is an explanation of the pattern in several different ways and a recommendation as to how to continue it. S: this assessment will be assessed under Criteria B</p>	<p>Assessment !:</p> <p>Relationship between summative assessment task(s) and statement of inquiry:</p> <p>this assessment models proportional change in the context of patterns in space.</p>
<p>Assessment 2: (if used in the unit)</p>	<p>Assessment 2: (if used in the unit)</p> <p>Outline of summative assessment task(s) including assessment criteria:</p>	<p>Assessment 2:</p> <p>Relationship between summative assessment task(s) and statement of inquiry:</p>
<p><b>Approaches to learning (ATL)</b></p>		
<p>In order for students to understand how modelling proportional relationships as multiplicative change can help us understand markets, commodities and commercialisation they will need to negotiate ideas and knowledge with peers and teachers. Explicitly taught and practised skill strategy: this is explicitly taught in block 1 lesson 3 where students use the talk strategies of think/pair/share and agree/build challenge to extend their talk repertoire in comparing methods for solving problems involving multiplicative change.</p>		

