

Teacher(s)	TCO, TSA, DCH, JGO, DSP, MCH	Subject group and discipline	Maths		
Unit title	4 Triangles and Measurement	MYP year	3	Unit duration (hrs)	

Inquiry: Establishing the purpose of the unit

Key concept	Related concept(s)	Global context
form	Measurement, space, systems	Orientation in space and time:working from direct to indirect measurement
Statement of inquiry		
Indirect measurement is made possible through the systems associated with forms in space.		
Inquiry questions		
Factual – How do you enlarge a shape? How can we find missing angles and sides in right-angled triangles? How can we estimate the height of a tree?		
Conceptual— What does a negative scale factor for an enlargement mean? How do similar shapes allow indirect measurement? How does Pythagoras' Theorem allow indirect measurement? How does trigonometry allow indirect measurement?		
Debatable— To what extent is maths driven by real-life need? Why was trigonometry invented?		
Objectives	Summative assessment	
Assessment 1: Criteria D 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	Assessment 1: Outline of summative assessment task(s) including assessment criteria: Students are asked to solve problems involving the use of right angled triangles to measure indirectly angles and distances in real life situations.	Assessment !: Relationship between summative assessment task(s) and statement of inquiry: By applying knowledge gained in this unit, students make inferences about real-life measurements without measuring directly.

<p>iv. explain the degree of accuracy of a solution v. explain whether a solution makes sense in the context of the authentic real-life situation.</p>	<p>G Calculate various impossible-to-measure-directly distances and angles R Surveyor A Builders, readers of report S Asked to find lengths and angles for construction purposes, but wanting to do so without direct measurement P Find the lengths and angles required from the given information S Criteria D</p>	
<p>Assessment 2: (if used in the unit)</p> <p>Criteria A</p> <p>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.</p>	<p>Assessment 2: (if used in the unit)</p> <p>Outline of summative assessment task(s) including assessment criteria:</p> <p>Factual assessment on Pythagoras' Theorem and its applications. Different questions will have different scenarios E.g.</p> <p>G State the diagonal length of a TV screen R Purchaser of a new television A Family members S In shop, looking at specs on box P Make conclusion about which TV is bigger S Criteria A</p>	<p>Assessment 2:</p> <p>Relationship between summative assessment task(s) and statement of inquiry:</p> <p>Students recognise and apply their ability to calculate missing side lengths without measurement.</p>
<p>Approaches to learning (ATL)</p>		