

	EIGHT	S	1						
SCHOOL				SUMMER 2	2	SUMMER 1			
		-	KEY	STAGE 5	REVISION &	& LEVEL 2 EXAMINATION	L2 - HANDLING INFOR MATHEMATICAL PROD REVISION Use the mean, median, mode Work out the probability of cr diagrams and tables, includin fractions, decimals and perce and recognise positive and n problem solving activities and	RMATION & DATA / SOLVING BLEMS AND DECISION MAKII e and range to compare two sets of data ombined events including the use of Ig two-way tables / Express probabilitie intages / Draw and interpret scatter diag egative correlation / Application of skills d past / practise papers.	
SPRING 2	PRING 2 SUMMER 1		SUMMER 2		AUTUMN 1		AUTUMN 2		
L1 - USING COMMON MEASURES, SHAPE AND SPACE Recognise and make use of simple scales on maps and drawings / Calculate the area and perimeter of simple shapes including those that are made up of a combination of rectangles / calculate the volumes of	L1 — HANDLING INFORMATION & DATA Represent discrete data in tables, diagrams and charts including pie charts, bar charts and line graphs / Group discrete data and represent grouped data graphically / Find the mean and range of a set of quantities / Understand probability on a scale from 0 (impossible) to 1 (certain) and use probabilities to compare the likelihood of events / Use equally likely outcomes to find the probabilities of simple events and express them as fractions / Solving mathematical problems and decision making (application of skills).		LEVEL 1 – SOLVING MATHEMATICAL PROBLEMS AND DECISION MAKING / REVISION & EXAMINATION Application of skills to problem solving activities and past / practise papers / revision / Level 1 examination.		Final series of the series of		L2 - USING NUMBERS AND THE NUMBER SYSTEM Order, add, subtract and compare amounts or quantities using prope and improper fractions and mixed numbers (2 weeks) / Express one number as a fraction of another / Order, approximate and compare decimals / Add, subtract, multiply and divide decimals up to three decimal places / Understand and calculate using ratios, direct proportion and inverse proportion / Follow the order of precedence operators, including indices.		
cubes and cuboids / Draw 2-D shapes and demonstrate an	SPRING 1		ΔΗΤΗΜΝ 2		ΔΗΤΗΜΝ 1				
understanding of line symmetry and knowledge of the relative size of angles / Interpret plans, elevations and nets of simple 3-D shapes / Use angles when describing position and direction, and measure angles in degrees.	L1 - USING NUMBERS AND THE NUMBER SYSTEM / USING COMMON MEASURES, SHAPE AND SPACE Estimate answers to calculations using fractions and decimals / Recognise and calculate equivalences between common fractions, percentages and decimals / Work with simple ratio and direct proportions / Calculate simple interest in multiples of 5% on amounts of money / Calculate discounts in multiples of 5% on amounts of money / Convert between units of length, weight, capacity, money and time, in the same system.		L1 - USING NUMBERS AND THE NUMBER SYSTEM Read, write, order and compare common fractions and mixed numbers / Find fractions of whole number quantities or measurements / Read, write, order and compare decimals up to three decimal places / Add, subtract, multiply and divide decimals up to two decimal places / Add, subtract, multiply and divide decimals up to two decimal places / Approximate by rounding to a whole number or to one or two decimal places / Read, write, order and compare percentages in whole numbers / Calculate percentages of quantities, including simple percentage increases and decreases by 5% and multiples thereof.		L1 - USING NUMBERS Read, write, order & compare and use positive and negative numbers and decimals by 10 and make connections with d expressed in words for one o squares of one-digit and two- precedence of operators.	S AND THE NUMBER SYSTEM a numbers (up to 1 million) / Recognise a numbers / Multiply & divide whole 100 and 1000 / Use multiplication facts livision facts / Use simple formulae or two-step operations / Calculate the -digit numbers / Follow the order of	REPRESENTATIO Probability - rela outcomes & ind interpreting qua inequalities / rev	ONS AND REVISION ative frequency, expected numl ependent events / drawing & dratic & other graphs / represe <i>i</i> sion.	
SUMMER 1		SUMMER 2		AUTUMN 1		AUTUMN 2	SPRING 1		
DEVELOPING GEOMETRY Calculate angles in parallel lines and polygons / calculate the area of trapezia, circles & compound shapes / lines of symmetry & reflection.		REASONING WITH DATA Collect data, understand primary & secondary data / interpret & construct multiple bar & pie charts / calculate the mode and modal class, compare distributions.		REASONING WITH ALGEBRA Interpret straight line graphs / reduce equations to the form y = mx + c / compare to linear sequences to find nth term rule / form & solve equations / change subject of a formula / test conjectures.		CONSTRUCTING IN 2 AND 3 DIMENSIONS Explore prisms & non-prisms / Calculate volu surface area of cuboids & cylinders / constru shapes from nets / construct perpendiculars of bisectors / explore congruency.	REASONING V ume & Types of numl ct 3D fraction arithm & using % / fina pricing.	REASONING WITH NUMBER Types of number inc. rational & real / revisit fraction arithmetic, HCF, LCM, standard form using % / financial maths inc. bills, interest & pricing.	
SPRING 2		SPRING 1		AUTUMN 2		AUTUMN 1		SUMMER 2	
DEVELOPING NUMBER Develop understanding of FDP / evaluate % increases & decreases / Standard index form / convert between metric units of measure / estimating.		ALGEBRAIC TECHNIQUES Form & use expressions, formulae & inequalities including brackets / generate sequences using brackets & squared terms / form expressions using indices.		REPRESENTATION Plot & interpret straight line graphs / equations of straight lines / draw & interpret scatter diagrams inc lines of best fit / list outcomes & probabilities using Venn diagrams.		PROPORTIONAL REASONING Solve ratio problems / use scale factors / conv between currencies / draw & interpret scale di and ÷ fractions.	′ert agrams / x	REASONING WITH NUMI Develop mental arithmetic Venn diagrams / calculate recognise prime, square o test conjectures.	
		AUTU	MN 1	AUTUMN	2	SPRING 1		SPRING 2	

ALGEBRAIC THINKING

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Describe & continue sequences / understand & use algebraic notation / use function machines (1- and 2-step rules) / form & solve 1-step equations / collect like terms.

AUTUMN 2

PLACE VALUE & PROPORTION

Recognise and use integer and decimal place value / compare, order & round numbers / interchange between fractions, decimals and percentages.

SPRING 1

APPLICATIONS OF NUMBER

Solving problems involving four operations / Multiply by 10, 100, 1000, 0.1, 0.01 / HCF & LCM / Fractions & % of amounts.

A / SOLVING CISION MAKING /

e two sets of data / lina the use of press probabilities as erpret scatter diagrams plication of skills to

tities using proper ks) / Express one

er of precedence of

L2 - USING COMMON MEASURES, SHAPE & SPACE / HANDLING INFORMATION & DATA

Use coordinates in 2-D, positive and negative, to specify the positions of points / Understand and use common 2-D representations of 3-D objects / Draw 3-D shapes to include plans and elevations / Calculate values of angles and/or coordinates with 2-D and 3-D shapes / Calculate the median and mode of a set of quantities / Estimate the mean of a grouped frequency distribution from discrete data.

SPRING 1

L2 - USING COMMON MEASURES, SHAPE & SPACE

Calculate amounts of money, compound interest, percentage increases, decreases and discounts including tax and simple budgeting / Convert between metric and imperial units of length, weight and capacity using a) a conversion factor and b) a conversion graph / Calculate using compound measures including speed, density and rates of pay / Calculate perimeters and areas of 2-D shapes including triangles and circles and composite shapes including non-rectangular shapes (formulae given except for triangles and circles) / Use formulae to find volumes and surface areas of 3-D shapes including cylinders (formulae given for 3-D shapes other than cylinders) / Calculate actual dimensions from scale drawings and create a scale diagram given actual measurem

pected number of drawing & hs / representing

SUMMER 1

REASONING WITH PROPORTION

Enlarge shapes by a +ive scale factor / calculate lengths of missing sides in similar shapes / solve ratio & proportion problems / Work with rate formulae for speed & density.

real / revisit tandard form / Ils, interest & unit

SPRING 2

REASONING WITH GEOMETRY

Find angles using algebraic methods & chains of reasoning / find the result of rotating a shape / translate points & shapes by a given vector / understand & use Pythagoras' Theorem to problem solve.

G WITH NUMBER

ental arithmetic strategies / draw & interpret ams / calculate probability of single events / rime, square & triangle numbers, make &

DIRECTED NUMBER & FRACTIONAL THINKING

Order directed numbers / revisit 4 operations / solve 2-step equations / use order of operations / add & subtract fractions & decimals.

SUMMER 1

LINES AND ANGLES

Draw & measure lines and angles accurately / recognise types of triangles, quadrilaterals etc / calculate & use angles at a point, on a straight line & vertically opposite angles.

SPRING 2



KEY STAGE 3

SUMMER 2

Position & direction: Read and plot coordinates in the first quadrant & in all 4 quadrants / translate shapes on a grid / Identify lines of symmetry / reflect shapes on a coordinate grid. Statistics: Draw, read & interpret line graphs & bar charts (including dual bar charts) / Read information from tables & two-way tables / Read & interpret pie charts / Draw pie charts / Calculate the mean. Converting units: Convert between metric units / convert between miles and kilometres / convert units of time / calculate with timetables

SUMMER 1

Ratio: Use ratio language / use scale factors / c shapes / solve ratio and proportion problems Algebra: Use function machines / form expres expressions / substitute into formulae / form e equations / find pairs of values to solve proble unknowns

Shape: Measure angles in degrees with a protra angles around a point & on a straight line / iden opposite angles / calculate missing angles in tr quadrilaterals / Draw shapes / Reason about 30

SPRING 2

Area & volume: Calculate the area of rectangles / compound shapes / triangles / parallelograms / Calculate the volume of a cuboid / Compare volumes / Estimate volume & capacity.

Decimals: Add & subtract decimals with the same or different number of decimal places Multiply & divide decimals by 10, 100 and 1000 / Multiply & divide decimals by integers.

Fractions, decimals & percentages: Know and use the fraction and decimal equivalents for tenths, hundredths and thousandths / Understand percentages / Convert percentages to fractions & decimals / Order F. D and P / Calculate percentages of an amount.

SUMMER 1

Ratio: Use ratio language / use scale factors / calculate with similar shapes / solve ratio and proportion problem Algebra: Use function machines / form expressions / substitute into expressions / substitute into formulae / form equations / solve one equations / find pairs of values to solve problems with two unknowns.

Shape: Measure angles in degrees with a protractor / calculate angles around a point & on a straight line / identify vertically opposite angles / calculate missing angles in triangles & guadrilaterals / Draw shapes / Reason about 3D shapes.

SPRING 1

Multiplication & division (continued): Solve multi-step problems involving x and \div / Use the order of operations / reason from known facts

Fractions: Multiply unit fractions by an integer / multiply nonunit fractions by an integer / multiply mixed numbers by integers / divide a fraction by an integer / calculate fractions of an amount / use a fraction of an amount to find the whole. Decimals: Identify place value in decimals with 2 or 3dp / Order and compare decimals up to 3dp / Round to the nearest whole number / Round to 1 or 2dp.

Perimeter: Calculate the area of rectangles & rectilinear shapes

SUMMER 2

SPRING 1

polygons.

SUMMER 2

AUTUMN 2

Position & direction: Read and plot coordinates in the first quadrant & in all 4 quadrants / translate shapes on a grid / Identify lines of symmetry / reflect shapes on a coordinate grid. Statistics: Draw, read & interpret line graphs & bar charts (including dual bar charts) / Read information from tables & twoway tables / Read & interpret pie charts / Draw pie charts / Calculate the mean.

Converting units: Convert between metric units / convert between miles and kilometres / convert units of time / calculate with timetables.

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AUTUMN 1

method) / use inverse operations to solve missing number problems / reason from known facts Multiplication & division: understand and identify multiples and factors / n factors / identify prime numbers / Identify square and cube numbers / multiply by 10, 100 and 1000 / divide by 10, 100 and

Addition & subtraction: Use mental strategies for addition and

Place Value: Understand place value for numbers up to 10,000,000 /

compare and order any integers / round numbers within 100,000 / round any integer / count through zero / Compare and order negative numbers.

subtraction / Add & subtract numbers with more than 4 digits (column

AUTUMN 2

Fractions: Identify equivalent fractions / 0 improper fractions and mixed numbers / fractions / add & subtract fractions / add & numbers / subtract a fraction from a mixe two mixed numbers / solve multi-step pro fractions

Multiplication & division: Multiply up to a 2-digit number / Use short division / Use le without remainders.

Fractions: Identify equivalent fractions / Convert between improper fractions and mixed numbers / compare and order fractions / add & subtract fractions / add & subtract mixed numbers / subtract a fraction from a mixed number / Subtract two mixed numbers / solve multi-step problems involving fractions

Multiplication & division: Multiply up to a 4-digit number by a 2-digit number / Use short division / Use long division with and without remainders.

AUTUMN 1

Place Value: Understand place value for numbers up to 10,000,000 / compare and order any integers / round numbers within 100,000 / round any integer / count through zero / Compare and order negative

Addition & subtraction: Use mental strategies for addition and subtraction / Add & subtract numbers with more than 4 digits (column method) / use inverse operations to solve missing number problems / reason from known facts.

Multiplication & division: understand and identify multiples and factors / identify common factors / identify prime numbers / Identify square and cube numbers / multiply by 10, 100 and 1000 / divide by 10, 100

SUMMER 2

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Shape: Identify turns and angles / Compare accurately / identify horizontal and vertica and perpendicular lines / recognise & desc Draw polygons / Identify lines of symmetry Position & direction: Read & plot coordina Statistics: Interpret and draw bar charts / p Interpret data from two-way tables / Collect

Multiplication and division: Mult

nultiply up to a 3-digit number by

exchange & with exchange / Answ

using known facts / Divide up to a

digit number – no exchange, with

Length & perimeter: Measure leng

lengths using cm and mm / add and

measure perimeter / calculate perimeter of rectiline

Find equivalent lengths using ma

SUMMER 1

Time: Tell the time to 5 minutes & to the minute / Use am and pm / convert between analogue and digital times / Convert between 12- and 24-hour clock times / find and use durations.

Decimals: Write tenths as fractions, decimals, on a place value chart and on a number line / Write hundredths as fractions, decimals, on a place value chart and on a number line / Write halves and quarters as decimals / Compare and order decimals / Round to the nearest whole number / Divide a number by 10 and 100.

Money: Write money using decimals / Convert pounds and pence / Compare amounts of money / Add & subtract money / Find change.

SPRING 2

Fractions: Understand denominators, numerators and the whole / Compare & order unit fractions & non-unit fractions / Identify equivalent fractions / Count beyond 1 / Partition a mixed number / Compare and order mixed numbers / Convert between mixed numbers and improper fractions and vice versa. Mass and capacity: Measure, compare, add & subtract mass / measure volume & compare, add & subtract capacity & volume

Fractions: Add fractions and mixed numbers / Subtract from whole amounts & mixed numbers / Calculate unit and non-unit fractions of an amount.

Shape: Identify turns and angles / Compare & angles / draw lengths accurately / identify horizontal and vertical lines / identify parallel and perpendicular lines / recognise & describe 2D & 3D shapes / Draw polygons / Identify lines of

Multiplication and division: Multiply three numbers / multiply

with exchange / Answer related calculations using known facts

Length & perimeter: Measure length in mm. cm. m & km / Find

equivalent lengths using m and cm / Find equivalent lengths

up to a 3-digit number by a 1-digit number – no exchange &

/ Divide up to a 3-digit number by a 1-digit number – no

using cm and mm / add and subtract lengths / measure

perimeter / calculate perimeter of rectilinear shapes &

exchange, with exchange & with remainders.

Position & direction: Read & plot coordinates / Translate on a grid Statistics: Interpret and draw bar charts /

pictograms / line graphs / Interpret data from twoway tables / Collect & represent data.

AUTUMN 1

Place Value: Represent numbers to 1000 / understand the place value of numbers up to 1000 / use a number line up t 1000 / Find 1, 10, 100 or 1000 more or less / compare objects / compare numbers / order numbers / Round to the

AUTUMN 2

nearest 10, 100 or 1000. Addition and subtraction: Add and subtract 1s. 10s. 100s 1nad 1000s / add up to two 4-digit numbers - no exchange across a 10 / across a 100 / across a 1000 / subtract up to two 4-digit numbers – no exchange / across a 10 / across a 100 / across a 1000

Addition and subtraction: Know and use complements to 100 /

operations to check answers to calculations / Select the most

Multiplication and division: Use equal groups for multiplication

& division / multiply and divide by 2.5 and 10 / Recall facts

from the 2, 4 and 8 times-table / Recall facts from the 3, 6 and

9 times-table / Recall facts from the 7. 11 and 12 times-table /

Area: Count the number of squares inside a shape to find its

1000 / estimate answers to calculations / Use inverse

Multiply by 1 and 0 / Divide a number by 1 and itself.

efficient method for a calculation.

area / Compare the area of two shapes.

AUTUMN (

Addition and subtraction: Know and use complements to 100 / 1000 / estimate answers to calculations / Use inverse operations to check answers to calculations / Select the most efficient method for a

Multiplication and division: Use equal groups for multiplication & division multiply and divide by 2, 5 and 10 / Recall facts from the 2, 4 and 8 times-table / Recall facts from the 3, 6 and 9 times-table / Recall facts from the 7, 11 and 12 times-table / Multiply by 1 and 0 / Divide a number by 1 and itself.

Area: Count the number of squares inside a shape to find its area / Compare the area of two shapes

AUTUMN 1

Place Value: Represent numbers to 1000 / understand the place value of numbers up to 1000 / use a number line up to 1000 / Find 1. 10, 100 or 1000 more or less / compare objects / compare numbers / order numbers / Round to the nearest 10, 100 or 1000.

Addition and subtraction: Add and subtract 1s, 10s, 100s 1nad 1000s / add up to two 4-digit numbers - no exchange / across a 10 / across a 100 / across a 1000 / subtract up to two 4-digit numbers – no exchange / across a 10 / across a 100 / across a 1000.



*Y3/4 mixed year group & Y5/6 mixed year group curriculums being used this year to meet needs of current children in Primary.



Iculate with similar ons / substitute into uations / solve one is with two ctor / calculate tify vertically ngles & shapes.	SPRING 2 Area & volume: Calculate the area of rectangles / compound shapes / triangles / parallelograms / Calculate the volume of a cuboid / Compare volumes / Estimate volume & capacity. Decimals: Add & subtract decimals with the same or different number of decimal places Multiply & divide decimals by 10, 100 and 1000 / Multiply & divide decimals by integers. Fractions, decimals & percentages: Know and use the fraction and decimal equivalents for tenths, hundredths and thousandths / Understand percentages / Convert percentages to fractions & decimals / Order F, D and P / Calculate
	percentages of an amount.
onvert between ompare and order subtract mixed d number / Subtract olems involving 4-digit number by a ong division with and	SPRING 1 Multiplication & division (continued): Solve multi-step problems involving x and ÷ / Use the order of operations / reason from known facts. Fractions: Multiply unit fractions by an integer / multiply non-unit fractions by an integer / multiply mixed numbers by integers / divide a fraction by an integer / calculate fractions of an amount / use a fraction of an amount to find the whole. Decimals: Identify place value in decimals with 2 or 3dp / Order and compare decimals up to 3dp / Round to the nearest whole number / Round to 1 or 2dp. Perimeter: Calculate the area of rectangles & rectilinear shapes.
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three numbers / 1-digit number – no related calculations digit number by a 1- change & with n in mm, cm, m & km / cm / Find equivalent subtract lengths /	SPRING 2 Fractions: Understand denominators, numerators and the whole / Compare & order unit fractions & non-unit fractions / Identify equivalent fractions / Count beyond 1 / Partition a mixed number / Compare and order mixed numbers / Convert between mixed numbers and improper fractions and vice versa. Mass and capacity: Measure, compare, add & subtract mass / measure volume & compare, add & subtract capacity & volume. Fractions: Add fractions and mixed numbers / Subtract from whole amounts & mixed numbers / Calculate unit and non-unit fractions of an amount