Addition & Subtraction – S Plan

LAKESIDE PRIMARY ACADEMY

Year 1
-Understanding part-whole models
- Addition symbol
-Fact families – addition facts
- Find number bonds for numbers within 10
- Use systematic methods for number bonds within 10
- Compare number bonds
- Adding together and adding more
-Finding a part
- Subtraction by crossing out, using the symbol and breaking apart
- Fact families
- Subtraction counting back and finding the difference
- Add by counting on
- Find and make number bonds
- Add by making 10
- Subtract by crossing and not crossing 10
- Comparing addition and subtraction number senten

EYFS
-Find one more
-Find one less
Introducing the part-whole model
- Combing two groups to make the whole
- Using a ten frame
- The part-whole model to 10
- Subtraction
- Adding by counting on
- Taking away by counting back
- Sorting into two groups

Year 2
-Fact families – addition and subtraction bonds to 20
- Check calculations
- Compare number sentences
- Related facts
- Bonds to 100
- Add and subtract 1s
- 10 more and 10 less
- Add and subtract 10s
- Add a 2 and 1 digit number crossing ten
- Subtract a 1 digit number from a 2 digit number
- Add two 2 digit numbers crossing and not crossing ten
- Subtract a 2 digit number from a 2 digit number crossing and not crossing ten
- Bonds to 100 (tens and ones)
Add three 1-digit numbers

Year 3
-Add and subtract multiples of 100
-Add and subtract 3 digit and 1 digit numbers crossing and not crossing 10 and 100.
- Add and subtract 3 digit and 2 digit numbers crossing and not crossing 10 and 100.
- Add and subtract 100s
-Spot patterns
- Add and subtract 3 digit and 2 digit numbers crossing and not crossing 10 and 100.
- Estimate and check answers

Year 4
- Add and subtract 1s, 10s, 100s and 1000s
- Add two 4 digit numbers – no exchange, one exchange and more than one exchange.
- Subtract two 4 digit numbers – no exchange, one exchange and more than one exchange.
- Efficient subtraction
- Estimate answers
- Checking strategies

Year 6
-Add and subtract integers
Mental calculations and estimation
Reason from known facts

Year 5
-Add whole numbers with more than 4 digits (column method)
- Subtract whole numbers with more than 4 digits (column method)
Round to estimate and approximate
Inverse operations
Multi-step problems

Fractions, Decimals & Percentages - S Plan

LAKESIDE PRIMARY ACADEMY

Year 1
- Find half of shapes and sets of objects
- Find a quarter of shapes and sets of objects

Year 2
- Make equal parts
- Recognise and find a half, quarter and third
- Recognise and understand unit and non-unit fractions
- Equivalence of ½ and 2/4
- Find three quarters
- Count in halves, thirds and quarters

Year 3
- Understand the concept of a 'whole'
- Recognise and count in tenths
- Place fractions on a number line
- Find fractions of a set of objects
- Find equivalent fractions
- Compare and order fractions
- Add and subtract fractions with the same denominator

Year 4
Fractions
- Understand what a fraction is
- Find equivalent fractions
- Understand fractions greater than 1
- Count in fractions
- Add two or more fractions with the same denominator
- Subtract two fractions with the same denominator
- Subtract fractions from whole amounts
- Calculate fractions of a quantity
Decimals
- Explore tenths as fractions
- Explore tenths as decimals within 1 whole and more than 1 whole
- Place tenths on a number line
- Divide a 1-digit number by 10
- Divide a 2-digit number by 10
- Explore hundredths as fractions
- Explore hundredths as decimals within 1 whole and more than 1 whole
- Divide a 1 or 2-digit number by 100
- Make a whole from tenths and hundredths
- Read and write decimal numbers to 2 d.p., understanding the value of each digit
- Compare and order decimals
- Round decimals with 1 d.p. to the nearest whole number
- Write halves and quarters as decimals

Year 5
Fractions
- Find equivalent fractions
- Convert improper fractions to mixed numbers and vice versa
- Count in fractions to complete a sequence
- Compare and order fractions less than and greater than 1
- Add and subtract fractions
- Add and subtract mixed numbers
- Multiply unit and non-unit fractions by an integer
- Find fractions of an amount
- Use fractions as operators
Decimals
- Read and write decimal numbers to 2.d.p, understanding the value of each digit
- Find equivalent fractions and decimals (tenths, hundredths and other fractions)
- Explore thousandths as fractions
- Explore thousandths as decimals within 1 whole and more than 1 whole
- Compare and order decimal numbers up to 3 d.p.
- Round decimals with 1 p.d. and 2 d.p. to the nearest whole number
- Round decimals to 1 d.p.
- Add and subtract decimals within 1
- Add decimals to make 1 whole
- Add and subtract decimals with the same number of decimal places, including regrouping
- Add and subtract decimals with a different number of decimal places, including regrouping
- Add and subtract whole numbers and decimal numbers
- Complete sequences with decimal numbers
- Multiply and divide up to 3 d.p. by 10, 100 and 1000
Percentages
- Understand percentages as 'the number of parts per 100'
- Understand percentages as fractions and decimals
- Find equivalent fractions, decimals and percentages

Year 6
Fractions
- Simplify fractions
- Place fractions on a number line
- Compare and order fractions using denominators and numerators
- Add and subtract fractions
- Add and subtract mixed numbers
- Multiply fractions by integers and fractions
- Divide fractions by integers
- Find fractions of an amount
- Use fractions of an amount to find the whole
Decimals
- Understand the place value of decimals within and above 1
- Round decimals to 1 d.p. and 2 d.p.
- Add and subtract decimals up to 3 d.p.
- Multiply and divide up to 3 d.p. by 10, 100 and 1000
- Multiply and divide decimals by integers
- Find decimal and fraction equivalents, including looking at fractions as division
Percentages
- Explore percentages as 'the number of parts per 100'
- Convert fractions to percentages
- Find equivalent fractions, decimals and percentages
- Order fractions, decimals dend percentages
- Find percentages of amounts
- Find the whole number from a given percentage

Geometry – S Plan

LAKESIDE PRIMARY ACADEMY

EYFS
3D shapes
2D shapes
Spatial awareness
Making simple patterns
Exploring more complex patterns
Composing and decomposing shapes

Year 1
Recognise and name 3-D shapes.
Sort 3D shapes
Recognise and name 2D shapes.
Sort 2D shapes.
Make patterns with 2D and 3D shapes.
Describe a turn – half, quarter, full.
Describe a position – left and right, forwards and backwards, above and below.
Understand ordinal numbers and sort using ordinal numbers.

Year 2
Recognise 2D and 3 shapes.
Count sides and vertices on 2D shapes.
Draw 2D shapes,
Identify lines of symmetry on shapes.
Use lines of symmetry to complete shapes.
Sort 2D shapes.
Count faces, edges and vertices on 3D shapes.
Sort 3D shapes.
Make patterns with 2D and 3D shapes.
Use language to describe position and movement.
Describe turns and movement.
Create shape patterns with turns.

Year 3
Understand that angles describe the size of a turn.
Identify right angles.
Compare angles that are greater and smaller than a right angle.
Measure and draw straight lines accurately in centimetres and millimetres.
Recognise and draw horizontal and vertical lines in a range of contexts.
Identify parallel and perpendicular lines in a range of practical contexts.
Recognise and name a variety of 2D shapes and describe their properties including types of angles, lines. Symmetry and lengths of sides.
Create and draw 2D shapes.
Recognise and describe 3D shapes using mathematical language.
Make 3D shapes using modelling materials.

Year 4
Understand angles as turns.
Identify right, acute and obtuse angles.
Compare and order angles.
Compare and classify different types of triangles and quadrilaterals.
Understand regular and irregular polygons.
Identify lines of symmetry in 2D shapes presented in different orientations.
Complete a symmetric figure.
Describe position using coordinates.
Plot coordinates.
Plot specified points and draw sides to complete a given polygon.
Describe movements between positions as translations of a given unit to the left/right and up/down.

Year 6
Measure and classify angles.
Calculate angles using known facts.
Learn that vertically opposite angles are equal.
Measure and add angles in a triangle to check that the sum in always 180 degrees.
Work out unknown angles in a triangle.
Find angles in polygons.
Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius.
Draw 2-D shapes using given dimensions and angles.
Recognise, describe and build simple 3-D shapes, including making nets.
Understand the first quadrant and plotting coordinates in a grid.
Read and plot points on the full coordinate grid (all four quadrants).
Solve problems with coordinates.
Draw and translate simple shapes on the coordinate plane, and reflect them in the axes.

Year 5
Understand degrees as a unit of measure for a turn.
Classify angles as right, acute, obtuse or a straight line.
Estimate the size of angles.
Measure angles up to 180 degrees using a protractor.
Draw lines and angles accurately using a protractor.
Calculate angles around a point.
Calculate angles on a straight line.
Calculate missing lengths and angles in shapes.
Distinguish between regular and irregular polygons based on reasoning about equal sides and angles.
Identify 3-D shapes, including cubes and other cuboids, from 2-D representations.
Read, plot and solve problems with coordinates
Translate a single point and full shapes using coordinates.
Identify lines of symmetry.
Reflect a shape using horizontal and vertical lines.

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-Finding a part
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- The part-whole model to 10
- Subtraction
- Adding by counting on
- Taking away by counting back
- Sorting into two groups

Year 2
-Fact families – addition and subtraction bonds to 20
- Check calculations
- Compare number sentences
- Related facts
- Bonds to 100
- Add and subtract 1s
- 10 more and 10 less
- Add and subtract 10s
- Add a 2 and 1 digit number crossing ten
- Subtract a 1 digit number from a 2 digit number
- Add two 2 digit numbers crossing and not crossing ten
- Subtract a 2 digit number from a 2 digit number crossing and not crossing ten
- Bonds to 100 (tens and ones)
Add three 1-digit numbers

Year 3
-Add and subtract multiples of 100
-Add and subtract 3 digit and 1 digit numbers crossing and not crossing 10 and 100.
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- Add and subtract 100s
-Spot patterns
- Add and subtract 3 digit and 2 digit numbers crossing and not crossing 10 and 100.
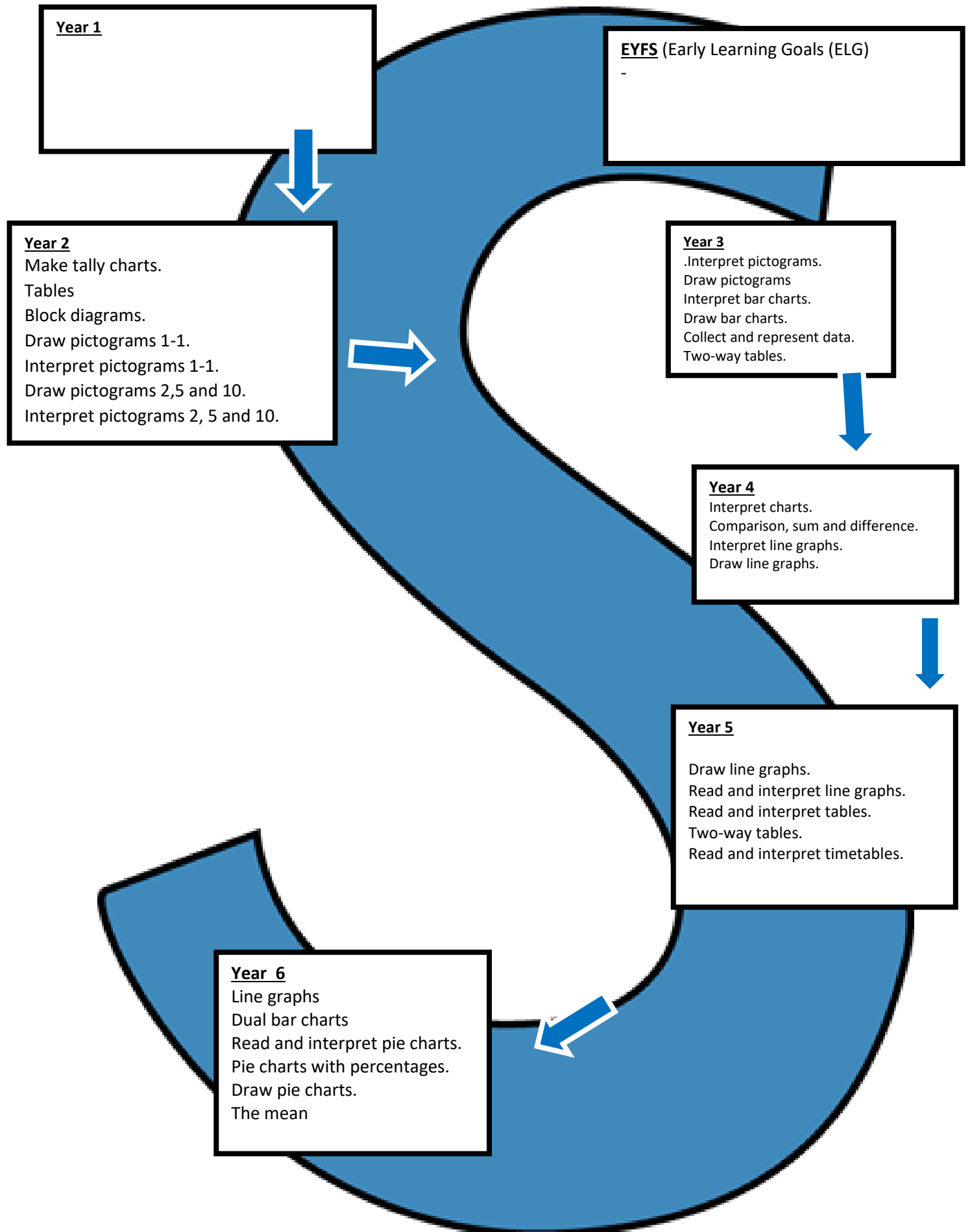- Estimate and check answers

Year 4
- Add and subtract 1s, 10s, 100s and 1000s
- Add two 4 digit numbers – no exchange, one exchange and more than one exchange.
- Subtract two 4 digit numbers – no exchange, one exchange and more than one exchange.
- Efficient subtraction
- Estimate answers
- Checking strategies

Year 6
-Add and subtract integers
Mental calculations and estimation
Reason from known facts

Year 5
-Add whole numbers with more than 4 digits (column method)
- Subtract whole numbers with more than 4 digits (column method)
Round to estimate and approximate
Inverse operations
Multi-step problems

Statistics – S Plan

LAKESIDE PRIMARY ACADEMY

Year 1

EYFS (Early Learning Goals (ELG)
-

Year 2
Make tally charts.
Tables
Block diagrams.
Draw pictograms 1-1.
Interpret pictograms 1-1.
Draw pictograms 2,5 and 10.
Interpret pictograms 2, 5 and 10.

Year 3
.Interpret pictograms.
Draw pictograms
Interpret bar charts.
Draw bar charts.
Collect and represent data.
Two-way tables.

Year 4
Interpret charts.
Comparison, sum and difference.
Interpret line graphs.
Draw line graphs.

Year 5

Draw line graphs.
Read and interpret line graphs.
Read and interpret tables.
Two-way tables.
Read and interpret timetables.

Year 6
Line graphs
Dual bar charts
Read and interpret pie charts.
Pie charts with percentages.
Draw pie charts.
The mean

Place Value – S Plan

EYFS
Counting to 1, 2 and 3.
Counting to 4.
Counting to 5.
Compare quantities of identical and non-identical objects.
Counting to 6, 7 and 8.
Counting to 9 and 10.
Comparing groups up to 10.
Length, height and distance.
Weight.
Counting to and from 20.
Volume and capacity.

Year 1
Autumn – Within 10
- Sort, count and represent objects
- Count, read and write forwards and backwards from any number 0 to 10
- Count one more and one less
- One-to one correspondence to start to compare groups
- Compare groups using language such as equal, more/greater, less/fewer
- Introduce <, > and = symbols
- Compare numbers
- Order groups of objects
- Order numbers
- Ordinal numbers (1st, 2nd, 3rd…)

Autumn – Within 20
- Count forwards and backwards and write numbers to 20 in numerals and words
- Represent numbers 11 to 20 with equipment
- Know how many tens and ones in numbers 11 to 20
- Count one more and one less
- Compare groups of objects
- Compare numbers
- Order groups of objects
- Order numbers

Spring – Within 50
- Count forwards and backwards within 50
- Know how many tens and ones in numbers to 50
- Represent numbers to 50 with equipment
- Find one more and one less
- Compare objects within 50
- Compare numbers within 50
- Order numbers within 50
- Count in 2s and 5s

Summer – Within 100
- Count forwards and backwards within 100
- Partition numbers to 100
- Compare and order numbers
- One more and one less

Year 2
- Count objects to 100 and read and write numbers in numerals and words
- Represent numbers to 100
- Represent tens and ones with a part-whole model
- Represent tens and ones using addition
- Represent two digit numbers in a place value chart
- Compare and order objects and numbers

Year 3
- Understand the concept of 100 and count in multiples of 100
- Represent numbers to 1000 using apparatus and pictorially
- Read and write numbers to 1000 in numerals and words
- Estimate and write numbers on a number line
- Find 1, 10 and 100 more or less
- Compare objects and numbers
- Order numbers
- Count in 50s

Year 4
- Round to the nearest 10 and 100
- Count in 1000s
- Represent, understand the value of and partition 4-digit numbers
- Estimate, label and draw numbers on a number line to 10,000
- Find 1000 more or less
- Compare and order 4 digit numbers
- Round to the nearest 1000
- Count in 25s
- Know that negative numbers are numbers below zero and count back through zero
- Explore Roman Numerals to 100

Year 5
- Represent numbers to 10,000
- Round to the nearest 10, 100 and 1000
- Represent, read and write numbers to 100,000
- Compare and order numbers to 100,000
- Round within 100,000
- Read, write and represent numbers to 1,000,000
- Count in powers of 10
- Compare and order numbers to 1,000,000
- Round within a million
- Explore negative numbers and position on a number line
- Explore Roman Numerals to 1000

Year 6
- Read, write and represent number to ten million in different ways.
- Compare and order whole number to ten million
- Round any whole number within ten million
- Continue to explore negative numbers

Muliplication & Division – S Plan

LAKESIDE PRIMARY ACADEMY

EYFS
-Doubling
- Halving and sharing
- Odds and evens

Year 1
- Count in 10s
- Make equal and add equal groups
- Make arrays and doubles
- Make equal groups by grouping and sharing

Year 2
-Recognise, make and add equal groups
- Multiplication sentences using the x symbol
- Multiplication sentences from pictures
- Use arrays
- 2, 5 and 10 times tables
- Make equal groups by sharing and grouping
Divide by 2, 5 and 10

Year 3
-Multiplication – equal groups
- Multiply and divide by 3 and the 3 times-table
- Multiply and divide by 4 and the 4 times-table
- Multiply and divide by 8 and the 8 times-table
- Comparing statements
- Related calculations
- Multiply and divide 2 digits by 1 digit.
- Scaling
- How many ways?

Year 4
-Multiply and divide by 10 and 100.
- Multiply by 1 and 0
- Divide by 1 and itself
- Multiply and divide by 6 and 6 times-table and division facts
- Multiply and divide by 9 and 9 times-table and division facts
-Multiply and divide by 7 and 7 times-table and division facts
- 11 and 12 times- tables
- Multiply 3 numbers
- Factor pairs
- Efficient multiplication
- Written methods
- Multiply and divide 2 and 3 digit numbers by a 1 digit number.
Correspondence problems

Year 5
-Identify multiples and factors
-Prime and square numbers
-Multiply and divide by 10, 100 and 1000
-Multiply 4 digits by 1 digit.
- Multiply 2, 3 and 4 digit numbers by 2 digit numbers
- Divide 4 digits by 1 digit
- Divide with remainders.

Year 6
-Multiply up to a 4 digit number by a 2 digit number
- Short division
- Division using factors
- Long division
- Common factors
- Common multiples
- Primes to 100
- Squares and cubes
-Mental calculations and estimation
-Reason from known facts