

Progress Page: Year 8 Summer 2:

Reasoning with Data

Working Towards		Expected Standard		Reaching Greater Depth	
Topic	To achieve 'Expected Standard' you will be able to....	WT	ES	Sparx code	
The data handling cycle	Design and criticise questionnaires			M493	
	Draw and interpret pictograms, bar charts and vertical line charts			M644 and M738	
	Draw and interpret multiple bar charts			M460	
	Draw and interpret pie charts			M574 and M165	
	Draw and interpret line graphs			M183	
	Represent and interpret grouped quantitative data			M945 and U312	
	Find and interpret the range			M328 and M127	
	Compare distributions using charts			-	
Measure of location	Understand and use the mean, median and mode			M841, M940 and M934	
	Choose the most appropriate average			M440	
	Identify outliers			-	
	Compare distributions using averages and the range			-	
	To achieve 'Greater Depth' you will be able to...	GD			
The data handling cycle	Choose the most appropriate diagram for given set of data			-	
	Identify misleading graphs			-	
Measure of location	Find the mean from an ungrouped frequency table			M127	
	Find the mean from a grouped frequency table			M287	

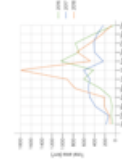


Y8 Summer 2: Reasoning with Data

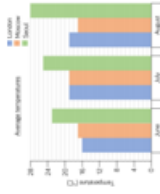


In this topic, you will learn how to collect data and analyse it using averages. You will learn the best ways to represent and analyse each set of data, and how to identify when data or data analysis might not be accurate!

Language	
French	●●●●●
Spanish	●●●●●
German	●



Draw and interpret charts



Represent and interpret grouped data

Calculate the mean, median and mode

Weight (w)	Frequency	Midpoint	Midpoint x Frequency
$30 < w \leq 40$	9	35	315
$40 < w \leq 50$	12		
$50 < w \leq 60$	15		
$60 < w \leq 70$	4		
Total			

Calculate the mean from grouped and ungrouped frequency tables

Compare charts and identify misleading charts

Assessment point: Data and Measures of Location

Reasoning with Data

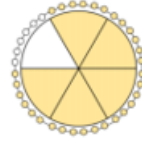
Next: Year 9!

Design and criticise questionnaires

Choose the most appropriate diagram

Set up a statistical enquiry

Draw and interpret pie charts



Calculate the range

Find the means of these sets of numbers.

2 5 8 10 12 16 19 20

5 35 35 37 38 39 40

Does the mean give a fair representation of the data sets?
Would any of the other averages be better?

Choose the most appropriate average

Identify outliers and compare distributions