

Lode Heath School Mathematics Department Year 9 Foundation

Assignment Title	Unit 3: Graphs, tables and charts	Date set	Spring 1

Summary of Unit 3		Key Words		
Display data in various charts and graphs. Analyse the data by interpreting the graphs.		Mean, median, mode, range, average, discrete, continuous, qualitative, quantitative, data, scatter graph, line of best fit, correlation, positive, negative, sample, population, stem and leaf, frequency, table, sort, pie chart, estimate.		
Prior Knowledge:		1		
1) Using the number 5, 7, 9, 2, 6				
a) The mode	b) The range			
c) The median	d) The mean			
2) What is age of the Key: 114 means 14	oldest person in this stem	and leaf diagram?		

1 4 5 8 2 1 3 6 9 9 3 0 5 7 4 4

LEARNING JOURNEY

Leve	Task Description
I	
1-2	3.1 Frequency tables (GCSE Statistics)
	Designing tables and data collection sheets.
	Reading data from tables.
2-4	3.2 Two-way tables (GCSE Statistics)
	Use data from tables.
	Design and use two-way tables.
1-4	3.3 Representing data (GCSE Statistics)
	Draw and interpret comparative and composite bar charts.
	Interpret and compare data shown in bar charts, line graphs and histograms.
1-3	3.4 Time series (GCSE Statistics)
	Plot and interpret time series graphs.
	Use trends to predict what might happen in the future.
3-4	3.5 Stem and leaf diagrams (GCSE Statistics)
	Construct and interpret stem and leaf and back-to-back stem and leaf diagrams.
3-5	3.6 Pie charts (GCSE Statistics)
	Draw and interpret pie charts.
4-5	3.7 Scatter graphs (GCSE Statistics)
	Plot and interpret scatter graphs.
	Determine whether or not there is a relationship between sets of data.
4-5	3.8 Line of best fit (GCSE Statistics)
	Draw a line of best fit on a scatter graph.
	Use the line of best fit to predict values.

Assignment Title	Unit 4: Fractions and perce	entages Da	ate set	Spring 1
Summary of Unit 4		Кеу	Key Words	
Calculate using fractions and percentages. Convert between fractions, decimals and percentages. Calculate percentage increase and decrease.		itage mix	Addition, subtraction, multiplication, division, fractions, mixed, improper, recurring, integer, decimal, percentage, VAT, increase, decrease, multiplier, profit, loss.	
Prior Knowledge:				
1) Calculate: a)	356 + 215 b) 243 ·	- 175	c) 24 x 36	d) 616÷4
2) What are the	e common factors of 12 and 2	20?		
3) Shade $\frac{3}{8}$ of t	he rectangle			
4) What is 25%	as a) a fraction?	b) a decim	al?	

LEARNING JOURNEY

Leve	Task Description	
1-4	4.1 Working with fractions	
	Compare fractions.	
	Add and subtract fractions.	
	Use fractions to solve problems.	
2-4	4.2 Operations with fractions	
	Find a fraction of a quantity or measurement.	
	Use fractions to solve problems.	
2-4	4.3 Multiplying fractions	
	Multiply whole numbers, fractions and mixed numbers.	
	Simplify calculations by cancelling.	
3-5	4.4 Dividing fractions	
	Divide a whole number by a fraction.	
	Divide a fraction by a whole number or a fraction.	
2-3	4.5 Fractions and decimals	
	Convert fractions to decimals and vice versa.	
	Use decimals to find quantities.	
	Write one number as a fraction of another.	
2-3	4.6 Fractions and percentages	
	Convert percentages to fractions and vice versa.	
	Write one number as a percentage of another.	
2-4	4.7 Calculating percentages 1	
	Convert percentages to decimals and vice versa.	
	Find a percentage of a quantity.	
	Use percentages to solve problems.	
	Calculate simple interest.	
2-5	4.8 Calculating percentages 2	
	Calculate percentage increases and decreases.	
	Use percentages in real-life situations.	
	Calculate VAT (value added tax).	