Subject	Year	Month	
Mathematics	8	July	Balcarras From strength to strength

Topic:

STATISTICS — 9 LESSONS

Content (Intent)

Prior Learning

KS2 : Frequency tables (tallying), bar charts,
Y7 June : Averages from a list, bar charts, pie charts, frequency tables

Future Learning

Y9 : Time series, scatter graph, frequency polygon
Y10 : All seen diagrams will come back for recap and deeper/further understanding

Objectives

Questionnaire and types of data – (1 lesson) – CLIPS S6, S7
- Qualitative, Quantitative, Discrete, Continuous
- Mean, median, mode and range from a list (advantages/disadvantage of each average)
- Discuss samples

Frequency tables & grouping data – (1 lesson) – CLIPS S3, S4
- Grouped frequency tables (knowing when to use them, and making good suggestions for class widths)
- Subject specifics: class width, inequality signs

Bar charts and histograms – (1 lesson) – CLIPS S2a, S2b
- Dual / Multiple bar charts
- Comparative vs Compound

Pie charts – (1 lesson) – CLIP S9
- Find missing values from a given pie chart
- Construct a pie chart
- Understand that two pie charts can only compared based on proportions if the total is not the same.

Scatter graphs – (2 lessons) – CLIP S8
- Types of correlation , describing correlation
- Plotting a scatter graph, interpreting a scatter graph
- Line of best fit, estimating values

Averages from a table – (2 lessons) – CLIPS S10a, S10b
- Mean from a table
- Estimated mean from a grouped table
- Mode and median from a table
- Modal class and median class from a grouped frequency table

Mixture of diagrams, comparing data – (1 lesson)
- Choose an appropriate diagram to represent given data
- Compare same and different diagram types
- Use averages and spread to compare data.

Pedagogical notes (implementation)

PowerPoints are prepared for the department
If there is time and computer resources, we will try to use Excel skills to show quick calculations and sorting functions.

How will understanding be assessed & recorded (Impact)

In class assessment

How can parents help at home?

MathsWatch clips (Qualification KS3)
Listed above next to each objective

Further reading/discussion

Reading / Enrichment	Literacy	Numeracy Links	Careers Links
	Qualitative, Quantitative, discrete, continuous, mean, mode, median, range, sample, class, interval, inequality signs, comparative, compound, correlation, positive, negative, line of best fit, spread, etc.		Research analyst (medical, educational, market, management, etc.) Economist Geotechnology