



	EYFS	Key Stage One		Key Stage Two			
	30 – 50 months 40 – 60 months Early Learning Goals	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Number	<p><u>Pattern and early number</u></p> <ul style="list-style-type: none"> •Recognise, describe, copy and extend colour and size patterns •Count and represent the numbers 1 to 3 •Estimate and check by counting <p><u>Numbers within 6</u></p> <ul style="list-style-type: none"> •Count up to six objects. •One more or one fewer •Order numbers 1 - 6 <p>•Conservation of numbers within six</p> <p><u>Numbers within 10</u></p> <ul style="list-style-type: none"> •Count up to ten objects •Represent, order and explore numbers to ten •One more or fewer, one greater or less <p><u>Numbers within 15</u></p>	<p><u>Numbers to 10</u></p> <ul style="list-style-type: none"> •Represent, compare and explore numbers within 10 •One more and one less •Doubling and halving <p><u>Numbers to 20</u></p> <ul style="list-style-type: none"> •Identify, represent, compare and order numbers to 20 •Doubling and halving •One more and one less <p><u>Numbers to 50</u></p> <ul style="list-style-type: none"> •2-digit numbers – represent, sequence, explore, compare. •Count in 2s, 5s and 10s •Describe and complete number patterns 	<p><u>Numbers within 100</u></p> <ul style="list-style-type: none"> •Read, write, represent, partition, compare and order numbers to 100 •Explore patterns including, odds and evens, tens and ones •Represent in different ways •Compare using symbols •Read scales 	<p><u>Number sense and exploring calculation strategies</u></p> <ul style="list-style-type: none"> •Read, write, order and compare numbers to 100 •Calculate mentally using known facts, round and adjust, near doubles, adding on to find the difference •Derive new facts from a known fact <p><u>Place value</u></p> <ul style="list-style-type: none"> •Read, write, represent, partition, order and compare 3-digit numbers •Find 10 and 100 more or less •Round to the nearest multiple of 10 and 100 <p><u>Exploring calculation</u></p>	<p><u>Reasoning with large numbers</u></p> <ul style="list-style-type: none"> •4-digit place value. Read, write, represent, order and compare •Find 10, 100 or 1000 more or less •Round numbers to the nearest 10, 100 or 1000 <p><u>Reasoning with pattern and sequences</u></p> <ul style="list-style-type: none"> •Roman numerals up to 100 •Place value of other number systems •Number sequences and patterns 	<p><u>Reasoning with large whole integers</u></p> <ul style="list-style-type: none"> •Read, write, order and compare numbers up to one million •Round numbers within one million to the nearest multiple of powers of ten •Read Roman numerals up to M <p><u>Problem solving</u></p> <ul style="list-style-type: none"> •Negative numbers and calculating intervals across zero •Calculating the mean •Interpret remainders •Investigate numbers: consecutive, palindromic, multiples 	<p><u>Integers and decimals</u></p> <ul style="list-style-type: none"> •Represent, read, write, order and compare numbers up to ten million •Round numbers, make estimates and use this to solve problems in context •Solve multi-step problems involving addition and subtraction <p><u>Calculation problems</u></p> <ul style="list-style-type: none"> •Understand the use of brackets •Use knowledge of the order of operations to carry out calculations •Generate and describe linear number sequences

Number

- Count up to 15 objects and recognise different representations
- Order and explore numbers to 15
 - One more or fewer

Numbers within 20

- Count up to 10 objects
- Represent, order and explore numbers to 15
 - One more or fewer

Depth of Numbers within 20

- Explore numbers and strategies
- Recognise and extend patterns
- Apply number, shape and measures knowledge
 - Count forwards and backwards

Numbers beyond 20

- One more one less
- Estimate and count
- Grouping and sharing

Numbers 50 to 100 and beyond

- Read, write, represent, compare and order numbers to 100
- One more / fewer, ten more / fewer
- Identify number patterns

strategies and place value

- Add and subtract mentally
- Find 10, 100 and 1000 more or less
- Order and compare beyond 1000
- Round numbers

- Express missing number problems algebraically
- Solve equations with unknown values

Addition and Subtraction

Addition and subtraction within 6

- Explore zero
- Explore addition and subtraction

Addition and subtraction within 10

- Explore addition as counting on and subtraction as taking away

Addition and subtraction within 20

- Commutativity
- Explore addition and subtraction
- Compare two amounts
- Relationship between doubling and halving

Addition and subtraction within 10

- Represent and explain addition and subtraction
 - Commutativity

- Addition and subtraction facts

Addition and subtraction within 20

- Represent and explain addition and subtraction strategies including 'Make Ten'
- Use known facts to add and subtract

- Model, explain and choose addition and subtraction strategies

- Illustrate, explain and link addition and subtraction with equations

- Apply 'Make Ten' strategy

- Use language to quantify and compare difference

Addition and Subtraction

- Explore addition and subtraction involving 2-digit numbers and ones
- Represent and explain addition and subtraction with regrouping
- Investigate number bonds within 20

Addition and Subtraction of 2-digit Numbers

- Read, write, represent, partition, compare and order numbers to 100

- Explore patterns including, odds and evens, tens and ones

- Illustrate, represent and explain addition and subtraction involving regrouping including 'Make Ten', 'Round and adjust' and near doubles strategies

Word Problems

- Introduction to bar models as a representation

- Create, label and sketch bar models

Calculation Strategies

- Apply addition and subtraction strategies to solve equations

- Illustrate and explain addition and subtraction using column method

Addition and subtraction

- Develop and use a range of mental calculation strategies
- Illustrate and explain formal written methods – column method

Addition and subtraction

- Select appropriate strategies to add and subtract
- Illustrate and explain appropriate addition and subtraction strategies including column method with regrouping

Integer addition and subtraction

- Use rounding to estimate
- Use a range of mental calculation strategies to add and subtract integers
- Illustrate and explain the written method of column addition and subtraction
 - Select efficient calculation strategies
- Calculating with whole numbers and decimals
 - Mental strategies to add and subtract involving decimals
 - Formal written strategies to add, subtract and multiply involving decimals
 - Multiply and divide by 10, 100 and 1000 involving decimals
 - Derive multiplication facts involving decimals

Multiplication and Division

Grouping and sharing

- Counting and sharing in equal groups
- Grouping into fives and tens
- Relationship between grouping and sharing

Doubling and halving

- Doubling and halving
- Relationship between

Multiplication and division

- Share equally into groups
 - Doubling
 - Link halving to fractions
- Add equal groups
- Explore arrays

2, 5 and 10

- Calculate the times tables of 2, 5, and 10 by skip counting
- Relate the 2 times table to doubling
 - Explore representations of multiplication and division
- Commutativity

3 and 4

- Multiplication and division facts for 3 and 4
- Relate 4 times table to doubling the 2 times tables
- Describe, interpret and represent using arrays and bar models
- Recognise inverse relationship

Multiplication and Division

- Multiplication and division facts for 2, 3, 4, 5, 6, 8 and 10
 - Multiplicative structures: equal groups/parts, change and comparison, correspondence problems
- Relationships: commutativity and inverse

Deriving Facts

- Multiply and divide by 10 and 100
- Multiply a 2-digit number by 2, 3, 4, 5 and corresponding division situations
- Divide 2-digit by a 1-digit

Securing multiplication and division

- Recall and use multiplication and division facts for 6 and 8 times table

Multiplication and division

- Distributive property including multiplying three 1-digit numbers
 - Mental multiplication and division strategies using place value and known and derived facts
- Short multiplication and division

Securing multiplication facts

- Identify and explore patterns in multiplication tables including 7 and 9

Multiplication and division

- Identify multiples and factors
- Investigate prime numbers
- Multiply and divide by 10, 100 and 1000 (integers)
 - Derived facts
 - Illustrate and explain formal multiplication and division strategies such as short and long
 - Use a range of mental calculation strategies

Calculating with whole numbers and decimals

- Mental strategies to add and subtract involving decimals
 - Formal written strategies to add, subtract and multiply involving decimals
- Multiply and divide by 10, 100 and 1000 involving decimals
 - Derive multiplication facts involving decimals

Multiplication and division

- Identify and use properties of number, focusing on primes
 - Multiply larger integers and decimal numbers using a range of strategies
- Divide integers by 1-digit and 2-digit numbers representing remainders appropriately
 - Illustrate and explain formal multiplication and division strategies

Fractions, Decimals and Percentages

Fractions

- Identify one half and one quarter of a shape or object
- Find one half and one quarter of a quantity

Fractions

- Part-whole relationships
- Fractions as part of a whole or a whole set
 - Relate to division
- Equivalent fractions

Fractions

- Part-whole relationships
- Fractions as part of a whole or a whole set and as a number
 - Add, subtract, compare and order fractions

Fractions

- Explore different interpretations and representations of fractions
- Equivalent fractions
- Represent fractions greater than one as mixed number and improper fractions
 - Add and subtract fractions with the same denominator including fractions greater than one

Decimals

- Decimal equivalents to tenths, quarters and halves
- Compare and order numbers with same number of decimal places
- Multiply and divide by 10 and 100 including decimals

Fractions and decimals

- Read, write, order and compare decimals
- Round decimals to the nearest whole number
 - Represent, identify, name, write, order and compare fractions (including improper and mixed numbers)
- Calculate fractions of amounts

Fractions and percentages

- Add, subtract fractions with denominators that are multiples of the same number
- Multiply fractions (and mixed numbers) by a whole number
- Explore percentage, decimal, fractions equivalence

Fractions

- Deepen understanding of equivalence
- Order, simplify and compare fractions, including those greater than one
- Recall equivalence between common fractions and decimals
 - Find decimal quotients using short division
 - Add and subtract fractions

Fractions

- Represent multiplication involving fractions
 - Multiply two proper fractions
- Divide a fraction by an integer

Percentage and statistics

- Calculate and compare percentages of amounts
 - Connect percentages with fractions
- Explore the equivalence of fractions, decimals and percentages
 - Calculate the mean
- Construct and interpret lines graphs and pie charts
 - Compare pie charts

Proportion problems

- Use fractions to express proportion
- Identify ratio as a relationship between quantities and as a scale factor
 - Unequal sharing involving ratio

Measures	<p><u>Measures</u></p> <ul style="list-style-type: none"> • Estimate, order compare, discuss and explore capacity, weight and lengths • Describe capacities • Compare volumes • Compare weights • Estimate, compare and order lengths 	<p><u>Length and mass</u></p> <ul style="list-style-type: none"> • Compare and measure lengths and mass using cm and kg • Doubling and halving <p><u>Capacity and volume</u></p> <ul style="list-style-type: none"> • Compare capacities, volumes and lengths • Explore litres • Apply understanding of fractions to capacity 	<p><u>Length</u></p> <ul style="list-style-type: none"> • Draw and measure lengths in centimetres • Use $<$, $>$ and $=$ to compare and order lengths in metres and centimetres <p><u>Capacity and Volume</u></p> <ul style="list-style-type: none"> • Read and measure temperature • Estimate, measure and understand litres and millilitres • Compare and order capacities <p><u>Mass</u></p> <ul style="list-style-type: none"> • Weigh and compare masses in kilograms and grams 	<p><u>Measures</u></p> <ul style="list-style-type: none"> • Read scales with different intervals when measuring mass and volume • Weigh and compare masses and capacities with mixed units • Estimate mass and capacity 	<p><u>Solving measures and money problems</u></p> <ul style="list-style-type: none"> • Convert units of measure • Select appropriate units to measure • Use strategies to investigate problems: trial and improvement, organising using lists and tables, working systematically 	<p><u>Converting units of measure</u></p> <ul style="list-style-type: none"> • Convert between metric units of length, mass and capacity and units of time • Know and use approximate conversion between imperial and metric <p><u>Volume</u></p> <ul style="list-style-type: none"> • Use cube numbers and notation • Estimate volume • Convert units of volume 	<p><u>Decimals and measures</u></p> <ul style="list-style-type: none"> • Use, read, write and convert between standard units of measures; length, mass, time, money and volume as well as imperial units • Calculate the area of parallelograms and triangles • Calculate, estimate and compare the volume of cuboids
Statistics			<p><u>Graphs</u></p> <ul style="list-style-type: none"> • Represent and interpret: pictograms, block diagrams, tables and tally charts. 	<p><u>Graphs</u></p> <ul style="list-style-type: none"> • Collect, interpret and present data using charts and tables 	<p><u>Discrete and continuous data</u></p> <ul style="list-style-type: none"> • Read, interpret and construct pictograms, bar charts and time graphs • Compare tables, pictograms and bar charts 	<p><u>Line graphs and timetables</u></p> <ul style="list-style-type: none"> • Complete, read and interpret data presented in line graphs • Read and interpret timetables including calculating intervals 	<p><u>Percentage and statistics</u></p> <ul style="list-style-type: none"> • Calculate the mean • Construct and interpret lines graphs and pie charts • Compare pie charts

Time	<p><u>Calendar and time</u></p> <ul style="list-style-type: none"> •Days of the week, seasons • Sequence daily events 	<p><u>Time</u></p> <ul style="list-style-type: none"> •Read, write and tell the time to o'clock and half past on analogue clock •Sequencing daily activities •Whole and half turns linked to time 	<p><u>Time</u></p> <ul style="list-style-type: none"> •Tell the time on an analogue clock: quarter past, quarter to and five minute intervals •Calculate durations of time in minutes and seconds •Sequence daily events •Minutes in an hour and hours in a day 	<p><u>Time</u></p> <ul style="list-style-type: none"> •Tell, record, write and order the time analogue and digital •12-hour, a.m., p.m. •Measure, calculate and compare durations 	<p><u>Time</u></p> <ul style="list-style-type: none"> •Analogue to digital, 12- hour and 24-hour • Convert between units of time 		
	Money	<p><u>Money</u></p> <ul style="list-style-type: none"> •Coin recognition and values •Combinations to total 20p •Change from 10p 	<p><u>Money</u></p> <ul style="list-style-type: none"> •Name coins and notes and understand their value •Represent the same value using different coins •Find change 	<p><u>Money</u></p> <ul style="list-style-type: none"> •Recognise coins and notes •Use £ and p accurately •Add and subtract amounts •Calculate change 			