Teacher(s)		Subject group and discipline	Maths		
Unit title	Data	MYP year	1 (Year 7)	Unit duration (hrs)	20

Inquiry: Establishing the purpose of the unit

Key concept	Related concept(s)	Global context
Logic	models, change	**Globalisation and sustainability**
		Data driven decision making

Statement of inquiry
Logic and data can be used to make decisions about models and change

Inquiry questions

Factual

How do we collect data?

What are the different sorts of data?

How can we represent data?

How are the mean, median and mode of a data set calculated?

Conceptual

How does the way that we represent information impact on our ability to interpret it?

What makes one representation more effective than another?

What are the strengths and weaknesses of numerical/categorical data

Debatable

How can we be sure about the reliability of data we collect?

What sort of evidence should we accept to support claims?

How do we evaluate and weigh the evidence for claims?

Objectives	Summative assessment	
Criteria: D i identify relevant elements of authentic real-life situations D ii select appropriate mathematical strategies when solving authentic real-life situations D iii apply selected mathematical strategies successfully to reach a solution D iv justify the degree of accuracy of a solution D v justify whether the solution makes sense in the context of the real-life situation	Outline of summative assessment task(s) including assessment criteria: G: Logic and data can be used to make decisions about models and change R: Students play the role of Statisticians A: General public S: Statisticians need to look at the data collected at the Oxford weather station since 1853 (https://www.metoffice.gov.uk/research/climate/maps-and-data/historic-station-data) and assess whether there is evidence for the theory that the climate is changing. P: A report including calculations and analysis of the results. S: Criterion D .	Relationship between summative assessment task(s) and statement of inquiry: In this summative assessment task we use historical data from Oxford weather station from 1853-present to evaluate the claim that the earth is getting warmer. Climate change is a pressing global issue that calls for a need to understand the ways in which the earth is changing and evidence those ways so that both individuals and political systems can use the data to support decisions about changes.

Approaches to learning (ATL)

Communication skills:

Students will need to make inferences from data and draw conclusions

Students will need to use and interpret a range of disciple-specific terms (in particular *data, secondary, primary, categorical/quantitative, numerical/qualitative, discrete, continuous, frequency, mean, median, mode, range).*

Organisation Skills

Students will need to bring necessary equipment to class (in addition to their book, pen, pencil and calculator, students will need a pair of compasses and a protractor)

Students should be given the opportunity to use technology (e.g. excel) to draw different charts

Collaboration skills

Students will be discussing the benefits of different representations of data and so will need to listen to other perspectives and ideas.

Affective skills

Students need to develop resilience and practice bouncing back after mistakes and failures.

Information literacy skills

Students will take part in a questionnaire at the start of the unit to collect data, which they will then identify.

They will present the information in a variety of formats.

Research skills

Students will be encouraged to form hypotheses (generalisations), which they will then test and draw conclusions.