

PEARSON/EDXCEL SCHEMES OF WORK ADAPTED FOR FOREST HILL SCHOOL (KS3: EXPLORER)

YEAR 7		KS3 Maths Progress		Pi 1 and Pi 3		
TERM	UNIT / LESSON	STEPS	STEPS	STEPS	STEPS	
		1st	2nd	3rd	4th	
W1	AUTUMN	1. Analysing and displaying data		1st (grade 1)	4th (grade 2)	
		1.1 Tables and pictograms	1st (grade 1)	3rd (grade 2)	Find information from tables and pictograms.	
	1.2 Bar charts	2nd (grade 1)	3rd (grade 2)	Find information from bar and bar line charts.		
	1.3 Grouped data	2nd (grade 1)	3rd (grade 2)	Organise data using a tally chart. Understand and use frequency tables. Understand and draw a grouped bar chart.		
	INVESTIGATION: KS3 DATA COLLECTION					
	1.4 Mode and modal class	3rd (grade 2)	3rd (grade 2)	Find the mode of a set of data. Find the modal class of a set of data.		
	1.5 Range and median	2nd (grade 1)	4th (grade 2)	Find the range and median of a set of data. Compare sets of data using their range, mode and median.		
	1.6 Mean	3rd (grade 2)	4th (grade 2)	Calculate the mean of a set of data.		
	25/09/2017	PROBLEM-SOLVING ACTIVITIES				
	AUTUMN	2. Calculating		1st (grade 1)	3rd (grade 2)	
02/10/2017	2.1 Adding	1st (grade 1)	2nd (grade 1)	Add numbers together in different ways. Round to the nearest 10.		
09/10/2017				Approximate before adding.		
2.2 Subtracting	1st (grade 1)	2nd (grade 1)	Subtract numbers in different ways. Approximate before subtracting.			
2.3 Multiplying	1st (grade 1)	3rd (grade 2)	Multiply numbers. Recognise multiples. Recognise square numbers.			
RICH TASK 2: FACTORS & MULTIPLES GAME						
RICH TASK 16: HOW MANY POLAR BEARS?						
2.4 Dividing	1st (grade 1)	3rd (grade 2)	Divide one number by another. Use times tables to help you divide.			
INVESTIGATION: OPPOSITE CORNERS						
INVESTIGATION: PARTITIONING						
2.5 Multiplying and dividing	1st (grade 1)	3rd (grade 2)	Multiply and divide by 10, 100 and 1000.			
2.6 Using the four operations	1st (grade 1)	3rd (grade 2)	Use addition, subtraction, multiplication and division. Solve simple ratio and proportion problems.			
2.7 Positive and negative numbers	1st (grade 1)	3rd (grade 2)	Use simple negative numbers. Continue a sequence.			
RICH TASK 14: WHY IS 1089 SO SPECIAL?						
16/10/2017	PROBLEM-SOLVING; REVISION					
HALF TERM TEST						
AUTUMN	3. Expressions, functions and formulae		2nd (grade 1)	5th (grade 3)		
30/10/2017	3.1 Using functions	2nd (grade 1)	2nd (grade 1)	Find outputs of simple functions.		
06/11/2017	3.2 Function machines	3rd (grade 2)	3rd (grade 2)	Describe simple functions using words or symbols.		
RICH TASK 11:		3.3 Simplify expressions	1st (grade 2)	3rd (grade 2)	Simplify expressions.	
NUMBER REVISION		3.4 Writing expressions	4th (grade 2)	4th (grade 2)	Write expressions given a description in words.	
RICH TASK 3:		3.5 STEM: Using formulae	3rd (grade 2)	5th (grade 3)	Substitute positive integers into simple formulae written in words. Substitute integers into simple formulae written in letter symbols.	
CHOOSE 3 NUMBERS		3.6 Writing formulae	4th (grade 2)	4th (grade 2)	Write simple formulae using words and letter symbols.	
13/11/2017	PROBLEM-SOLVING ACTIVITIES					
AUTUMN	4. Graphs		2nd (grade 1)	5th (grade 3)		
20/11/2017	4.1 Real-life graphs	3rd (grade 2)	3rd (grade 2)	Read information from real life graphs. Draw graphs to show change over time.		
27/11/2017	4.2 Coordinates	2nd (grade 1)	5th (grade 3)	Write the coordinates of points on a grid. Plot points from their coordinates.		
RICH TASK 15: SQUARE COORDINATES		4.3 Graphs of functions	4th (grade 2)	4th (grade 2)	Plot graphs of simple functions. Read values from graphs.	
4.4 STEM: Scientific graphs	5th (grade 3)	5th (grade 3)	Draw line graphs to show relationships between quantities. Read values from science graphs.			
04/12/2017	PROBLEM-SOLVING ACTIVITIES					
11/12/2017	PROBLEM-SOLVING; REVISION					
END OF TERM TEST						

TERM	UNIT / LESSON	STEPS	STEPS	STEPS	STEPS	LEARNING OBJECTIVES	
		1st	2nd	3rd	4th		
W1	SPRING	5. Factors and multiples		1st (grade 1)	3rd (grade 2)		
		5.1 Number rules and divisibility	1st (grade 1)	3rd (grade 2)	Understand the priority of operations. Use the operation keys on a calculator. Recognise multiples of 2, 5, 10 and 25. Work out multiples.		
	RICH TASK 1: POSITIVE DIFFERENCES						Understand the rules of multiplication. Use the operation keys on a calculator.
	01/01/2018	5.2 Multiples	1st (grade 1)	2nd (grade 1)	Multiply 3-digit numbers by a single digit. Round numbers to the nearest 100 and 1000. Divide 3-digit numbers by a single digit. Decide whether you can divide a number by 2, 5, 9 or 10. Begin to identify factors of numbers.		
	08/01/2018	5.3 Multiplication	2nd (grade 1)	3rd (grade 2)	Multiply 3-digit numbers by a single digit.		
	5.4 Division	1st (grade 1)	3rd (grade 2)	Divide 3-digit numbers by a single digit.			
	5.5 Solving problems	1st (grade 1)	2nd (grade 1)	Solve problems involving multiplication and division.			
	5.6 Factors and primes	2nd (grade 1)	3rd (grade 2)	Find factors of numbers. Identify prime numbers.			
	5.7 Common factors and multiples	2nd (grade 1)	3rd (grade 2)	Recognise and use multiples, factors and primes. Find common factors and common multiples. Work out the HCF and LCM of two numbers. Work out if a number is divisible by 3, 4 or 6.			
	15/01/2018	PROBLEM-SOLVING ACTIVITIES					
SPRING	6. Decimals and measures		1st (grade 1)	5th (grade 3)			
22/01/2018	6.1 Estimates and measures	1st (grade 1)	3rd (grade 2)	Estimate, and choose suitable units, to measure length, mass and capacity. Draw lines to the nearest mm and measure lines to the nearest cm.			
29/01/2018				Read a variety of scales. Record estimates to a suitable degree of accuracy. Read and write numbers in figures and words. Including in measures.			
RICH TASK 28: DECIMAL ARITHMETIC						Read and interpret scales using decimals.	
6.2 Decimal numbers	1st (grade 1)	3rd (grade 2)	Read and interpret scales using decimals.				
6.3 Metric units	2nd (grade 1)	3rd (grade 2)	Order metric measurements. Convert between different units of measure. Read and interpret scales. Record measurements.				
RICH TASK 5: NUMBER SHACK						Recognise and extend number sequences by counting in decimals. How are decimals connected numbers.	
6.4 Adding and subtracting decimals	2nd (grade 1)	3rd (grade 2)	Extend mental methods of calculation, to include decimals. Round decimals to nearest whole number and nearest tenth. Use a calculator and interpret the display in different contexts (decimals).				
6.5 Rounding	2nd (grade 1)	3rd (grade 2)	Round decimals to nearest whole number and nearest tenth.				
6.6 Multiplying and dividing decimals	3rd (grade 2)	3rd (grade 2)	Consolidate and extend mental calculation methods, including decimals. Multiply and divide decimal numbers.				
6.7 FINANCE: Calculating with money	3rd (grade 2)	5th (grade 3)	Use a calculator to solve word problems involving money. Round amounts on a calculator to 2 decimal places.				
05/02/2018	PROBLEM-SOLVING; REVISION						
HALF TERM TEST							
SPRING	7. Angles and lines		1st (grade 1)	3rd (grade 2)			
19/02/2018	7.1 Right angles and lines	1st (grade 1)	3rd (grade 2)	Know a right angle is 90 degrees.			
26/02/2018				Recognise quarter, half and three-quarter turns. Recognise parallel and perpendicular lines. Use compass points.			
RICH TASK 10: HOW MANY ANGLES?						Recognise acute and obtuse angles. Measure acute angles. Label lines and angles.	
7.2 Measuring angles 1	2nd (grade 1)	2nd (grade 1)	Recognise acute, obtuse and reflex angles. Measure obtuse angles.				
7.3 Measuring angles 2	3rd (grade 2)	3rd (grade 2)	Estimate the size of angles. Draw acute angles.				
7.4 Drawing and estimating angles	2nd (grade 1)	3rd (grade 2)	Draw acute angles. Find missing angles on a straight line.				
7.5 Putting angles together	3rd (grade 2)	3rd (grade 2)	Find missing angles round a point.				
05/03/2018	PROBLEM-SOLVING ACTIVITIES						
SPRING	8. Measuring and shapes		1st (grade 1)	5th (grade 3)			
12/03/2018	8.1 Shapes	1st (grade 1)	3rd (grade 2)	Identify triangles, squares and rectangles. Recognise the properties of triangles, squares and rectangles.			
19/03/2018	INVESTIGATION: FLAGGING					Describe the line symmetry of triangles, quadrilaterals and other shapes.	
8.2 Symmetry in shapes	2nd (grade 1)	4th (grade 2)	Solve problems using line symmetry. Describe rotational symmetry.				
8.3 More symmetry	3rd (grade 2)	4th (grade 2)	Identify polygons.				
8.4 Regular polygons	1st (grade 1)	3rd (grade 2)	Understand the line and rotational symmetry of rotational polygons. Find the perimeter of squares, rectangles and regular polygons. Calculate the perimeter of shapes made from rectangles.				
8.5 Perimeter	1st (grade 1)	3rd (grade 2)	Solve problems involving the perimeter of squares and rectangles. Use metric units to measure area. Calculate the area of squares and rectangles.				
8.6 Area	2nd (grade 1)	3rd (grade 2)	Use metric units to measure area. Calculate the area of squares and rectangles.				
26/03/2018	PROBLEM-SOLVING; REVISION						
END OF TERM TEST							

STEPS REFER TO THE 12-STEP PEARSON MODEL					
TERM	UNIT / LESSON	STEPS	STEPS	STEPS	LEARNING OBJECTIVES
		1st	2nd	3rd	
SUMMER	9. Fractions, decimals and percentages		1st (grade 1)	3rd (grade 2)	
16/04/2018	9.1 Comparing fractions	1st (grade 1)	3rd (grade 2)	Order fractions. Use fractions to describe parts of shapes.	
23/04/2018	9.2 Equivalent fractions	1st (grade 1)	3rd (grade 2)	Identify equivalent fractions. Simplify fractions by cancelling. Change an improper fraction to a mixed number.	
9.3 Calculating with fractions	1st (grade 1)	3rd (grade 2)	Calculate simple fractions of quantities.		
9.4 Adding and subtracting fractions	2nd (grade 1)	3rd (grade 2)	Add and subtract simple fractions.		
9.5 Introducing percentages	2nd (grade 1)	3rd (grade 2)	Understand percentage as 'the number of parts per 100'. Write a percentage as a fraction or decimal.		
9.6 FINANCE: Finding percentages	3rd (grade 2)	3rd (grade 2)	Calculate percentages.		
30/04/2018	PROBLEM-SOLVING ACTIVITIES				
SUMMER	10. Transformations		1st (grade 1)	5th (grade 3)	
Pi 1	10.1 Reflection	1st (grade 1)	3rd (grade 2)	Reflect a shape in a mirror line.	
RICH TASK 18: ENTRAPMENT					
07/05/2018	10.2 Translation	2nd (grade 1)	3rd (grade 2)	Translate a shape.	
RICH TASK 4: WILL THEY MEET?					
14/05/2018	10.3 Rotation	3rd (grade 2)	4th (grade 2)	Draw and describe rotations.	
Pi 3	10.4 STEM: Congruency	1st (grade 1)	4th (grade 2)	Identify congruent shapes.	
Pi 3	10.5 10.1 Quadrilaterals	5th (grade 3)	5th (grade 3)	Identify the properties of quadrilaterals.	
21/05/2018	PROBLEM-SOLVING ACTIVITIES				
RICH TASK 13: HOW MANY QUADRILATERALS?					
04/06/2018	REVISION FOR END OF YEAR TESTS				
11/06/2018	REVISION FOR END OF YEAR TESTS				
18/06/2018	END OF YEAR TESTS: NON-CALCULATOR & CALCULATOR				
25/06/2018	FINANCIAL MATHS				
02/07/2018	FINANCIAL MATHS				
09/07/2018	FINANCIAL MATHS				
16/07/2018	FEEDBACK FROM END OF YEAR TESTS				
23/07/2018	FEEDBACK FROM END OF YEAR TESTS				