# UNIT 5 Data Analysis

# **Teaching Notes**

### Historical Background and Introduction

The work in this unit follows on from Units 11 and 18 of Year 7, and the historical background is covered in the previous Teacher Support sections.

Here we extend the Year 7 work in a number of ways but principally

- data presentation, with pie charts and line graphs
- measures of central tendency (i.e. 'average') for grouped data.

The active involvement of pupils in obtaining their own data is a vital part of this unit, and you should look carefully at the activities, as they will require careful organisation and planning in advance.

Routes		Standard	Academic	Express	
5.1	Frequency Tables: Discrete Ungrouped Data	✓	✓	✓	
5.2	Mean, Median, Mode and Range	✓	✓	✓	

Language	Standard Academic Express		
Frequency table	✓	✓	✓
Pie chart	✓	✓	✓
Line graph	✓	✓	✓
Mean, median, mode	✓	$\checkmark$	✓
Range	✓	✓	✓

### Misconceptions

- the median of an even number of values is the mean of the two middle values,
  - e.g. for 10 values in order, it is the mean of the 5th and 6th values (not, as often wrongly assumed, the 5th value).
- pupils must remember that, when finding the median, the values must first be put in order, which is not necessarily the given order.

### Challenging Questions

The following questions are more challenging than others in the same section:

		Section	Question No.	Page
Practice Boo	ok Y8A	5.1	8	86
"	"	5.2	9, 10	93