YEAR 10	Autumn 2021		Foundation			0
DATES	UNIT / LESSON	PRIOR KNOWLEDGE	GRADE FROM ...	GRADE TO ...	OBJECTIVES	Corbett
	9 Graphs	Plot coordinates and read scales Substitute into a formula.	**1**	**5**		
6-Sep	9.1 Coordinates	Halve a number. Substitute into an equation, and solve for an unknown.	**2**	**3**	Find the midpoint of a line segment. Recognise, name and plot straight-line graphs parallel to the axes.	198
13-Sep	9.2 Linear graphs	Use a function machine. Read scales	**2**	**3**	Generate and plot coordinates from a rule. Plot straight-line graphs from tables of values. Draw graphs to represent relationships.	186/187
20-Sep	9.3 Gradient	Understand that parallel lines will never meet. Identify which line is steepest.	**1**	**4**	Find the gradient of a line. Identify and interpret the gradient from an equation. Understand that parallel lines have the same gradient.	189 196
	9.4 y = mx + c	Understand that in a linear equation, the coefficient of x is the gradient. Understand that parallel lines have the same gradient. Draw a line with a given gradient.	**4**	**4**	Understand what m and c represent in y = mx + c. Find the equations of straight-line graphs. Sketch graphs given the values of m and c.	191/194
27-Sep	9.5 Real-life graphs	Interpret scales. Draw a graph of an equation in the form y = mx + c.	**2**	**4**	Draw and interpret graphs from real data.	151
	9.6 Distance-time graphs	Understand and use the relationship between distance, average speed and time.	**3**	**5**	Use distance–time graphs to solve problems. Draw distance–time graphs. Interpret rate of change graphs.	171
	9.7 More real-life graphs	Interpret a distance–time graph. Recall the definitions of positive, negative and no correlation. Find the equation of a line.			Draw and interpret a range of graphs. Understand when predictions are reliable.	
	10 Transformations	Recall basic shapes. Be able to plot points in all four quadrants. Understand the concept of rotation. Reflect a shape in a mirror line. Translate a shape on a squared grid using instructions such as left/right and up/down. Draw and recognise lines parallel to axes and y = x, y = −x. Understand the terms 'clockwise' and 'anticlockwise'.	**2**	**4**		
4-Oct	10.1 Translation	Use the words left and right List the four types of transformations Describe translations using left/right and up/down.	**4**	**4**	Translate a shape on a coordinate grid. Use a column vector to describe a translation.	325/326
	10.2 Reflection	Define the word perpendicular Reflect a shape in a mirror line.	**2**	**4**	Draw a reflection of a shape in a mirror line. Draw reflections on a coordinate grid. Describe reflections on a coordinate grid.	272 273 274
11-Oct	10.3 Rotation	Know the number of degrees in fractions of a turn. Use the words clockwise and anticlockwise.	**3**	**4**	Rotate a shape on a coordinate grid. Describe a rotation.	275
	10.4 Enlargement	Find scale factor from object to image and from image to object.	**3**	**3**	Enlarge a shape by a scale factor. Enlarge a shape using a centre of enlargement.	104/105
	10.5 Describing enlargements	Recognise the properties of enlargements. Simplify fractions.	**3**	**3**	Identify the scale factor of an enlargement. Find the centre of enlargement. Describe an enlargement.	106/109
18-Oct	10.6 Combining transformations	State key information for describing transformations. Identify the type of transformation used.	**4**	**4**	Transform shapes using more than one transformation. Describe combined transformations of shapes on a grid.	Transformations - mixture
HALF TERM						
	11 Ratio and proportion	Know the four operations of number. Have a basic understanding of fractions as being 'parts of a whole'. Find the scale factor of an enlargement. Draw a line graph from a table of values.	**2**	**5**		
1-Nov	11.1 Writing ratios	Multiply and divide whole numbers. Interpret bar charts.	**2**	**3**	Use ratio notation. Write a ratio in its simplest form. Solve problems using ratios.	269
	11.2 Using ratios 1	Know and use metric conversions. Find the HCF of a pair of numbers.	**2**	**3**	Solve simple problems using ratios.	269
8-Nov	11.3 Ratios and measures	Convert units of weight, length, capacity and time. Use index notation. Work out areas of recangles and volumes of cubes.	**2**	**4**	Use ratios to convert between units. Write and use ratios for shapes and their enlargements.	269
15-Nov	11.4 Using ratios 2	Write ratios using correct notation. Round to a specified degree of accuracy. Write a ratio in its simplest form.	**3**	**5**	Divide a quantity into 2 parts in a given ratio. Divide a quantity into 3 parts in a given ratio. Solve word problems using ratios.	270 271
22-Nov	11.5 Comparing using ratios	Interpret ratios. Write a ratio in its simplest form.	**3**	**4**	Use ratios involving decimals. Compare ratios. Solve ratio and proportion problems.	271
29-Nov	11.6 Using proportion	Understand and use place value to order decimals. Write a ratio in the form 1 : n.	**3**	**3**	Use the unitary method to solve proportion problems. Solve proportion problems in words. Work out which product is better value for money.	255a/256 256
6-Dec	11.7 Proportion and graphs	Understand and use y = mx + c. Use conversion graphs. Plot a line graph from a table of values.	**3**	**4**	Recognise and use direct proportion on a graph. Understand the link between the unit ratio and the gradient.	
13-Dec	11.8 Proportion problems	Relate common sense to real life problems.			Recognise different types of proportion. Solve word problems involving direct and inverse proportion.	254/155
END OF TERM 4 TEST						

9u8y7u