Maths

Scheme of work

2023/24

Aims and Objectives

- To ensure greater consistency and continuity in planning, teaching and assessment of maths across all year groups.
- To enable children to have equal access to mathematics and to experience success in their work
- To promote enjoyment and enthusiasm for learning through practical activity, exploration and discussion
- To enable independent and group work for all children
- To allow children to develop transferable skills and informed opinions
- To develop, maintain and stimulate children's curiosity, interest and enjoyment in maths
- To develop children's familiarity with appropriate mathematical concepts, principles, methods and vocabulary
- To develop children's understanding of maths in its widest context and to see how it relates to themselves outside of school
- To develop the ability to solve problems through decision-making and reasoning in a range of contexts
- To promote confidence and competence with numbers and the number system
- To develop a practical understanding of the ways in which information is gathered and presented
- To explore features of shape and space
- To develop measuring skills in a range of contexts
- To understand the importance of maths in everyday life
- Above all, to raise standards through fun and enjoyment.

Maths
Scheme of Work

Teaching
Maths

Teaching Maths

We will personalise the learning for children within: Foundation Stage, Key Stage 1, Lower Key Stage 2 and Upper Key Stage 2

Lessons will need appropriate timetabling within these phases to allow teaching to meet children's specific needs

All children should be provided with the opportunity to participate in a daily mathematics lesson

Children should also have access to:

A 'five a day' programme

Intervention programmes should run throughout school as appropriate to the needs of the children:

Maths should be enhanced throughout school using opportunities for cross-curricular links, particularly, but not exclusively during our application of skills weeks.

Maths should permeate all areas of provision within the Foundation Stage and Key Stage 1

There should be a high profile of maths in the classroom using display, practical apparatus and activities, cross curricular links and literature to promote maths at every level

Emphasis must be given to the teaching of practical skills alongside knowledge

Planning should reflect formative assessment

Evidence should be accrued from observational assessment to provide valuable summative judgements

Moderation will take place regularly to ensure continuity and progression throughout school

Using the 'Five a Day' programme

The Five a Day programme will take place at the beginning of the daily maths lesson.

Children should be provided with 5 questions each day. Four of these should relate to the four operations and one further question which should relate to something previously taught

This programme should run from Foundation Stage to Year 6 and be matched to the level of the children.

Foundation Stage and Key Stage 1 may complete this in whole class or groups, orally, on whiteboards or more formally on paper when the teaching of number masters is not taking place.

Key Stage 2 children will all record their work using appropriate methods in a 'five a day' book.

Teachers or teaching assistants should then encourage children to verbalise their findings, methods and solutions

Mastering Number

KS1 children will work in small groups to follow the Mastering number programme of study each day.

Teachers and teaching assistants will lead a small group and build upon the children having a fundamental understanding of number.

There will be a focus on understanding of vocabulary and all staff will model the correct use of it in each session. Stem sentences are also used to embed learning and understanding of number facts and relations.

Sessions will be very practical in nature to help children develop their ability to manipulate numbers.

Maths
Scheme of Work

Long Term Plan

Year Foundation Stage	Maths Long Term Planning Grid					2023/2024
Week	Autumn 1 8 weeks	Autumn 2 7 weeks	Spring 1 5 weeks	Spring 2 5 weeks	Summer 1 7 weeks	Summer 2 7 weeks
1	Number names Nursery rhymes	Counting	Subtraction through taking objects away	Number bonds	2d/3d shapes	Estimate a number of objects
2	Money	Addition by combining two groups	Counting, writing and ordering numbers	Sorting	Days of the week	Ordinal number
3	Counting	Finding one more / one less than	Money	Measures	Problem solving involving measures	2D Shape / 3D Shape
4	Addition and Subtraction rhymes	Sorting	Finding one more / one less than	Creating patterns	Measures/ distance/ capacity	Doublng/ halving
5	Comparing quantities / sets of objects	Ordering numbers	Problem solving & Position	Measures/ distance/ capacity	Time	Preparation for y1
6	Number recognition	Measures/ distance/ capacity	Make sets with the same number	Money		Transition
7	Number sequences	Number sequences	Identifying Patterns			Transition
8						

Year 1	Maths Long Term Planning Grid					2023/2024
Week	Autumn 1 8 weeks	Autumn 2 7 weeks	Spring 1 5 weeks	Spring 2 5 weeks	Summer 1 7 weeks	Summer 2 7 weeks
1	Place value	Measures Length	Number Patterns / Place value	Money	Problem Solving Using addition and subtraction	Place value to 100
2	Place value	2d shapes	Time	Fractions	Measures Height	Money week
3	Number bonds to 10	Position/direct ion	Addition	Place Value	Measures Problem Solving using Weight, Length, Capacity	AOS
4	Addition	Place value - More / Less than	Understanding Shape 2D Shapes	Multiplication Counting in 2s, 5s and 10s.	Place Value to 100	Position and direction
5	Subtraction	Addition Money	3d shapes	Application of skills week	Measures Time	Preparation for year 2
6	Subtraction	AOS	Subtraction	Volume		Transition
7	Money	Measures Weight	Division			Transition
8						

Year 2	Maths Long Term Planning Grid					2023/2024
Week	Autumn 1 8 weeks	Autumn 2 7 weeks	Spring 1 5 weeks	Spring 2 5 weeks	Summer 1 7 weeks	Summer 2 7 weeks
1	Place Value Partitioning numbers	Handling data Pictograms	Time	Money Division with remainders	Problem Solving Four operations	Money Four operations
2	Addition	Multiplication	Measures Time	Handling data Venn Diagrams and block graphs	Measures Problem Solving using Weight, Length, Capacity	Problem Solving Four operations
3	Subtraction	Addition	Money Multiplication	Multiples & Fractions	Measures Time	Understanding Shape Angles
4	More / Less than using signs < and >	Money Subtraction	Division	Measures Capacity	Application of skills week	Handling data Problem solving
5	Money	Measures Weight	Fractions	Application of skills week	Position and direction	Preparation for year 3
6	Number bonds	Application of skills week	Understanding Shape 2D / 3D shapes	Estimation / rounding		Transition
7	Measures Length	Understanding Shape/ Symmetry	Position and direction			Transition
8						

Year 3	Maths Long Term Planning Grid					2023/2024
Week	Autumn 1 8 weeks	Autumn 2 7 weeks	Spring 1 5 weeks	Spring 2 5 weeks	Summer 1 7 weeks	Summer 2 7 weeks
1	Partitioning numbers < and >	Multiplication	Doubles / Halves	Measures Capacity	Problem Solving Using numbers, images and diagrams	Money Two step problem solving
2	Addition	Division	Money One step problem solving	Money One step problem solving	Subtraction	Problem Solving Using numbers, images and diagrams
3	Measures Weight	Understanding Shape Symmetry 2D / 3D Shape	Measures Time - analogue	Addition	Fractions	Understanding Shape Angles
4	Measures Length	Handling data Pictograms and Bar charts	Measures Time - analogue	Handling data Venn Diagrams and Carroll Diagrams	Application of skills week	Understanding Shape Compass direction
5	Subtraction	Money Four operations	Length and perimeter	Application of skills week	Fractions	Preparation for year 4
6	Measures Time – digital	Application of skills week	Fractions	Money Two step problem solving		Transition
7	Measures Time – digital	Number bonds	Statistics			Transition
8						

Year 4	Maths Long Term Planning Grid					2023/2024
Week	Autumn 1 8 weeks	Autumn 2 7 weeks	Spring 1 5 weeks	Spring 2 5 weeks	Summer 1 7 weeks	Summer 2 7 weeks
1	Number Patterns / Place value	Money Four operations	Multiplication	Division	Problem Solving Using numbers, images and diagrams	Money Two step problem solving
2	Addition	Fractions	Money One step problem solving	Ratio / proportion	Decimals	Understanding Shape Compass direction / Co-ordinates Problem Solving Using numbers, images and diagrams
3	Measures Weight/length	Understanding Shape Symmetry 2D / 3D Shape	Measures Capacity	Addition / Subtraction	Fractions	Understanding Shape Angles
4	Measures Length	Handling data Pictograms and Bar charts	Measures Time Problem solving	Handling data Venn Diagrams and Carroll Diagrams	Application of skills week	Area
5	Subtraction	Positive and Negative numbers	Decimals	Application of skills week	Mental multiplication strategies	Preparation for year 5
6	Multiplication	Application of skills week	Fractions	Money Two step problem solving		Transition
7	Division	Number bonds	Understanding Shape Perimeter			Transition
8						

Year 5	Maths Long Term Planning Grid					2023/2024
Week	Autumn 1 8 weeks	Autumn 2 7 weeks	Spring 1 5 weeks	Spring 2 5 weeks	Summer 1 7 weeks	Summer 2 7 weeks
1	Number/ Place Value	Subtraction Rounding and estimating	Multiplication Rounding and estimating	Division Rounding and estimating	Four operations Money Problem Solving	Two step problem solving
2	Addition Rounding and estimating	Four operations	One step problem solving	One step problem solving	Scales	Understanding Shape Angles
3	Measures Conversions	Understanding Shape 2D / 3D Shape Visualisation / nets	Measures Time 24 hour clock Calendars Timetables	Problem Solving	Decimals Multiplication / division	Understanding Shape Perimeter / area
4	Percentages	Handling data Frequency tables, Pictograms, Bar and line graphs	Fractions	Handling data Venn Diagrams, Carroll Diagrams, line graphs	Application of skills week	Co-ordinates, Reflection, translation
5	Partitioning numbers < and >	Positive and Negative numbers	Fractions	Application of skills week	Decimals, percentages and fractions	Preparation for year 6
6	Equivalent fractions	Application of skills week	Decimals, percentages and fractions	Ratio, proportion and probability		Transition
7	Practical skills: measuring lines and angles, symmetry	Mental calculation strategies	Decimals, percentages and fractions			Transition
8						

Year 6	Maths Long Term Planning Grid					2023/2024
Week	Autumn 1 8 weeks	Autumn 2 7 weeks	Spring 1 5 weeks	Spring 2 5 weeks	Summer 1 7 weeks	Summer 2 7 weeks
1	Number/Place value	Multiplication	Ratio and Proportion	Test technique Misconception identification	Problem solving Multi-step, finding all possibilities, finding formula	Measures (application to other areas of the curriculum)
2	Addition	Sequences Formulae	Problem Solving Multi Step	SATS week		
3	Subtraction	Translation Rotation Reflection Coordinates	Time problems			Algebra (application to other areas of maths)
4	Perimeter and Area	Data Handling	Decimals, percentages and fractions	Shape	Algebra	
5	Division	Positive and negative numbers	Application of skills week	Shape	Shape/angles	Transition
6	Fractions	Application of skills week	Angles	Based on assessment gaps	Number	Transition
7	Multi-step problem solving Money	Problem Solving: Reasoning	Problem solving			
8						

Maths
Scheme of Work

Maths
Objectives

Foundation Stage	Maths objectives		2023/2024
Week	Autumn 1 8 weeks	Lesson focus	Mental and Oral
1	Number names Nursery rhymes	Use number language e.g. one, two, three, how many, count etc. Sing nursery rhymes and other counting songs Use pictures and objects to illustrate counting songs	A range of counting songs, games and activities Number to be incorporated in all areas of provision
2	Money	Use 1p and 2p coins Coin recognition Buying items using 1p and 2p coins up to a total of 10p	
3	Counting	Count aloud sets of objects, grouped regularly and irregularly Encourage children to follow number lines	
4	Addition and Subtraction rhymes	Use number language e.g. one, two, three, how many, count etc. Sing songs, play games and role play incorporating addition and subtraction	
5	Comparing quantities / sets of objects	Compare two groups of objects saying when they have the same number Use language such as: same as, less or fewer	
6	Number recognition	Add numerals to all areas of provision Introduce the concept of zero Use number stories to illustrate	
7	Number sequences	Forward number sequences Backward number sequences	

Foundation Stage	Maths objectives		2023/2024
Week	Autumn 2 7 weeks	Lesson focus	Mental and Oral
1	Counting	Count aloud sets of objects, grouped regularly and irregularly Encourage children to follow number lines	
2	Addition by combining two groups	Combine two groups of objects Model finding a solution through counting / drawing Encourage children to record through drawing	A range of counting songs, games and activities Number to be incorporated in all areas of provision
3	Finding one more / one less than	Number songs, rhymes and stories Use questioning techniques to answer how many Use pictures and objects to illustrate	
4	Sorting	Sort sets of objects using given criteria Encourage children to sort independently using own criteria Give children the opportunity to explain choices	
5	Ordering numbers	Ask children what comes before or after a given number Place numbers on a given numberline	
6	Measures	Make comparisons between capacity/distance.	
7	Number sequences	Forward number sequences Backward number sequences	

Foundation Stage	Maths objectives		2023/2024
Week	Spring 1 5 weeks	Lesson focus	Mental and Oral
1	Subtraction through taking objects away	Count a given set of objects Pose questions and demonstrate taking away Model process	
2	Counting, writing and ordering numbers	Count given sets of objects Practice recording using a range of media Order numbers on a numberline Indicate 1-10 using fingers	A range of counting songs, games and activities Number to be incorporated in all areas of provision
3	Money	Use 1p, 2p and 5p coins Coin recognition Buying items using 1p, 2p and 5p coins up to a total of 10p	
4	Finding one more / one less than	Number songs, rhymes and stories Use questioning techniques to answer how many Use pictures and objects to illustrate	
5	Problem solving & Position	Reinforce previous learning in different contexts Explore position of objects e.g. in, on, under (refer to vocabulary sheet)	
6	Make sets with the same number	Investigate sets Recognise differences in quantity – more, less, same / equal	
7	Identifying Patterns	Recognise simple number patterns Copy given patterns	

Foundation Stage	Maths objectives		2023/2024
Week	Spring 2 5 weeks	Lesson focus	Mental and Oral
1	Number bonds	Investigate number bonds	A range of counting songs, games and activities Number to be incorporated in all areas of provision
2	Sorting	Sort sets of objects using given criteria Encourage children to sort independently using own criteria Give children the opportunity to explain choices	
3	Measures	Investigate measures in context using practical ideas e.g will the bear fit in the bed?	
4	Creating patterns	Follow a given sequence / pattern Create own patterns	
5	Measures	Compare capacity and length	
6	Money	Use 1p, 2p, 5p and 10p coins Coin recognition Buying items using 1p, 2p, 5p and 10p coins up to a total of 20p	

Foundation Stage	Maths objectives		2023/2024
Week	Summer 1 7 weeks	Lesson focus	Mental and Oral
1	2d/3d shapes	Shape matching within areas of provision Introduce mathematical names for 2D and 3D shapes Recognition of 2D and 3D shapes	A range of counting songs, games and activities Number to be incorporated in all areas of provision
2	Days of the week	Use days of week in practical contexts Use terms yesterday, today and tomorrow Relate to everyday events	
3	Problem solving involving measures	Make direct comparisons between two lengths, heights, amounts (weight / capacity)	
4	Measures	Compare capacity and length	
5	Time	Introduce the concept of time Investigate clocks – numbers, hands Introduce o'clock	

Foundation Stage	Maths objectives		2023/2024
Week	Summer 2 7 weeks	Lesson focus	Mental and Oral
1	Estimate a number of objects	Encourage children to estimate in a range of contexts Use number names when estimating e.g. have you got enough to give me five?	A range of counting songs, games and activities Number to be incorporated in all areas of provision
2	Ordinal number	Use ordinal numbers to explain position – focusing on teen value	
3	2D Shape / 3D Shape	Shape matching within areas of provision Introduce mathematical names for 2D and 3D shapes Recognition of 2D and 3D shapes	
4	Doubling/ halving	Finding double and half of a 1 digit number	
5,6 & 7	Transition		

Year 1	Maths objectives		2023/2024
Week	Autumn 1 8 weeks	Lesson focus	Mental and Oral
1	Number Patterns / place value	Recognise and create simple patterns in shape Recognise and create simple patterns in number Apply a given pattern Explain a given pattern Order numbers Place numbers on a given number track / numberline	Value of digits in a 2 digit number Simple addition within 20
2	Place value	Recognise and create simple patterns in shape Recognise and create simple patterns in number Apply a given pattern Explain a given pattern Order numbers Place numbers on a given number track / numberline	Value of digits in a 2 digit number Simple addition within 20
3	Number bonds to 10	Find number bonds to 10 Record appropriately Work out the corresponding subtraction facts	Simple subtraction within 20
4	Addition	Using numberlines to carry out simple addition within 20 Use vocabulary related to addition and =	Read / write numbers to 20 in numerals and words Coin recognition
5	Subtraction	Using numberlines to carry out simple subtraction within 20 Use vocabulary related to subtraction and =	Value of digits in a 2 digit number
6	Subtraction	Using numberlines to carry out simple subtraction within 20 Use vocabulary related to subtraction and =	Compare and order numbers
7	Money	Coin recognition – 1p, 2p, 5p, 10p Addition and subtraction using coins Paying and giving change	Counting on starting from a given number

Year 1	Maths objectives		2023/2024
Week	Autumn 2 7 weeks	Lesson focus	Mental and Oral
1	Measures Length	Make comparisons between objects Measure objects using a ruler from '0' Order objects according to length Use centimetres and metres Use vocabulary related to length Use <, > and = to record results	Using the = sign Read / write numbers to 20
2	2d shapes	Recognise and name 2d shapes Sort 2d shapes	Count, read and write numbers to 100 Read / write numbers to 20 in numerals and words
3	Understanding Shape Positional Language	Use vocabulary related to position / direction Describe the position of objects Follow instructions relating to position / direction including left / right / whole, half and 3 /4 turns.	Compare and order numbers
4	More / Less than	Identify a number which is one more than / one less than a given number Identify a number which is ten more than / ten less than a given number	Count objects practically to 20 Estimate number of objects
5	Money	Coin recognition 1p, 2p, 5p, 10p, 20p, 50p, £1, £2 Addition and subtraction using coins Record appropriately Paying and giving change	Compare and order numbers to 100, count forwards and backwards to and across 100 from any given number
6	Application of skills week		Compare and order numbers to 100, count forwards and backwards to and across 100 from any given number
7	Measures Weight	Make comparisons between objects Weigh objects using a simple balance Order objects using weight / mass Introduce 'kilogram' Use vocabulary related to weight Use <, > and = to record results	Using the = sign Read / write numbers to 20

Year 1	Maths objectives		2023/2024
Week	Spring 1 5 weeks	Lesson focus	Mental and Oral
1	Number Patterns / place value	Recognise and create simple patterns in shape Recognise and create simple patterns in number Apply a given pattern Explain a given pattern Order numbers Place numbers on a given number track / numberline	Value of digits in a 2 digit number Simple addition using single digit numbers
2	Measures Time	Use vocabulary related to time including hours, minutes, seconds, quicker, slower, earlier, later Know hour and minute hand. Understand clockwise direction Tell the time using o'clock Sequence events in chronological order using language such as before, after, first, today, yesterday, tomorrow, morning, evening.	Recall number bonds to 5 To order objects according to appropriate measure i.e. weight, length and capacity
3	Addition	Add a one digit number to a multiple of ten Add a multiple of ten to a one digit number Find that addition can be done in any order Record using + and = Record in different ways e.g. 7 = 5 + 2	Put familiar events in chronological order
4	Understanding Shape 2D Shape	Name and describe common 2D shapes including triangles (various kinds), rectangles, squares and circles Describe properties of 2D shapes that you can see or visualise using related vocabulary Create 2D shape patterns	Recall the doubles of numbers to at least 10
5	Understanding Shape 3D Shape	Name and describe simple 3d shapes.	Simple subtraction within 20 Compare and order numbers Counting on and back starting from a given number
6	Subtraction	Subtract a one digit number from a one / two digit number Subtract a multiple of 10 from a 2 digit number Record using – and = Use different formats such as 7 = 16-9	Order the days of the week / months of the year and years
7	Division	Finding half of a given number Find equal groups by sharing	Recall the doubles of numbers to at least 10

Year 1		Maths objectives	2023/2024
Week	Spring 2 5 weeks	Lesson focus	Mental and Oral
1	Money	Coin recognition 1p, 2p, 5p, 10p, 20p, 50p, £1, £2 Addition and subtraction using coins Introduce the difference between two amounts Paying and giving change	Tell the time using o'clock
2	Fractions	Find a half and a quarter of shapes and amounts.	Recall number bonds to 10
3	Place value	Numbers to 50 Tens and ones Represent numbers to 50 One more one less Compare objects within 50 Compare numbers within 50 Order numbers within 50	Tell the time using o'clock
4	Multiplication/ place value	Count in 2s Count in 5s Group objects equally	Recall the doubles of numbers to at least 10
5	Application of skills		To order objects according to appropriate measure i.e. weight, length and capacity
6	Volume	Introduce capacity and volume Measure capacity Compare capacity	Simple subtraction within 20 Compare and order numbers Counting on and back starting from a given number

Year 1		Maths objectives	2023/2024
Week	Summer 1 7 weeks	Lesson focus	Mental and Oral
1	Problem Solving Using addition and subtraction	Use a range of strategies to solve problems Include addition, subtraction, difference and related vocabulary	Tell the time using o'clock
2	Measures Height	Measure and compare heights of objects.	Recall the doubles of numbers to at least 20
3	Measures problem solving using weight, length, capacity	Solve problems comparing weight, length and capacity.	Simple subtraction within 20 Compare and order numbers Counting on and back starting from a given number
4	Place value to 100	Counting to 100 Partitioning numbers Comparing numbers (1) Comparing numbers (2) Ordering numbers One more, one less	Recall number bonds to 10
5	Measures Time	Before/after Dates Tell the time to the hour/half past Write times and compare times.	To order objects according to appropriate measure i.e. weight, length and capacity

Year 1		Maths objectives	2023/2024
Week	Summer 2 7 weeks	Lesson focus	Mental and Oral
1	Place value to 100	Counting to 100 Partitioning numbers Comparing numbers (1) Comparing numbers (2) Ordering numbers One more, one less	Value of digits in a 2 digit number
2	Money	Money week 2020	
3	AOS		
4	Position and direction	Describe turns including, whole, half, quarter and three quarter turn. Use left, right, forwards and backwards to describe directions.	Recall the doubles of numbers to at least 10
5, 6 and 7	Transition		

Year 2	Maths objectives		2023/2024
Week	Autumn 1 8 weeks	Lesson focus	Mental and Oral
1	Place value / partitioning numbers	Recall what each digit in a 2 digit number represents including multiples of 10 Partition 2 digit numbers in different ways Record appropriately	2, 5 and 10 times tables
2	Addition	Add 1s. 10 more, 10 less. Add 10s.	Number bonds to 20
3	Subtraction	Subtract a one digit number from a multiple of ten Subtract a one digit number from a two digit number Mentally carry out subtraction Record using – and = Use inverse to find missing numbers, including solving problems Record in different ways e.g. 20 = 22-2	Counting back from 100.
4	Multiplication	Recognise equal groups. Make equal groups. Multiplication using the x symbol. Multiplication sentences. Use arrays 2 times table.	Counting 2.
5	Money	Count money Pence/pound/notes/coins Select money Make the same amount Compare money Find totals	Count in 5s.
6	Number bonds	Find number bonds to 20 Record appropriately Work out the corresponding subtraction facts	Tell the time using o'clock and half past
7	Measures Length	comparisons between objects Measure objects using appropriate equipment (cm and m) Draw and measure lines to the nearest cm Read scales using intervals Use vocabulary related to length / height including e.g. twice as high, $\frac{1}{2}$ as wide	Counting up to 100 Read and write numbers up to 100

Year 2	Maths objectives		2023/2024
Week	Autumn 2 7 weeks	Lesson focus	Mental and Oral
1	Handling data Pictograms	Record information in lists / tables Present the information using pictures / pictograms (where the picture represents 2, 5 and 10) Interpret information from a given pictogram	Doubling of numbers to 10
2	More / Less than using signs < and >	Order 2 digit numbers and position them on a number line (estimate position of numbers) Use the < and > and = signs to compare numbers up to 100 (used in different contexts including measures) Count in fractions on a numberline up to 10 (using $\frac{1}{4}$, and then both $\frac{1}{2}$ and 2/4 so that children become familiar with their equivalence.	Count up to 100 in 2's, 5's and 10's
3	Addition	Add a one digit number to a multiple of ten Add a multiple of ten to a one digit number Mentally carry out addition Record using + and = Record in different ways e.g. 17 = 10+ 7 Use inverse to find missing numbers Add 3 1 digit numbers (add in any order)	Counting in multiples of 2,5,10 Introduce the term 'multiplication'
4	Money Subtraction	Subtraction using coins including pounds and pence Totalling amounts, pay and give change Use correct notation to record money Problem solving Find the sum and difference, count up / count back method	Read and write 2 digit numbers using numerals and words
5	Measures Weight	Make comparisons between objects Weigh objects using appropriate equipment Weigh using 'grams' and 'kilograms' Read scales using intervals Use vocabulary related to weight	Read and write 3 digit numbers using numerals and words
6	Application of skills week		Counting up to 100 Read / write numbers up to 100 Patterns in number including spatial representations
7	Understanding Shape Symmetry	Identity reflective symmetry in 2D shapes and patterns	Properties of 2D shapes

Year 2	Maths objectives		2023/2024
Week	Spring 1 5 weeks	Lesson focus	Mental and Oral
1	Time	Use vocabulary related to time – seconds, minutes, hours Compare and sequence intervals of time Tell the time using o'clock, half past, quarter past, quarter to Know relationships between hours/days, minutes/hours. Find intervals between given times	Tell the time using o'clock and half past
2	Money Multiplication	Multiplication using coins including pounds and pence Totalling amounts, pay and give change Use correct notation to record money Problem solving	Days of the week, months of the year
3	Measures Time	Use vocabulary related to time – seconds, minutes, hours Compare and sequence intervals of time Tell the time using o'clock, half past, quarter past, quarter to Know relationships between hours/days, minutes/hours. Find intervals between given times	Tell the time to the nearest 5 minutes.
4	Understanding Shape 2D/3D Shape	Name, describe 2D and 3D shapes including various triangles, rectangles, squares, circles, pentagons, hexagons, cubes, cuboids, cylinders, spheres, pyramids, quadrilateral, polygon and prisms. Describe properties of 2D or 3D shapes that you can see or visualise using related vocabulary Create 2D and 3D shapes and label them using shape names	Finding objects that match given lengths / weigh more or less than
5	Position and direction	Describe position Describe movement Describe turns Describe movement and turns Making patterns with shapes	Properties of 2D shapes
6	Division	Use practical activities to share objects into equal groups Use division sign and = Use vocabulary related to division	Properties of 3D shapes including vertices
7	Position and direction	Describe position Describe movement Describe turns Describe movement and turns Making patterns with shapes	Properties of 2D shapes

Year 2	Maths objectives		2023/2024
Week	Spring 2 5 weeks	Lesson focus	Mental and Oral
1	Money Division with remainders	Division using coins including remainders Calculating the cost of individual items Use correct notation to record money Problem solving	Name the shape 'visualisation' using related vocabulary
2	Handling data Venn Diagrams and block graphs	Sort and group objects using Venn diagrams and record data in lists or tables Create block graphs using ICT Interpret information from given Venn diagrams / block graphs	Problem solving with money
3	Multiples & Fractions	Count on / back in 1's, 2's, 3's, 5's and 10's up to 100 Find pairs of multiples of 10 which total 100 Revise finding a half and a quarter of a given shape, amount or set of objects Find three quarters of a given shape, amount or set of objects	Read and write 3 digit numbers, using numerals and words. Answer multiple choice questions giving reasons for chosen answer and explaining why the others are incorrect
4	Measures Capacity	Make comparisons between containers Measure capacity using appropriate equipment (litres and millilitres) Read scales using intervals – reading to the nearest unit Use vocabulary related to capacity	Number bonds to 20
5	Application of skills week		Find half and quarter of a shape or amount
6	Estimation / rounding	Estimate a number of objects Round two digit numbers to the nearest 10	Multiplies of 2, 5 and 10 and associated division facts

Year 2	Maths objectives		2023/2024
Week	Summer 1 7 weeks	Lesson focus	Mental and Oral
1	Problem Solving Four operations	Use a range of strategies to solve problems Include addition, subtraction, multiplication, division, inverse and related vocabulary	Answer multiple choice questions giving reasons for chosen answer and explaining why the others are incorrect
2	Measures Problem Solving using Weight, Length, Capacity	Use a range of strategies to solve problems Include addition, subtraction, multiplication and division and related vocabulary in the context of weight, length or capacity Allow children to make choices with regards to appropriate equipment	Tell the time using o'clock, half past, quarter past, quarter to
3	Measures Time (including digital time)	Use vocabulary related to time – seconds, minutes, hours Tell the time using o'clock, half past, quarter past, quarter to, Write the time to 5 and 10 minutes (draw hands on clock faces to show these times) Find intervals between given times across the hour	Positional language
4	Application of skills week		Number bonds to 20
5	Fractions	Revise finding a half and a quarter of a given shape, amount or set of objects – use counting in 3's to support finding a third of shapes, lengths, amounts and sets of objects Find three quarters of a given shape, amount or set of objects Represent $\frac{1}{2}$ as 2/4 Write simple fractions e.g. $\frac{1}{2}$ of 6 = 3 Solve fraction problems	Answer multiple choice questions giving reasons for chosen answer and explaining why the others are incorrect

Year 2	Maths objectives		2023/2024
Week	Summer 2 7 weeks	Lesson focus	Mental and Oral
1	Money Four operations	Money using the four operations Totalling amounts Calculating the cost of individual items Paying and giving change	Find time intervals across the hour
2	Problem Solving Four operations	Use a range of strategies to solve problems Include addition, subtraction, multiplication, division, inverse and related vocabulary Check answers to given problems	Number bonds to 20
3	Understanding Shape Angles	Follow and give instructions involving position, direction and movement Recognise and use whole, half and quarter turns, both clockwise and anti-clockwise Investigate right angles and know that a right angle represents a quarter turn Link with ICT if possible to use programmable robots.	Multiplies of 2, 5 and 10 and associated division facts
4	Handling data Problem solving	Solve a range of problems involving: Pictograms, Venn diagrams, block graphs, lists, tables and diagrams	Answer multiple choice questions giving reasons for chosen answer and explaining why the others are incorrect
5, 6 and 7	Transition		

Year 3	Maths objectives		2023/2024
Week	Autumn 1 8 weeks	Lesson focus	Mental and Oral
1	Partitioning numbers < and >	Partition 3 digit numbers (Use vocabulary: hundreds, tens and units) Use < and > to compare numbers	Counting on and back from a given number; finding 10 or a 100 more than a given number
2	Addition	Use written methods to record addition of two and three digit numbers	Read, write and order 3 digit numbers
3	Measures Weight	Investigate the relationship between kilograms and grams Estimate, use scales to weigh and record Read to the nearest division and half division scales that are numbered or partially numbered Compare/add/subtract measures	Read, write and order 4 digit numbers
4	Measures Length	Investigate the relationship between kilometres and metres, metres and centimetres Estimate, use rulers to measure and record Use given information to draw accurate lines Compare/add/subtract measures	Count on in multiples of 2, 3, 4, 5, 10 and 100 Find 10 or 100 more or less than a given number
5	Subtraction	Use written methods to record subtraction of two and three digit numbers	Partitioning 2 digit numbers
6	Measures Time / analogue /digital	Read the time on a 12 hour analogue / digital clock to the nearest minute Use am/pm morning, afternoon, noon and midnight Record and compare time in terms of seconds, minutes and hours Find intervals between given times Look at different clock faces including those with Roman numerals	Read the time
7	Measures Time / analogue /digital	Read the time on a 12 hour analogue / digital clock to the nearest minute Use am/pm morning, afternoon, noon and midnight Record and compare time in terms of seconds, minutes and hours Find intervals between given times Look at different clock faces including those with Roman numerals	3 and 6 times tables

Year 3	Maths objectives		2023/2024
Week	Autumn 2 7 weeks	Lesson focus	Mental and Oral
1	Multiplication	Consolidate 2, 4 and 8 times tables Comparing statements Related calculations Multiply 2 digits by 1 digit	Add and subtract numbers mentally including: A three digit number and ones A three digit number and tens A three digit number and hundreds
2	Division	Divide a two digit number by a one digit number Practically divide a two digit number by a one digit number to demonstrate remainders	Shape names and properties of 2D and 3D shapes
3	Understanding Shape Symmetry, 2D/3D shape	Visualise 3D shapes from 2D drawings Describe 2D and 3D shapes Identify 3d shapes in different orientations and describe them Make and draw 2D and 3D shapes; recognise their geometrical features and properties including faces and symmetry, and use these to classify shapes Draw and complete shapes with reflective symmetry Draw the reflection of a shape in a mirror line	Count on from 0 in multiples of 2, 3, 4, 5, 8, 50 and 100 Find 10 or 100 more or less from a given number
4	Handling data Pictograms / Bar charts	Use tally charts, frequency tables, pictograms (where the picture represents more than one) and bar charts to represent results Create bar charts using ICT Interpret information from given pictograms - bar charts, solving one step and two step problems	Doubles and halves to 20
5	Money Four Operations	Money using the four operations Totalling amounts Calculating the cost of individual items Paying and giving change	Number bonds to 20
6	Application of skills week		Read, write and order numbers
7	Number bonds	Recall all addition and subtraction facts for each number to 20 Find sums of multiples of 10 up to 100 Find the difference between multiples of 10 up to 100 Find number pairs that total 100	3 and 6 times tables

Year 3		Maths objectives	2023/2024
Week	Spring 1 5 weeks	Lesson focus	Mental and Oral
1	Doubles / Halves	Identify halving as the inverse of doubling Find doubles to 100 and corresponding halves Relate to multiply and divide by 2 and 4 Use to estimate calculations	Partitioning of 3 and 4 digit numbers
2	Money One step problem solving	Money using the four operations Totalling amounts Calculating the cost of individual items Paying and giving change Solving written one step problems using £ and p notation (e.g. £3.00, 27p, £3.45)	Compare numbers using < and >
3	Measures Time / Analogue	Read the time to the nearest 5 minutes Calculate time intervals Find the start or end times for a given time interval Read the time using the 24 hour clock Use a roman numeral analogue clock face	2, 3, 4, 5, 6, 8 and 10 times tables
4	Measures Time / Analogue	Read the time to the nearest 5 minutes Calculate time intervals Find the start or end times for a given time interval Read the time using the 24 hour clock Use a roman numeral analogue clock face	Ordering days of the week, months of the year Learn facts associated with the number of days in months and in year (including leap years) Compare units of time using <,> and=
5	Length and perimeter	Measure length Equivalent lengths cm and m Compare lengths Add/subtract lengths Measure perimeter Calculate perimeter	2, 3, 4, 5, 6, 8 and 10 times tables Visualise 3D shapes to identify the properties
6	Fractions	Read and write proper fractions Know denominator as the parts of a whole Know numerator as the number of parts Identify and estimate fractions of shapes Use diagrams to compare fractions and find equivalents with small denominators	Number bonds to 100 Add and subtract, 1's, 10's and 100's to and from a 3 digit number mentally

Year 3		Maths objectives	2023/2024
Week	Spring 2 5 weeks	Lesson focus	Mental and Oral
1	Measures Capacity	Investigate the relationship between litres and millilitres Estimate, measure and record quantities Read to the nearest division and half division scales that are numbered or partially numbered Add, subtract and compare measures	Count on from 0 in multiples of 2, 3, 4, 5, 8, 50 and 100 Find 10 or 100 more or less from a given number
2	Money One step problem solving	Money using the four operations Totalling amounts Calculating the cost of individual items Paying and giving change Solving written one step problems using £ and p notation (e.g. £3.00, 27p, £3.45)	2, 3, 4, 5, 6, 8 and 10 times tables
3	Addition	Use written methods to record addition of two and three digit numbers Use inverse operation to check answers	Venn diagrams and pictograms
4	Handling data Venn Diagrams and Carroll Diagrams	Interpret information from given Venn diagrams / Carroll diagrams Use Venn diagrams and Carroll diagrams to sort data and objects using more than one criterion	2, 3, 4, 5, 6, 8 and 10 times tables Use inverse operations
5	Application of skills week		Counting on and back from a given number
6	Money Two step problem solving	Solving written two step problems using £ and p notation (e.g. £3.00, 27p, £3.45) Allow children to choose appropriate calculations	2, 3, 4, 5, 6, 8 and 10 times tables

Year 3	Maths objectives		2023/2024
Week	Summer 1 7 weeks	Lesson focus	Mental and Oral
1	Problem Solving Using numbers, images and diagrams	Solve 'finding all possibilities' problems using a systematic approach, Use numbers, images and diagrams to describe and explain methods Solve finding the missing number problems	Finding objects that match given lengths / weigh more or less than a given object
2	Subtraction	Use written methods to record subtraction of two and three digit numbers Use inverse to check answers	Properties of 3D shape
3	Fractions	Find fractions of quantities including: half, third, quarter, sixth, tenths and three quarters	Position numbers and fractions on a numberline
4	Application of skills week		2, 3, 4, 5, 6, 8 and 10 times tables Use inverse operations
5	Fractions	Read and write proper fractions Know denominator as the parts of a whole Know numerator as the number of parts Identify and estimate fractions of shapes Use diagrams to compare fractions and find equivalents Add and subtract fractions with the same denominator Know how to count up and down in tenths, dividing an object into ten equal parts and divide one digit numbers or quantities by 10	Visualise 3D shapes to identify the properties

Year 3	Maths objectives		2023/2024
Week	Summer 2 7 weeks	Lesson focus	Mental and Oral
1	Money Two step problem solving	Solving written two step problems using £ and p notation (e.g. £3.00, 27p, £3.45) including the use of fractions Allow children to choose appropriate calculations	Read to the nearest division and half division scales that are numbered or partially numbered
2	Problem Solving Using numbers, images and diagrams	Solve 'logic' problems using a systematic approach Use numbers, images and diagrams to describe and explain methods Include positive integer scaling problems and correspondence problems in which n objects are connected to m objects	Answer multiple choice questions giving reasons for chosen answer and explaining why the others are incorrect
3	Understanding Shape Angles Perimeter	language for position and direction Draw right angles Identify right angles in 2D shapes Compare angles with right angles Know that a straight line is equivalent to two right angles Know the language 'perpendicular', 'parallel', 'horizontal' and 'vertical' Find the perimeter of regular shapes	2, 3, 4, 5, 6, 8 and 10 times tables Use inverse operations
4	Understanding Shape Compass directions	language for position and direction Use all four compass directions to describe movement about a grid Practically apply compass directions	Draw 2D shapes from a given description
5,6 and 7	Transition		

Year 4		Maths objectives	2023/2024
Week	Autumn 1 8 weeks	Lesson focus	Mental and Oral
1	Number Patterns / place value	Investigate a statement involving numbers and test it with examples Read, write and order positive and negative numbers Count backwards through zero to include negative numbers Place numbers on a given numberline beyond 1000 and including negative numbers Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of 0 and place value	Times tables to x 10
2	Addition	Use written methods to record addition of two three and four digit numbers including word problems Use inverse operations to check answers Add mentally pairs of two digit numbers	Times tables to x 10 Count in multiples of 25 and 1000 Read, write and order 4 digit numbers Find 1000 more or less than a given number
3	Measures Weight/length	Investigate the relationship between kilograms and grams Estimate, use scales to weigh and record using kg and g Read to the nearest tenth of a division and record appropriately e.g. 3.7 kg Investigate the relationship between kilometres and metres, metres and centimetres Estimate, use rulers to measure and record using km, m, cm, mm Use given information to draw accurate lines to the nearest tenth e.g. 3.7 cm	Times tables to x 10 Visualise 3D shapes to identify the properties
4	Measures Length	Investigate the relationship between kilometres and metres, metres and centimetres Estimate, use rulers to measure and record using km, m, cm, mm Use given information to draw accurate lines to the nearest tenth e.g. 3.7 cm	Times tables to x 10 Compare numbers using < and >
5	Subtraction	Use written methods to record subtraction of two, three and four digit numbers, including word problems Use inverse operations to check answers Subtract mentally pairs of two digit numbers	Times tables to x 10 Read the time Count in multiples of 1000
6	Multiplication	Multiply numbers up to 1000 by 10 and 100 and understand the effect Use written methods to multiply a two digit number by a one digit number,	Times tables to x 10 Counting on and back from a given number
7	Division	Divide numbers up to 1000 by 10 and 100 and	Times tables to x 10

		understand the effect Use written methods to divide a two digit number by a one digit number including remainders Round remainders up or down to the nearest whole	Number bonds to 100

Year 4	Maths objectives		2023/2024
Week	Autumn 2 7 weeks	Lesson focus	Mental and Oral
1	Money Four operations	Money using the four operations Choosing the appropriate calculation Use decimal notation Round to the nearest £	Times tables to x 10
2	Fractions	Find pairs of fractions that total 1 Investigate equivalent fractions e.g. 6/8 , 3/4 Order fractions on a numberline including mixed number fractions e.g. $3\frac{1}{2}$ Find fractions of amounts or shapes including fractions where the numerator is greater than one. Add and subtract fractions with the same denominator	Times tables to x 10 Symmetry
3	Understanding Shape Symmetry 2D / 3D Shape	Draw polygons and classify them, including their line symmetry Identify the different types of triangles Identify regular / irregular shapes Identify parallel, perpendicular, horizontal and vertical lines Visualise 3D shapes from 2D drawings Make and identify nets of common solids	Times tables to x 10 Pictograms and bar charts
4	Handling data Pictograms and Bar charts	Choose the most appropriate method to record data – including: tally charts, frequency tables, pictograms (where the picture represents more than one) and bar charts Use ICT where appropriate Investigate the effect of changing scales on the Y Axis Examine graphs showing events over time – solve problems	Times tables to x 10 Position numbers on a numberline
5	Positive and Negative numbers	Position positive and negative numbers on a given numberline Use positive and negative numbers in context e.g. temperature Compare positive and negative numbers using < and > Use numbers beyond 1000 Compare decimals up to 2 decimal places	Times tables to x 10 Count in 1000's Examine the swapping around of numbers in a multiplication e.g 6 x 7 and 7 x 6
6	Application of skills week		Times tables to x 10 Doubling and halving
7	Number bonds	Investigate number bonds of 100 Use knowledge of rounding, number bonds of 10 and inverse to estimate and check answers	Times tables to x 10 Adding pairs of multiples of 10, 100 and 1000

Year 4	Maths objectives		2023/2024
Week	Spring 1 5 weeks	Lesson focus	Mental and Oral
1	Multiplication	Multiply by 10 and 100 and understand the effect Multiply by 1 and 0 Multiply by 3, 6 and 9	Times tables to x 12
2	Money One step problem solving	Money using the four operations Choosing the appropriate calculation Solving written one step problems using decimal notation	Times tables to x 12 Position positive and negative numbers on a numberline
3	Measures Capacity	Investigate the relationship between litres and millilitres Estimate, measure and record quantities using l and ml Read to the nearest tenth of a division and record appropriately e.g. 3.7 l	Times tables to x 10 Tell the time Convert hours into minutes Days into weeks Weeks into years etc.
4	Measures Time Problem solving	Read time to the nearest minute Use am, pm and 24 hour clock notation Calculate time intervals from clocks, calendars and timetables Find equivalent times	Times tables to x 12 Order 4 digit numbers Count in multiples of 1000
5	Decimals	Recognise tenths and hundredths Tenths as decimals Tenths on a place value grid Tenths on a numberline Divide 1 digit by 10 Divide 2 digits by 10 Hundredths Hundredths as decimals Hundredths on a place value grid Divide 1 or 2 by 100	Times tables to x 12 Number bonds up to 20 Add mentally pairs of 2 digit numbers
6	Fractions	Find pairs of fractions that total 1 Investigate equivalent fractions e.g. 6/8 , 3/4 Order fractions on a numberline including mixed number fractions e.g. $3\frac{1}{2}$ Find fractions of amounts or shapes including fractions where the numerator is greater than one. Add and subtract fractions with the same denominator	Times tables to x 12 Add mentally pairs of 2 digit numbers
7	Understanding shape Perimeter	Measure perimeter Perimeter on a grid Perimeter of a rectangle Perimeter of rectilinear lines	Times tables to x 12 Add mentally pairs of 2 digit numbers

Year 4	Maths objectives		2023/2024
Week	Spring 2 5 weeks	Lesson focus	Mental and Oral
1	Division	Divide numbers up to 1000 by 10 and 100 and understand the effect Use written methods to divide a two digit number by a one digit number including remainders Round remainders up or down to the nearest whole	Times tables to x 12 Count up in multiples of 25 and 1000
2	Ratio and proportion	Use the vocabulary of ratio to describe the relationship between two quantities e.g. there are 2 red beads **to every** 3 green beads Use the vocabulary of proportion to describe the relationship between two quantities e.g. 2 beads **in every** 5 beads are red. Estimate the proportion e.g. a quarter of a box of apples is red – or 1 in every 4 Include scaling and correspondence problems	Times tables to x 12 Subtract mentally pairs of 2 digit numbers
3	Addition / Subtraction	Use written methods to record addition and subtraction of two and three digit numbers Use knowledge of rounding, number bonds of 10 and inverse to estimate and check answers	Times tables to x 12 Multiply numbers by 10 and 100
4	Handling data Venn Diagrams and Carroll Diagrams	Use Venn diagrams and Carroll diagrams to sort data and objects using more than one criterion Interpret information from given Venn diagrams / Carroll diagrams	Times tables to x 10 Divide numbers by 10 and 100
5	Application of skills week		Dividing single digits and bigger numbers by 10 and 100
6	Money Two step problem solving	Money using the four operations Choosing the appropriate calculation Solving written two step problems using decimal notation and using brackets	Times tables to x 10 Round numbers to the nearest 10, 100 and 1000

Year 4	Maths objectives		2023/2024
Week	Summer 1 7 weeks	Lesson focus	Mental and Oral
1	Problem Solving Using numbers, images and diagrams	Solve 'finding all possibilities' problems using a systematic approach, Use numbers, images and diagrams to describe and explain methods	Times tables to x 12 Interpret data from a bar chart or pictogram
2	Decimals	Introduce decimal notation using 'tenths and hundredths' Relate the notation to money Order one and two place decimals Position one and two place decimals on a numberline (ensure children place a 0 in the hundredths column as a place holder where necessary) Round decimals to whole numbers	Times tables to x 12 Interpret data from a Venn diagram or a Carroll diagram
3	Fractions	Recognise the equivalence between decimals and fractions including $\frac{1}{2}$, $\frac{1}{4}$, $\frac{3}{4}$,1/10 and 1/100 Use the decimal column headings 'tenth and hundredth' to find fraction equivalents and vice versa	Times tables to x 12 Subtract mentally pairs of 2 digit numbers
4	Application of skills week		Times tables to x 12 Ratio and proportion
5	Mental Multiplication Strategies	Multiply numbers up to 1000 by 10 and 100 and understand the effect Recall all times tables to 12 x 12 and corresponding division problems Multiply 3 numbers together e.g. 6 x 6 x 7	Times tables to x 12 Add mentally pairs of 2 digit numbers

Year 4	Maths objectives		2023/2024
Week	Summer 2 7 weeks	Lesson focus	Mental and Oral
1	Understanding Shape Compass direction / Co-ordinates	Recognise vertical and horizontal lines Use the eight compass points to describe direction Plot specified points to create a polygon on a co-ordinates grid Describe and identify the position of a square on a grid of squares using co-ordinates Translate shapes on co-ordinate grids	Times tables to x 12 Count in multiples of 25 and 1000
2	Problem Solving Using numbers, images and diagrams	Solve 'logic' problems using a systematic approach Use numbers, images and diagrams to describe and explain methods	Times tables to x 12 Read to the nearest tenth of a division scales that are numbered or partially numbered
3	Understanding Shape Angles	Know that angles are measured in degrees and that one whole turn is 360 degrees Draw, compare and order angles less than 180 degrees Identify angles which are obtuse and acute	Times tables to x 12 Ratio and proportion
4	Understanding Shape Area	What is area? Counting squares Making shapes Comparing area	Times tables to x 12 Answer multiple choice questions giving reasons for chosen answer and explaining why the others are incorrect
5,6 and 7	Transition		

Year 5	Maths objectives		2023/2024
Week	Autumn 1 8 weeks	Lesson focus	Mental and Oral
1	Place Value	Read, write and order numbers with up to 3 decimal places Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit	Add mentally pairs of two digit numbers Mentally add and subtract tenths, and one-digit whole numbers and tenths
2	Addition Rounding and estimating Four operations	Use written methods to record addition of numbers including decimals, include a mix of whole numbers and decimals Include decimal complements of 1 e.g. 0.83 + 0.17 = 1 Use rounding and estimation to check answers Use knowledge of number facts, place value and inverse operations to check answers Choose, use and combine the appropriate calculations Use decimal notation Pencil and Paper methods	Visualise properties of 2D / 3D Shapes
3	Measures Conversions	Investigate the relationship between measures (weight, length and capacity) Read and record standard units of measure Understand and use approximate equivalence between metric units and common imperial units such as inches, pounds and pints Convert larger to smaller units using decimals of one place	Multiply by 10 Multiply by 100
4	Percentages	Know that percentage is the number of parts in a hundred Express tenths and hundredths as percentages Investigate the link between decimals, fractions and percentages	Divide by 10 Divide by 100
5	Partitioning numbers < and >	Investigate positive and negative numbers Partition, round and order numbers Use <, > and = to compare numbers	Number bonds to 100 Count forwards or backwards in steps of powers of 10 for any given number to 1 000 000 http://www.mathsisfun.com/index-notation-powers.html
6	Equivalent fractions	Find equivalent fractions Relate fractions to their decimal representations Investigate the link between decimals, fractions and percentages	Conversions mm to cm cm to m
7	Practical skills : measuring lines and angles, symmetry	Use rulers to measure and draw lines to the nearest mm Draw and measure angles using a protractor Use various strategies to identify lines of symmetry including the use of tracing paper	Finding common equivalents of fractions, percentages and decimals

Year 5	Maths objectives		2023/2024
Week	Autumn 2 7 weeks	Lesson focus	Mental and Oral
1	Subtraction Rounding and estimating	Use written methods to record subtraction of numbers including decimals Use rounding and estimation to check answers Use knowledge of number facts, place value and inverse operations to check answers	Subtract mentally pairs of 2 digit numbers
2	Four operations	Choose, use and combine the appropriate calculations Use decimal notation including money	Order numbers up to 2 decimal places
3	Understanding Shape 2D / 3D Shape Visualisation / nets	Identify, visualise and describe properties of rectangles, triangles, regular polygons and 3D shapes Identify and draw nets of 3D shapes Recognise perpendicular and parallel lines	Position positive and negative numbers on a given numberline
4	Handling data Frequency tables, Pictograms, Bar and line graphs	Choose the most appropriate method to record data – including: tally charts, frequency tables, pictograms (where the picture represents more than one) bar charts and line graphs Interrogate data Use ICT where appropriate Investigate the effect of changing scales on the Y Axis	Find equivalent fractions
5	Positive and Negative numbers	Use positive and negative numbers in context e.g. temperature Compare positive and negative numbers using < and > Investigate negative numbers and draw conclusions	Round numbers to the nearest whole Round numbers to the nearest tenth
6	Application of skills week		
7	Mental calculation strategies	Develop a range of mental calculation strategies Such as: Rounding 9, 19, 11, 21 and adjusting the answer Multiply by 2 digit number through partitioning Using knowledge of doubles, halves and quarters	Times tables to x 12

Year 5	Maths objectives		2023/2024
Week	Spring 1 5 weeks	Lesson focus	Mental and Oral
1	Multiplication	Multiples and factors Common factors Prime numbers Square numbers Cube numbers Multiply by 10, 100, 1000	Add mentally pairs of 2 digit numbers
2	One step problem solving	Money using the four operations Choosing the appropriate calculation Solving written one step problems using decimals up to three decimal places, percentages and fractions Pencil and paper methods Use and explain the equals sign to indicate equivalence including in missing number problems	Visualise properties of shapes
3	Measures Time 24 hour clock Calendars Timetables	Read time to the nearest minute using analogue and digital representations Find differences between given times Use am, pm and 24 hour clock notation Calculate time intervals from clocks, calendars and timetables	Find fractions of given amounts Count on and back in simple fractions
4	Fractions	What is a fraction? Equivalent fractions Fractions greater than 1 Improper fractions to mixed numbers # Mixed numbers to improper fractions Number sequences Compare and order fractions less than 1 Compare and order fractions greater than 1 Add and subtract fractions Add fractions within 1 Add 3 or more fractions Add fractions	Use the four operations to reach target numbers
5	Fractions	Add mixed numbers Subtract fractions Subtract mixed numbers Subtract – breaking the whole Subtract 2 mixed numbers	
6	Fractions	Multiply unit fractions by an integer Multiply non-unit fractions by an integer Multiply mixed numbers by integers Calculate fractions of a quantity Fraction of an amount Using fractions as operators	Add 9, 19, 11 and 21 through rounding Add mentally pairs of numbers
7	Decimals, percentages and fractions	Find fractions of quantities Find percentages of quantities Record using decimal notation Look at scaling by simple fractions including fractions >1	

Year 5	Maths objectives		2023/2024
Week	Spring 2 5 weeks	Lesson focus	Mental and Oral
1	Division Rounding and estimating	Divide numbers including decimals by 10, 100 and 1000 and understand the effect Use written methods to divide three digit, two digit and decimal numbers (Use a division box) Use rounding and estimation to check answers Use knowledge of number facts, place value and inverse operations to check answers	Subtract mentally pairs of 2 digit numbers
2	One step / two step problem solving	Money using the four operations Choosing the appropriate calculation Solving written one step problems using decimal notation Solve problems using knowledge of factors, multiples, squares and cubes.	Times tables to x 12
3	Problem Solving	Reasoning: Prove whether given statements are true or false (e.g. Ben says 2 digit numbers + 2 digit numbers always total to give an answer which is a 3 digit number – is he correct? True or False) Generate statements to be tested as above. Use numbers, images and diagrams to describe and explain methods	Number bonds to 100
4	Handling data Venn Diagrams, Carroll Diagrams, line graphs	Choose the most appropriate method to record data – including: Venn diagrams, Carroll diagrams and line graphs Interrogate data Use ICT where appropriate	Find time intervals between given times
5	Application of skills week		Multiply by 10, 100, 1000
6	Probability, ratio and proportion Two step problem solving	Use the language of chance or likelihood Solve problems involving ratio and proportion Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates Money using the four operations Choosing the appropriate calculation Solving written two step problems using decimal notation Pencil and Paper methods	Estimate angles

Year 5	Maths objectives		2023/2024
Week	Summer 1 7 weeks	Lesson focus	Mental and Oral
1	Problem Solving	Solve 'finding all possibilities' problems using a systematic approach, Use numbers, images and diagrams to describe and explain methods	Times tables to x 12
2	Scales	Interpret a reading that lies between two un-numbered divisions on a scale Apply to weight, length, capacity, temperature, numberlines etc.	Visualise properties of 2D and 3D shape
3	Decimals Multiplication / division	Multiply and divide numbers including decimals by 10, 100 and 1000 and understand the effect Use written methods to multiply and divide three digit, two digit and decimal numbers Identify multiples and factors, including all factor pairs of a number and common factors of two numbers Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers Establish whether a number up to 100 is prime and recall prime numbers up to 19.	Conversions l to ml kg to g Use inverses
4	Application of skills week		Add mentally pairs of numbers
5	Decimals, percentages and fractions	Find fractions of quantities Find percentages of quantities Record using decimal notation	

Year 5	Maths objectives		2023/2024
Week	Summer 2 7 weeks	Lesson focus	Mental and Oral
1	Two step problem solving	Money using the four operations Choosing the appropriate calculation Solving written two step problems using decimal notation	Order decimal numbers
2	Understanding Shape Angles	Estimate, draw and measure acute, obtuse, reflex and right angles using a protractor Calculate missing angles on a straight line and ½ turn (total 180 degrees) e.g. if angle A = 70° then angle B = ? Calculate angles at a point and one whole turn (total 360 degrees) and other multiples of 90 degrees Distinguish between regular and irregular polygons based on reasoning about equal sides and angles Use conventional markings for parallel lines and right angles Use the term diagonal and reason about the angles formed between sides, diagonals and parallel sides	Find decimal, percentage and fraction equivalents
3	Understanding Shape Perimeter / area	Measure and calculate the perimeter of regular and irregular polygons Use formula to calculate area of rectangles and squares Know that a(b + c) = ab + ac (relate to finding formula) Use properties of rectangles to deduce related facts about missing lengths and angles Recognise and use square numbers and cube numbers, and the notation for square and cubed. Estimate volume e.g. using 1cm cubed blocks to build cuboids and capacity e.g. using water	Times tables to x 12
4	Co-ordinates, Reflection, translation	Read and plot co-ordinates in the first quadrant Complete patterns with up to two lines of symmetry Draw the position of shape after a reflection or translation	Divide by 10, 100, 1000 Revise using a protractor
5, 6 and 7	Transition		

Year 6	Maths objectives		2023/2024
Week	Autumn 1 8 weeks	Lesson focus	Mental and Oral
1	Number/ Place value	Numbers to ten million Compare and order any number Round any number Negative numbers	Round numbers, including decimals up to 3 decimal places
2	Addition	Use standard column addition to add integers and decimals Use rounding, estimating and approximation to check answers Read, write, order and compare numbers up to 10 000 000 Round any whole number to a required degree of accuracy	Multiply and Divide by 10, 100, 1000 giving answers up to 3 decimal places (identify the value of each digit)
3	Subtractio n	Use standard column subtraction (including decomposition) to subtract integers and decimals Use rounding, estimating and approximation to check answers	Use tests of divisibility
4	Perimeter and Area	Calculate the perimeter and area of rectilinear shapes Estimate the area of an irregular shape by counting squares Calculate the area of a parallelogram Calculate the area of right angled triangles given the lengths of the two perpendicular sides Find the volume and surface area of cubes and cuboids using standard units e.g. cm cubed extending to other units eg. Km cubed Solve problems involving similar shapes where the scale factor is known or can be found. Know that shapes with the same area can have different perimeters and vice versa	Round numbers, including decimals up to 3 decimal places
5	Division	Use division boxes to divide 4 digit numbers by single digit numbers Use division boxes to divide 4 digit numbers by 2 digit numbers Use long division methods for divisions greater than one digit. Interpret remainders as whole number remainders, fractions or by rounding (appropriate to the context)	Use multiplication facts to find all squares of numbers to 12 x 12 and the corresponding squares of multiples of 10
6	Fractions	Find equivalent improper and proper fractions e.g. 8/5 or 1 whole 3/5 Simplify fractions by cancelling common factors Order a set of fractions by finding a common denominator and converting them Use knowledge to work backwards to find an amount e.g. $\frac{1}{4}$ of a length is 36cm to 36 x 4 = 144cm the original length. Convert simple fractions to decimals e.g. 3/8 = 0.375 and for those with recurring decimal equivalents they round to decimal places (or other when appropriate)	Find fractions of quantities
7	Problem Solving Multi step	Solve 'finding all possibilities' and 'logic' problems using a systematic approach, Use numbers, images and diagrams to describe and explain methods	Know approximate equivalents between metric and imperial measures still in

		Solve multi-step problems (possible link to money) Solve problems involving fractions, decimals and percentages Break problem down into manageable stages Pencil and paper methods	everyday use Solve problems calculating and converting – up to three decimal places Examine conversion graphs

Year 6	Maths objectives		2023/2024
Week	Autumn 2 7 weeks	Lesson focus	Mental and Oral
1	Multiplication	Use knowledge of place value and multiplication facts to find related multiplication and division facts involving decimal numbers eg. 0.8 x 7 Use formal methods to multiply up to 4 digit integers by 2 digit integers (including decimals)	Select and use standard metric units of measure Convert units of measure using decimals to 3 places e.g. 2.752 litres = 2752 ml
2	Sequences Formulae	Represent and interpret sequences, patterns and relationships involving numbers and shapes Suggest and test hypotheses to find the link in the pattern Construct and use simple expressions and formulae in words and then symbols Represent information or unknown numbers in a problem using a formulae Use a formulae to find solutions in the context of a problem Express missing number sequences algebraically Find pairs of numbers that satisfy an equation with two unknowns Enumerate possibilities of combinations of two variables.	Interpret a reading that lies between two un-numbered divisions on a scale Compare readings on different scales
3	Translation Rotation Reflection Co-ordinates	Visualise and draw on grids of different types where a shape will be after: reflection, translation rotation through 90° or 180° about its centre or one of its vertices Use all four quadrants to find co-ordinates of points determined by geometric information	Add and subtract pairs of 2 digit integers including decimals
4	Data Handling	Collect, organise and represent information Interpret results from given data Identify and answer related questions Use all forms of data representation Link percentages or 360 degrees to calculate angles of pie charts Create pie charts and line graphs and use these to solve problems	Use the language of chance or likelihood Understand and use the probability scale from 0to 1
5	Positive and negative numbers	Find the difference between a positive and a negative integer Find the difference between two negative integers in context	Multiply and divide pairs of 2 digit / 1 digit integers including decimals
6	Application of skills week		Find the mode, median and mean averages
7	Problem Solving, Reasoning	Reasoning: Prove whether given statements are true or false (e.g. Ben says 2 digit numbers + 2 digit numbers always total to give an answer which is a 3 digit number – is he correct? True or False) Generate statements to be tested as above.	Describe, identify and visualise parallel and perpendicular edges or faces in 2D and 3D shapes Draw D shapes from

		Use numbers, symbols, images and diagrams to describe and explain methods	given dimensions and angles

Year 6	Maths objectives		2023/2024
Week	Spring 1 5 weeks	Lesson focus	Mental and Oral
1	Ratio and Proportion	Solve problems involving ratio and proportion, use appropriate notation e.g. a:b, Use simple scaling quantities up and down as a means to solving simple problems Understand the difference between ratio and proportion Use ratio notation; Reduce a ratio to its simplest form Divide a quantity into two parts in a given ratio eg. 2:5 Use fractions and percentages to identify and compare proportions	Find decimal, percentage and fraction equivalents
2	Problem Solving Multi Step	Solve multi-step problems Solve problems involving fractions, decimals and percentages Break problem down into manageable stages Use the knowledge of the order of operations to carry out calculations involving the four operations	Describe and interpret results and solutions using the mode and range
3	Time problems	Carry out calculations involving time by converting hours and minutes to minutes Find differences between given times Use am, pm and 24 hour clock notation Calculate time intervals from clocks, calendars and timetables	Order a set of fractions by converting them to decimals
4	Decimals, percentages and fractions	Use decimal notation for tenths, hundredths and thousandths Partition, round and order decimals with up to 3 decimal places Find equivalent fractions, decimals and percentages including the use of money e.g. £400 out of £1000 as a percentage etc. Find fractions and percentages of whole number quantities Add and subtract fractions with different denominators and mixed numbers Multiply fractions writing the answer in the simplest forms (use images to support understanding) Divide proper fractions by whole numbers Associate fractions with division and use this to find decimal equivalents	Describe and interpret results and solutions using the median and mean
5	Application of skills week		
6	Angles	Estimate angles Use a protractor to measure and draw angles both on their own and within shapes Construct a triangle given two sides and the included angle Know the sum of angles at a point, on a straight line and in a triangle Recognise vertically opposite angles Calculate angles in a triangle or around a point Use the correct vocabulary, notation and labelling	Recognise the square roots of perfect squares Recognise and use multiples, lowest common and highest common factors

		conventions for lines, angles and shapes	
7	Problem solving	Problem solving involving all four operations.	

Year 6	Maths objectives		2023/2024
Week	Spring 2 5 weeks	Lesson focus	Mental and Oral
1-3	Test technique Misconception identification	Practice SATs weeks – gap analysis, taught sessions relating to these, including the use of boosters	
4	Shape	Draw 2D shapes from given dimensions and angles (using a protractor) Recognise, describe and build simple 3D shapes including making nets Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals and regular polygons	Find fraction and decimal equivalents
5	Shape	Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius. Recognise angles where they meet at a point, are on a straight line, or are vertically opposite and find missing angles	Revise finding differences in time in 24 hour clock Revise Roman numerals to 1000
6	Dependent on cohort need	Develop from assessment	

Year 6		Maths objectives	2023/2024
Week	Summer 1 7 weeks	Lesson focus	Mental and Oral
1-3	Problem solving Multi-step, finding all possibilities, finding formula	Practice SATs weeks – gap analysis, taught sessions relating to these, including the use of boosters	
4	Algebra	Using shapes and then numbers to illustrate algebra and simple linear equations. Practical application of removal of terms from both sides so a visual representation supports their next steps	Find fraction and decimal equivalents
5	Shape/angles	Recognise angles where they meet at a point, are on a straight line, or are vertically opposite and find missing angles. Use different shapes within these questions to develop application of prior learning.	Revise finding differences in time in 24 hour clock Revise Roman numerals to 1000
6	Number	Look at squared and cubed numbers, develop children's understanding practically. Look at 10 squared, cubed and begin to use the language 'power of' in preparation for secondary school	Speed recall of times tables

Year 6	Maths objectives		2023/2024
Week	Summer 2 7 weeks	Lesson focus	Mental and Oral
1-2	Measures (application to other areas of the curriculum)	Use measures to explore scientific questions, computing challenges, sports day challenges and recipes through ratio and proportion to see the application of maths elsewhere. Allow the children to draw on their prior learning to apply this appropriately. Use 'power of' language to record larger values and simple formula where this naturally occurs.	Find equivalent measures
3-4	Algebra (application to other areas of maths)	Using formula and writing formula for simple mathematical tasks such as finding area and perimeter for both regular and irregular shapes and word problems including ratio and proportion questions used in week 1-2	Find fraction and decimal equivalents
5	Transition	Opportunities to address areas of weakness in smaller groups when the children are in.	
6	Transition	Opportunities to address areas of weakness in smaller groups when the children are in.	

Maths
Scheme of Work

Maths
Vocabulary

Vocabulary

Reception

Counting

number
zero, one, two, three... to twenty and beyond
zero, ten, twenty... one hundred
none
how many...?
count, count (up) to
count on (from, to)
count back (from, to)
count in ones, twos... tens...
more, less, many, few
odd, even
every other
how many times?
pattern, pair
guess how many, estimate
nearly, close to, about the same as
just over, just under
too many, too few, enough, not enough

Solving problems

Reasoning about numbers or shapes
pattern
puzzle
answer
right, wrong
what could we try next?
how did you work it out?
count, sort
group, set
match
same, different
list

Measures (general)

measure
size
compare
guess, estimate
enough, not enough
too much, too little
too many, too few
nearly, close to, about the same as
just over, just under

Length

length, width, height, depth
long, short, tall
high, low
wide, narrow
deep, shallow
thick, thin
longer, shorter, taller, higher... and so on
longest, shortest, tallest, highest... and so on
far, near, close

Comparing and ordering numbers

the same number as, as many as
*Of **two** objects/amounts:*
greater, more, larger, bigger
less, fewer, smaller
*Of **three** or more objects/amounts:*
greatest, most, biggest, largest
least, fewest, smallest
one more, ten more
one less, ten less
compare
order
size
first, second, third... tenth
last, last but one
before, after
next
between
above, below

Problems involving 'real life' or money

compare
double
half, halve
pair
count out, share out
left, left over
money
coin
penny, pence, pound
price
cost
buy
sell
spend, spent
pay
change
dear, costs more
cheap, costs less, cheaper
costs the same as
how much...? how many...?
total

Mass

weigh, weighs, balances
heavy/light, heavier/lighter, heaviest/lightest
balance, weight, scales

Capacity

full
half full
empty
holds
container

Adding and subtracting

add, more, and
make, sum, total
altogether
score
double
one more, two more, ten more...
how many more to make... ?
how many more is... than...?
take (away), leave
how many are left/left over?
how many have gone?
one less, two less... ten less...

Time

time
days of the week: Monday, Tuesday...
day, week
birthday, holiday
morning, afternoon, evening, night
bedtime, dinnertime, playtime
today, yesterday, tomorrow
before, after
next, last
now, soon, early, late
quick, quicker, quickest, quickly
slow, slower, slowest, slowly

Exploring patterns, shape and space

shape, pattern
flat
curved, straight
round
hollow, solid
corner
face, side, edge, end
sort
make, build, draw

how many fewer is... than...?
difference between
is the same as

old, older, oldest
new, newer, newest
takes longer, takes less time
hour, o'clock
clock, watch, hands

Instructions

listen
join in
say
think
imagine
remember
start from
start with
start at
look at
point to
show me
put, place
fit
arrange
rearrange
change, change over
split
separate
carry on, continue
repeat
what comes next?
find
choose
collect
use
make
build
tell me
describe
pick out
talk about
explain
show me
read
write
trace
copy
complete
finish, end
fill in
shade
colour
tick, cross
draw
draw a line between
join (up)
ring
cost
count
work out
answer
check

Patterns and symmetry

size
bigger, larger, smaller
symmetrical
pattern
repeating pattern
match

General

same number/s
different number/s
missing number/s
number facts
number line, number track
number square
number cards
counters, cubes, blocks, rods
die, dice
dominoes
pegs, peg board
same way, different way
best way, another way
in order, in a different order

not
all, every, each

Position, direction and movement

position
over, under
above, below
top, bottom, side
on, in
outside, inside
around
in front, behind
front, back
before, after
beside, next to
opposite
apart
between
middle, edge
corner
direction
left, right
up, down
forwards, backwards, sideways
across
close, far, near
along
through
to, from, towards, away from
movement
slide
roll
turn
stretch, bend

3D shapes

cube
pyramid
sphere
cone

2D shapes

circle
triangle
square
rectangle
star

Vocabulary

Year 1

Counting, properties of numbers and number sequences

number
zero, one, two, three... to twenty and beyond
zero, ten, twenty... one hundred
none
how many...?
count, count (up) to
count on (from, to)
count back (from, to)
count in ones, twos... tens...
more, less, many, few
odd, even
every other
how many times?
pattern, pair

Making decisions and reasoning

pattern
puzzle
answer
right, wrong
what could we try next?
how did you work it out?
count out, share out, left, left over
number sentence
sign, operation

Measures (general)

measure
size
compare
guess, estimate
enough, not enough
too much, too little
too many, too few
nearly, roughly, close to, about the same as
just over, just under

Length

length, width, height, depth
long, short, tall
high, low
wide, narrow
deep, shallow
thick, thin
longer, shorter, taller, higher... and so on
longest, shortest, tallest, highest... and so on
far, near, close
metre
ruler, metre stick

Mass

weigh, weighs, balances
heavy/light, heavier/lighter, heaviest/lightest
balance, scales, weight

Capacity

full
half full
empty
holds
container

Place value and ordering

units, ones
tens
exchange
digit
'teens' number
the same number as, as many as
equal to
Of two objects/amounts:
greater, more, larger, bigger
less, fewer, smaller
Of three or more objects/amounts:
greatest, most, biggest, largest
least, fewest, smallest
one more, ten more
one less, ten less
compare
order
size
first, second, third... tenth, eleventh... twentieth
last, last but one
before, after
next
between, half-way between
above, below

Problems involving 'real life' or money

money
coin
penny, pence, pound
price
cost
buy
sell
spend, spent
pay
change
dear, costs more
cheap, costs less, cheaper
costs the same as
how much...? how many...?
total

Addition and subtraction

+, add, more, plus
make, sum, total
altogether
score
double, near double
one more, two more... ten more
how many more to make...?
how many more is... than...?
how much more is...?
-, subtract, take (away), minus
leave
how many are left/left over?

Time

time
days of the week: Monday, Tuesday...
seasons: spring, summer, autumn, winter
day, week, month, year,
weekend, birthday, holiday
morning, afternoon, evening
night, midnight
bedtime, dinnertime, playtime
today, yesterday, tomorrow
before, after
next, last, now, soon, early, late
quick, quicker, quickest, quickly

Patterns and symmetry

size
bigger, larger, smaller
symmetrical
pattern
repeating pattern
match

how many are gone?
one less, two less, ten less...
how many fewer is... than...?
how much less is...?
difference between
half, halve
=, equals, sign, is the same as

fast, faster, fastest
slow, slower, slowest, slowly
old, older, oldest
new, newer, newest
takes longer, takes less time
hour, o'clock, half past
clock, watch, hands
how long ago? how long will it be to...? how long will it take to...? how often?
always, never, often, sometimes, usually
once, twice

Instructions

listen
join in
say
think
imagine
remember
start from
start with
start at
look at
point to
put, place
fit
arrange
rearrange
change, change over
split
separate
carry on, continue
repeat
what comes next?
find
choose
collect
use
make
build
tell me
describe
pick out
talk about
explain
show me
read
write
record

Estimating

guess how many, estimate
nearly, roughly, close to
about the same as
just over, just under
too many, too few, enough, not enough

Organising and using data

count, sort, *vote*
list
group, set
table

Position, direction and movement

position
over, under, underneath
above, below
top, bottom, side
on, in
outside, inside
around
in front, behind
front, back
before, after
beside, next to
opposite
apart
between
middle, edge
centre
corner
direction
journey
left, right
up, down
forwards, backwards, sideways
across
close, far, near
along
through
to, from, towards, away from
movement
slide
roll
turn, whole turn, half turn
stretch, bend

trace
copy
complete
finish, end
fill in
shade
colour
tick, cross
draw
draw a line between
join (up)
ring
arrow
cost
count
work out
answer
check

General

same number/s
different number/s
missing number/s
number facts
number line, number track
number square
number cards
abacus
counters, cubes, blocks, rods
die, dice
dominoes
pegs, peg board
same way, different way
best way, another way
in order, in a different order
not
all, every, each

Shape and Space

shape, pattern
flat
curved, straight
round
hollow, solid
corner
point, pointed
face, side, edge, end
sort
make, build, draw

3D shapes

cube
cuboid
pyramid
sphere
cone
cylinder

2D shapes

circle
triangle
square
rectangle
star

Vocabulary

Year 2

Counting, properties of numbers and number sequences

number
zero, one, two, three... to twenty and beyond
zero, ten, twenty... one hundred
zero, one hundred, two hundred... one thousand
none
how many...?
count, count (up) to
count on (from, to)
count back (from, to)
count in ones, twos, threes, fours, fives and so on
count in tens
more, less, many, few
tally
odd, even
every other
how many times?
multiple of
sequence
continue
predict
pattern, pair, rule

Making decisions and reasoning

pattern, puzzle
calculate, calculation
mental calculation
jotting
answer
right, correct, wrong
what could we try next?
how did you work it out?
number sentence
sign, operation, symbol

Measures (general)

measure
size
compare
measuring scale
guess, estimate
enough, not enough
too much, too little
too many, too few
nearly, roughly, about, close to, about the same as
just over, just under

Length

length, width, height, depth
long, short, tall, high, low
wide, narrow, deep, shallow, thick, thin
longer, shorter, taller, higher... and so on
longest, shortest, tallest, highest... and so on
far, further, furthest, near, close
metre (m), centimetre (cm)
ruler, metre stick, tape measure

Place value and ordering

units, ones
tens, hundreds
digit
one-, two- or three-digit number
'teens' number
place, place value
stands for, represents
exchange
the same number as, as many as
equal to
Of two objects/amounts:
greater, more, larger, bigger
less, fewer, smaller
Of three or more objects/amounts:
greatest, most, biggest, largest
least, fewest, smallest
one more, ten more
one less, ten less
compare
order
size
first, second, third... tenth... twentieth
twenty-first, twenty-second...
last, last but one
before, after
next
between, half-way between
above, below

Problems involving 'real life' or money

money
coin
penny, pence, pound, (£)
price, cost
buy, bought, sell, sold
spend, spent
pay
change
dear, costs more
cheap, costs less, cheaper
how much...? how many...?
total

Mass

weigh, weighs, balances
heavy/light, heavier/lighter, heaviest/lightest
kilogram (kg), half-kilogram, gram(g)
balance, scales, weight

Capacity

capacity
full, half full
empty
holds, contains
litre (l), half-litre, millilitre (ml)
container

Addition and subtraction

+, add, addition, more, plus
make, sum, total
altogether
score
double, near double
one more, two more... ten more... one hundred more
how many more to make...?
how many more is... than...?
how much more is...?
-, subtract, take away, minus
leave, how many are left/left over?
one less, two less... ten less... one hundred less
how many less is... than...?
how much fewer is...?
difference between
half, halve
=, equals, sign, is the same as
tens boundary

Time

time
days of the week: Monday, Tuesday...
months of the year: January, February...
seasons: spring, summer, autumn, winter
day, week, fortnight, month, year
weekend
birthday, holiday
morning, afternoon, evening, night, midnight
bedtime, dinnertime, playtime
today, yesterday, tomorrow
before, after
next, last
now, soon, early, late
quick, quicker, quickest, quickly
fast, faster, fastest
slow, slower, slowest, slowly
old, older, oldest
new, newer, newest
takes longer, takes less time
how long ago?/how long will it be to...?
how long will it take to...?
hour, minute, second
o'clock, half past, quarter to, quarter past
clock, watch, hands
digital/analogue clock/watch, timer
how often?
always, never, often, sometimes, usually
once, twice

Patterns and symmetry

size
bigger, larger, smaller
symmetrical
line of symmetry
fold
match
mirror line, reflection
pattern
repeating pattern

Instructions

listen
join in
say
recite
think
imagine
remember
start from
start with
start at
look at
point to
show me
put, place
fit
arrange, rearrange
change, change over
split
separate
carry on, continue
repeat
what comes next…?
predict
describe the pattern
describe the rule
find, find all, find different
investigate
choose
decide
collect
use
make
build
tell me
describe
name
pick out
discuss
talk about
explain
explain your method
explain how you got your answer
give an example of…
show how you…
read
write
record
write in figures
present
represent
trace
copy
complete
finish, end
fill in, shade, colour
label
tick, cross
draw , draw a line between
join (up)
ring
arrow
cost, count, tally
calculate
work out
solve
answer

Multiplication and division

lots of, groups of
x, times, multiply, multiplied by
multiple of
once, twice, three times,
four times, five times… ten times…
times as (big, long, wide and so on)
repeated addition
array
row, column
double, halve
share, share equally
one each, two each, three each…
group in pairs, threes… tens
equal groups of
÷, divide, divided by, divided into, left, left over

Estimating

guess how many, estimate
nearly, roughly, close to
about the same as
just over, just under
exact, exactly
too many, too few, enough, not enough
round, nearest, round to the nearest ten

Organising and using data

count, tally, sort, vote
graph, block graph, pictogram
represent
group, set
list, table
label, title
most popular, most common
least popular, least common

Fractions

part, equal parts
fraction
one whole
one half, two halves
one quarter, two… three… four quarters
Words new to Year 2 are emphasised

Position, direction and movement

position
over, under, underneath
above, below
top, bottom, side
on, in
outside, inside
around
in front, behind
front, back
before, after
beside, next to
opposite
apart
between
middle, edge
centre
corner
direction
journey, route
left, right
up, down
higher, lower
forwards, backwards, sideways
across
close, far, near
along
through
to, from, towards, away from
clockwise, anti-clockwise
movement
slide
roll
whole turn, half turn, quarter turn
right angle
straight line
stretch, bend

check	**General** same, different missing number/s number facts number pairs number bonds number line, number track number square, hundred square number cards number grid abacus counters, cubes, blocks, rods die, dice dominoes pegs, peg board geo-strips same way, different way best way, another way in order, in a different order not all, every, each	**Shape and Space** shape, pattern flat, curved, straight round hollow, solid corner point, pointed face, side, edge, end sort make, build, draw surface **3D shapes** cube cuboid pyramid sphere cone cylinder **2D shapes** circle, circular triangle, triangular square rectangle, rectangular star pentagon hexagon octagon

Vocabulary

Year 3

Counting, properties of numbers and number sequences

number
zero, one, two, three... to twenty and beyond
zero, ten, twenty... one hundred
zero, one hundred, two hundred... one thousand
none
how many...?
count, count (up) to
count on (from, to)
count back (from, to)
count in ones, twos, threes, fours, fives and so on
count in tens, hundreds
more, less, many, few
tally
odd, even
every other
how many times?
multiple of
sequence
continue
predict
pattern, pair, rule
relationship

Making decisions and reasoning

pattern, puzzle
calculate, calculation
mental calculation
method
jotting
answer
right, correct, wrong
what could we try next?
how did you work it out?
number sentence
sign, operation, symbol, equation

Measures (general)

measure
size
compare
measuring scale, division
guess, estimate
enough, not enough
too much, too little
too many, too few
nearly, roughly, about, close to,
about the same as, approximately
just over, just under

Length

length, width, height, depth
long, short, tall, high, low
wide, narrow, deep, shallow, thick, thin
longer, shorter, taller, higher... and so on
longest, shortest, tallest, highest... and so on
far, further, furthest, near, close
distance apart/between... to... from
kilometre (km), metre (m), centimetre (cm)
mile
ruler, metre stick, tape measure

Place value and ordering

units, ones
tens, hundreds
digit
one-, two- or three-digit number
'teens' number
place, place value
stands for, represents
exchange
the same number as, as many as
equal to
Of two objects/amounts:
greater, more, larger, bigger
less, fewer, smaller
Of three or more objects/amounts:
greatest, most, biggest, largest
least, fewest, smallest
one more, ten more, one hundred more
one less, ten less, one hundred less
compare
order
size
first, second, third... tenth... twentieth
twenty-first, twenty-second...
last, last but one
before, after
next
between, half-way between
above, below

Problems involving 'real life' or money

money
coin, note
penny. pence, pound, (£)
price, cost
buy, bought, sell, sold
spend, spent
pay
change
dear, costs more, more/most expensive
cheap, costs less, cheaper, less/least expensive
how much...? how many...?
total, amount
value, worth

Mass

weigh, weighs, balances
heavy/light, heavier/lighter, heaviest/lightest
kilogram (kg), half-kilogram, gram (g)
balance, scales, weight

Capacity

capacity
full, half full
empty
holds, contains
litre (l), half-litre, millilitre (ml)
container

Addition and subtraction

+, add, addition, more, plus
make, sum, total
altogether
score
double, near double
one more, two more... ten more... one hundred more
how many more to make ...?
how many more is... than ...?
how much more is...?
-, subtract, take (away), minus
leave, how many are left/left over?
one less, two less... ten less... one hundred less
how many fewer is... than ...?
how much less is...?
difference between
half, halve
=, equals, sign, is the same as
tens boundary, hundreds boundary

Time

time
days of the week: Monday, Tuesday...
months of the year: January, February...
seasons: spring, summer, autumn, winter
day, week, fortnight, month, year, century
weekend
birthday, holiday
calendar, date
morning, afternoon, evening, night, midnight
am, pm
bedtime, dinnertime, playtime
today, yesterday, tomorrow
before, after
next, last
now, soon, early, late, earliest, latest
quick, quicker, quickest, quickly
fast, faster, fastest
slow, slower, slowest, slowly
old, older, oldest
new, newer, newest
takes longer, takes less time
how long ago?/how long will it be to...?
how long will it take to...?
hour, minute, second
o'clock, half past, quarter to, quarter past
clock, watch, hands
digital/analogue clock/watch, timer
how often?
always, never, often, sometimes, usually
once, twice

Patterns and symmetry

size
bigger, larger, smaller
symmetrical
line of symmetry
fold
match
mirror line, reflection
pattern
repeating pattern

Instructions

listen
join in
say
recite
think
imagine
remember
start from
start with
start at
look at
point to
show me
put, place
fit
arrange, rearrange
change, change over
split
separate
carry on, continue
repeat
what comes next?
predict
describe the pattern
describe the rule
find, find all, find different
investigate
choose
decide
collect
use

Multiplication and division

lots of, groups of
x, times, multiplication, multiply, multiplied by
multiple of, product
once, twice, three times,
four times, five times... ten times...
times as (big, long, wide and so on)
repeated addition
array
row, column
double, halve
share, share equally
one each, two each, three each...
group in pairs, threes... tens
equal groups of
÷, divide, division, divided by, divided into
left, left over, remainder

Fractions

part, equal parts
fraction
one whole
one half, two halves
one quarter, two... three... four quarters
one third, two thirds
one tenth

Estimating

guess how many, estimate
nearly, roughly, close to
approximate, approximately
about the same as
just over, just under
exact, exactly
too many, too few, enough, not enough
round (up or down)
nearest (round to the nearest ten)

Position, direction and movement

position
over, under, underneath
above, below
top, bottom, side
on, in
outside, inside
around
in front, behind
front, back
before, after

make
build
tell me
describe
name
pick out
discuss
talk about
explain
explain your method
explain how you got your answer
give an example of…
show how you…
show your working
read
write
record
write in figures
present
represent
interpret
trace
copy
complete
finish, end
fill in
shade, colour
label
tick, cross
draw, sketch
draw a line between
join (up)
ring
arrow
cost, count, tally
calculate
work out
solve
investigate

Handling data

count, tally, sort, vote
graph, block graph, pictogram
represent
group, set
list, chart, bar chart
table, frequency table
Carroll diagram, Venn diagram
label, title, axis, axes
diagram
most popular, most common
least popular, least common

beside, next to
opposite
apart
between
middle, edge
centre
corner
direction
journey, route, map, plan
left, right
up, down
higher, lower
forwards, backwards, sideways
across
close, far, near
along
through
to, from, towards, away from
ascend, descend
grid
row, column
clockwise, anti-clockwise
compass point
north, south, east, west, (N, S, E, W)
horizontal, vertical
diagonal
movement
slide
roll
whole turn, half turn, quarter turn
angle, …is a greater/smaller angle than right angle
straight line
stretch, bend

question
answer
check

General

same, different
missing number/s
number facts, number pairs, number bonds
greatest value, least value
number line, number track
number square, hundred square
number cards
number grid
abacus
counters, cubes, blocks, rods
die, dice
dominoes
pegs, peg board
geo-strips
same way, different way
best way, another way
in order, in a different order
not
all, every, each

Shape and Space

shape, pattern
flat, curved, straight
round
hollow, solid
corner
point, pointed
face, side, edge, end
sort
make, build, draw
surface
right-angled
vertex, vertices
layer, diagram

3D shapes

cube
cuboid
pyramid
sphere, hemi-sphere
cone
cylinder
prism

2D shapes

circle, circular, semi-circle
triangle, triangular
square
rectangle, rectangular
star
pentagon, pentagonal
hexagon, hexagonal
octagon, octagonal
quadrilateral

Vocabulary

Year 4

Counting, properties of numbers and number sequences

number, count, how many...?
odd, even
every other
how many times?
multiple of
digit
next, consecutive
sequence
continue
predict
pattern, pair, rule
relationship
sort, classify, property

Making decisions and reasoning

pattern, puzzle
calculate, calculation
mental calculation
method
jotting
answer
right, correct, wrong
what could we try next?
how did you work it out?
number sentence
sign, operation, symbol, equation

Measures (general)

measure, measurement
size
compare
unit, standard unit
metric unit, imperial unit
measuring scale, division
guess, estimate
enough, not enough
too much, too little
too many, too few
nearly, roughly, about, close to
about the same as, approximately
just over, just under

Length

length, width, height, depth, breadth
long, short, tall, high, low
wide, narrow, deep, shallow, thick, thin
longer, shorter, taller, higher... and so on
longest, shortest, tallest, highest... and so on
far, further, furthest, near, close
distance apart... between... to... from
edge, perimeter
kilometre (km), metre (m), centimetre (cm), millimetre (mm)
mile
ruler, metre stick, tape measure

Mass

mass: big, bigger, small, smaller, balances
weight: heavy/light, heavier/lighter, heaviest/lightest
weigh, weighs
kilogram (kg), half-kilogram, gram (g)
balance, scales

Capacity

capacity
full, half full
empty
holds, contains
litre (l), half-litre, millilitre (ml)
pint
container, measuring cylinder

Place value and ordering and rounding

units, ones
tens, hundreds, thousands
ten thousand, hundred thousand, million
digit, one-, two-, three- or four-digit number
numeral
'teens' number
place, place value
stands for, represents
exchange
the same number as, as many as
equal to
Of two objects/amounts:
>, greater than, bigger than, more than, larger than
<, less than, fewer than, smaller than
Of three or more objects/amounts:
greatest, most, largest, biggest
least, fewest, smallest,
one... ten... one hundred... one thousand more/less
compare, order, size
first... tenth... twentieth
last, last but one
before, after
next
between, half-way between
guess how many, estimate
nearly, roughly, close to, about the same as
approximate, approximately
just over, just under
exact, exactly
too many, too few, enough, not enough
round (up or down), nearest
round to the nearest ten
round to the nearest hundred
integer, positive, negative
above/below zero, minus

Problems involving 'real life' or money

money
coin, note
penny, pence, pound, (£)
price, cost
buy, bought, sell, sold
spend, spent
pay
change
dear, costs more, more/most expensive
cheap, costs less, cheaper, less/least expensive
how much...? how many...?
total, amount
value, worth

Addition and subtraction

add, addition, more, plus, increase
sum, total, altogether
score
double, near double
how many more to make...?
subtract, subtraction, take away, minus, decrease
leave, how many are left/left over?
difference between
half, halve
how many more/fewer is... than...?
how much more/less is...?
is the same as, equals, sign
tens boundary, hundreds boundary
inverse

Time

time
days of the week: Monday, Tuesday...
months of the year: January, February...
seasons: spring, summer, autumn, winter
day, week, fortnight, month
year, leap year, century, millennium
weekend, birthday
holiday
calendar, date, date of birth
morning, afternoon, evening, night
am, pm, noon, midnight
today, yesterday, tomorrow
before, after, next, last
now, soon, early, late, earliest, latest
quick, quicker, quickest, quickly
fast, faster, fastest, slow, slower, slowest, slowly
old, older, oldest, new, newer, newest
takes longer, takes less time
how long ago?/how long will it be to...?
how long will it take to...?
timetable, arrive, depart
hour, minute, second
o'clock, half past, quarter to, quarter past
clock, watch, hands
digital/analogue clock/watch, timer
how often?
always, never, often, sometimes, usually

Patterns and symmetry

size
bigger, larger, smaller
symmetrical
line of symmetry, line symmetry
fold
match
mirror line, reflection, reflect
pattern, repeating pattern, translation

Area

area, covers, surface
square centimetre (cm2)

Instructions

listen, join in, say, recite
think, imagine, remember
start from, start with, start at
look at, point to, show me
put, place
arrange, rearrange
change, change over
split, separate
carry on, continue, repeat
what comes next? predict
describe the pattern, describe the rule
find, find all, find different
investigate
choose, decide
collect
use, make, build, construct
tell me, describe, name, pick out
discuss, talk about
explain
explain your method
explain how you got your answer
give an example of…
show how you…
show your working
justify
make a statement
read, write, record
write in figures
present, represent
interpret
trace, copy
complete, finish, end
fill in, shade, colour
label, plot
tick, cross

Multiplication and division

lots of, groups of
times, multiplication, multiply, multiplied by
multiple of, product
once, twice, three times
four times, five times… ten times
times as (big, long, wide, and so on)
repeated addition
array
row, column
double, halve
share, share equally
one each, two each, three each…
group in pairs, threes… tens
equal groups of
divide, division, divided by, divided into, divisible by
remainder
factor, quotient
inverse

Fractions and decimals

part, equal parts
fraction
one whole
half, quarter, eighth
third, sixth
fifth, tenth, twentieth
proportion, in every, for every
decimal, decimal fraction
decimal point, decimal place
Words new to Year 4 are emphasised

Estimating

guess how many, estimate
nearly, roughly, close to
approximate, approximately
about the same as
just over, just under
exact, exactly
too many, too few, enough, not enough
round (up or down)
nearest (round to the nearest ten)

Position, direction and movement

position
over, under, underneath
above, below, top, bottom, side
on, in, outside, inside, around
in front, behind, front, back
before, after, beside, next to
opposite, apart
between, middle, edge, centre
corner
direction

draw, sketch draw a line between, join (up), ring, arrow cost, count, tally calculate, work out, solve investigate, question answer check	**Handling data** count, tally, sort, vote survey, questionnaire, data graph, block graph, pictogram represent group, set list, chart, bar chart, tally chart table, frequency table Carroll diagram, Venn diagram label, title, axis, axes diagram most popular, most common least popular, least common	journey, route, map, plan left, right up, down, higher, lower forwards, backwards, sideways, across close, far, near along, through, to, from, towards, away from ascend, descend grid row, column origin, coordinates clockwise, anti-clockwise compass point, north, south, east, west (N, S, E, W) north-east, north-west, south-east, south-west (NE, NW, SE, SW) horizontal, vertical, diagonal movement slide, roll whole turn, half turn, quarter turn, rotate angle, …is a greater/smaller angle than right angle degree straight line stretch, bend ruler, set square angle measurer, compasses

General

same, different
missing number/s
number facts, number pairs, number bonds
greatest value, least value
number line, number track
number square, hundred square
number cards, number grid
abacus
counters, cubes, blocks, rods
die, dice
dominoes
pegs, peg board, pin board
geo-strips
same way, different way
best way, another way
in order, in a different order
not
all, every, each

Shape and Space

shape, pattern
flat, line
curved, straight
round
hollow, solid
corner
point, pointed
face, side, edge, end
sort
make, build, construct, draw, sketch
centre, radius, diameter, perimeter
net
surface
angle, right-angled
base, square-based
vertex, vertices
layer, diagram
regular, irregular
concave, convex
open, closed

3D shapes

3D, three-dimensional
cube
cuboid
pyramid
sphere, hemi-sphere, spherical
cone
cylinder, cylindrical
prism
tetrahedron, polyhedron

2D shapes

2D, two-dimensional
circle, circular, semi-circle
triangle, triangular
equilateral triangle, isosceles triangle
square
rectangle, rectangular, oblong
pentagon, pentagonal
hexagon, hexagonal
heptagon
octagon, octagonal
polygon
quadrilateral

Vocabulary

Year 5

Counting, properties of numbers and number sequences

number, count, how many...?
odd, even
every other
how many times?
multiple of
digit
next, consecutive
sequence
continue
predict
pattern, pair, rule
relationship
sort, classify, property
formula
divisible (by), divisibility, factor
square number
one squared, two squared....(12, 22...)

Making decisions and reasoning

pattern, puzzle
calculate, calculation
mental calculation
method, strategy
jotting
answer
right, correct, wrong
what could we try next?
how did you work it out?
number sentence
sign, operation, symbol, equation

Measures (general)

measure, measurement
size
compare
unit, standard unit
metric unit, imperial unit
measuring scale, division
guess, estimate
enough, not enough
too much, too little
too many, too few
nearly, roughly, about, close to
about the same as, approximately
just over, just under

Length

length, width, height, depth, breadth
long, short, tall, high, low

Place value and ordering and rounding

units, ones
tens, hundreds, thousands
ten thousand, hundred thousand, million
digit, one-, two-, three- or four-digit number
numeral
'teens' number
place, place value
stands for, represents
exchange
the same number as, as many as
equal to
Of two objects/amounts:
>, greater than, more than, larger than, bigger than
<, less than, fewer than, smaller than
≥, greater than or equal to
≤, less than or equal to
Of three or more objects/amounts:
greatest, most, largest, biggest
least, fewest, smallest
one... ten... one hundred... one thousand more/less
compare, order, size
ascending/descending order
first... tenth... twentieth
last, last but one
before, after, next
between, half-way between
guess how many, estimate
nearly, roughly, close to, about the same as
approximate, approximately
≈, is approximately equal to
just over, just under
exact, exactly
too many, too few, enough, not enough
round (up or down), nearest
round to the nearest ten/hundred
round to the nearest thousand
integer
positive, negative
above/below zero, minus

Problems involving 'real life' or money

money
coin, note
penny, pence, pound, (£)
price, cost
buy, bought, sell, sold
spend, spent
pay
change
dear, costs more, more/most expensive
cheap, costs less, cheaper, less/least expensive
how much...? how many...?
total, amount, value, worth
discount
currency

wide, narrow, deep, shallow, thick, thin
longer, shorter, taller, higher... and so on
longest, shortest, tallest, highest... and so on
far, further, furthest, near, close
distance apart/between... to... from
edge, perimeter
kilometre (km), metre (m), centimetre (cm), millimetre (mm)
mile
ruler, metre stick, tape measure

Mass

mass: big, bigger, small, smaller, balances
weight: heavy/light, heavier/lighter, heaviest/lightest
weigh, weighs
kilogram (kg), half-kilogram, gram (g)
balance, scales

Capacity

capacity
full, half full
empty
holds, contains
litre (l), half-litre, millilitre (ml)
pint, gallon
container, measuring cylinder

Addition and subtraction

add, addition, more, plus, increase
sum, total, altogether
score
double, near double
how many more to make...?
subtract, subtraction, take (away), minus, decrease
leave, how many are left/left over?
difference between
half, halve
how many more/ fewer is... than...?
how much more/less is...?
equals, sign, is the same as
tens boundary, hundreds boundary
units boundary, tenths boundary
inverse

Time

time
days of the week: Monday, Tuesday...
months of the year: January, February...
seasons: spring, summer, autumn, winter
day, week, fortnight, month
year, leap year, century, millennium
weekend, birthday
holiday
calendar, date, date of birth
morning, afternoon, evening, night
am, pm, noon, midnight
today, yesterday, tomorrow
before, after, next, last
now, soon, early, late, earliest, latest
quick, quicker, quickest, quickly
fast, faster, fastest, slow, slower, slowest, slowly
old, older, oldest, new, newer, newest
takes longer, takes less time
how long ago?/how long will it be to...?
how long will it take to...?
timetable, arrive, depart
hour, minute, second
o'clock, half past, quarter to, quarter past
clock, watch, hands
digital/analogue clock/watch, timer
24-hour clock, 12-hour clock
how often?
always, never, often, sometimes, usually

Patterns and symmetry

size
bigger, larger, smaller
symmetrical
line of symmetry, axis of symmetry
line symmetry, reflective symmetry
fold
match
mirror line, reflection, reflect
pattern, repeating pattern, translation

Area

area, covers, surface
square centimetre (cm2), square metre (m2)
square millimetre (mm2)

Instructions

listen, join in, say, recite
think, imagine, remember
start from, start with, start at
look at, point to, show me
put, place
arrange, rearrange
change, change over
split, separate
carry on, continue, repeat
what comes next? predict
describe the pattern, describe the rule
find, find all, find different
investigate
choose, decide
collect
use, make, build, construct, bisect
tell me, describe, name, pick out, identify

Multiplication and division

lots of, groups of
times, multiply, multiplication, multiplied by
multiple of, product
once, twice, three times
four times, five times... ten times
times as (big, long, wide, and so on)
repeated addition
array
row, column
double, halve
share, share equally
one each, two each, three each...
group in pairs, threes... tens
equal groups of
divide, divided by, divided into, divisible by
remainder
factor, quotient, divisible by
inverse

Fractions, decimals, percentages, ratio and proportion

part, equal parts
fraction, proper/improper fraction
mixed number
numerator, denominator
equivalent, reduced to, cancel
one whole
half, quarter, eighth
third, sixth, ninth, twelfth
fifth, tenth, twentieth, hundredth
proportion, ratio
in every, for every
to every, as many as
decimal, decimal fraction
decimal point, decimal place
percentage, per cent, %

discuss, talk about
explain
explain your method/answer/ reasoning
give an example of…
show how you…
show your working
justify
make a statement
read, write, record
write in figures
present, represent
interpret
trace, copy, complete, finish, end
fill in, shade, colour, label, plot
tick, cross
draw, sketch, draw a line between, join (up), ring, arrow
cost, count, tally
calculate, work out, solve, convert
investigate, question, answer
check

General

name, different
missing number/s
number facts, number pairs, number bonds
greatest value, least value
number line, number track
number square, hundred square
number cards, number grid
abacus
counters, cubes, blocks, rods
die, dice, spinner
dominoes
pegs, peg board, pin board
geo-strips
same way, different way
best way, another way
in order, in a different order
not
all, every, each

Probablity

fair, unfair
likely, unlikely, likelihood
certain, uncertain
probable, possible, impossible
chance, good chance
poor chance, no chance
risk, doubt

Handling data

count, tally, sort, vote
survey, questionnaire
data, database
graph, block graph, line graph
pictogram,
represent
group, set
list, chart, bar chart, bar line chart
tally chart
table, frequency table
Carroll diagram, Venn diagram
label, title, axis, axes
diagram
most popular, most common
least popular, least common
mode, range
maximum/minimum value
classify, outcome

Position, direction and movement

position
over, under, underneath
above, below, top, bottom, side
on, in, outside, inside, around
in front, behind, front, back
before, after, beside, next to
opposite, apart
between, middle, edge, centre
corner
direction
journey, route, map, plan
left, right
up, down, higher, lower
forwards, backwards, sideways, across
next to, close, far
along, through, to, from, towards, away from
ascend, descend
grid, row, column

Shape and Space

shape, pattern
flat, line
curved, straight
round
hollow, solid
corner
point, pointed
face, side, edge, end
sort
make, build, construct, draw, sketch
centre, radius, diameter, perimeter
net
surface
angle, right-angled
congruent
base, square-based
vertex, vertices
layer, diagram
regular, irregular
concave, convex
open, closed

3D shapes

3D, three-dimensional
cube, cuboid
pyramid
sphere, hemi-sphere, spherical
cone
cylinder, cylindrical
prism
tetrahedron, polyhedron, octahedron

2D shapes

2D, two-dimensional
circle, circular, semi-circle
triangle, triangular
equilateral triangle, isosceles triangle, scalene triangle
square
rectangle, rectangular, oblong
pentagon, pentagonal
hexagon, hexagonal
heptagon
octagon, octagonal
polygon
quadrilateral

origin, coordinates
clockwise, anti-clockwise
compass point, north, south, east, west (N, S, E, W)
north-east, north-west, south-east, south-west (NE, NW, SE, SW)
horizontal, vertical, diagonal
parallel, perpendicular
x-axis, y-axis
quadrant
movement
slide, roll
whole turn, half turn, quarter turn
rotate, rotation
angle, ...is a greater/smaller angle than
right angle, acute, obtuse
degree
straight line
stretch, bend
ruler, set square
angle measurer, compasses, protractor

Vocabulary

Year 6

Counting, properties of numbers and number sequences

number, count, how many...?
odd, even
every other
how many times?
multiple of
digit
next, consecutive
sequence
continue
predict
pattern, pair, rule
relationship
sort, classify, property
formula
divisible (by), divisibility, factor, factorise
square number
one squared, two squared....(12, 22...)
prime, prime factor

Making decisions and reasoning

pattern, puzzle
calculate, calculation
mental calculation
method, strategy
jotting
answer
right, correct, wrong
what could we try next?
how did you work it out?
number sentence
sign, operation, symbol, equation

Measures (general)

measure, measurement
size
compare
unit, standard unit
metric unit, imperial unit
measuring scale, division
guess, estimate
enough, not enough
too much, too little
too many, too few
nearly, roughly, about, close to
about the same as, approximately
just over, just under

Length

ength, width, height, depth, breadth
long, short, tall, high, low
wide, narrow, deep, shallow, thick, thin

Place value and ordering and rounding

: units, ones
tens, hundreds, thousands
ten thousand, hundred thousand, million
digit, one-, two-, three- or four-digit number
numeral
'teens' number
place, place value
stands for, represents
exchange
the same number as, as many as
equal to
Of two objects/amounts:
>, greater than, more than, larger than, bigger than
<, less than, fewer than, smaller than
≥, greater than or equal to
≤, less than or equal to
Of three or more objects/amounts:
greatest, most, largest, biggest
least, fewest, smallest,
one... ten... one hundred... one thousand more/less
compare, order, size
ascending/descending order
first... tenth... twentieth
last, last but one
before, after
next
between, half-way between
guess how many, estimate
nearly, roughly, close to, about the same as
approximate, approximately
≈, is approximately equal to
just over, just under
exact, exactly
too many, too few, enough, not enough
round (up or down), nearest
round to the nearest ten/hundred/thousand
integer, positive, negative
above/below zero, minus

Problems involving 'real life' or money

money
coin, note
penny, pence, pound, (£)
price, cost
buy, bought, sell, sold
spend, spent
pay
change
dear, costs more, more/most expensive
cheap, costs less, cheaper, less/least expensive
how much...? how many...?
total, amount, value
discount, profit, loss
currency

longer, shorter, taller, higher... and so on
longest, shortest, tallest, highest... and so on
far, further, furthest, near, close
distance apart/between... to... from
edge, perimeter, circumference
kilometre (km), metre (m), centimetre (cm), millimetre (mm)
mile, yard, feet, foot, inches, inch
ruler, metre stick, tape measure, compasses

Mass

mass: big, bigger, small, smaller, balances
weight: heavy/light, heavier/lighter, heaviest/lightest
weigh, weighs
tonne, kilogram (kg), half-kilogram, gram (g)
pound, ounce
balance, scales

Capacity

capacity
full, half full
empty
holds, contains
litre (l), half-litre, centilitre (cl), millilitre (ml)
pint, gallon
container, measuring cylinder

Addition and subtraction

add, addition, more, plus, increase
sum, total, altogether
score
double, near double
how many more to make...?
subtract, subtraction, take (away), minus, decrease
leave, how many are left/left over?
difference between
half, halve
how many more/fewer is... than...?
how much more/less is...?
is the same as, equals, sign
tens boundary, hundreds boundary
units boundary, tenths boundary
inverse

Time

time
days of the week: Monday, Tuesday...
months of the year: January, February...
seasons: spring, summer, autumn, winter
day, week, fortnight, month
year, leap year, century, millennium
weekend, birthday
holiday
calendar, date, date of birth
morning, afternoon, evening, night
am, pm, noon, midnight
today, yesterday, tomorrow
before, after, next, last
now, soon, early, late, earliest, latest
quick, quicker, quickest, quickly
fast, faster, fastest, slow, slower, slowest, slowly
old, older, oldest, new, newer, newest
takes longer, takes less time
how long ago?/how long will it be to...?
how long will it take to...?
timetable, arrive, depart
hour, minute, second
o'clock, half past, quarter to, quarter past
clock, watch, hands
digital/analogue clock/watch, timer
24-hour clock, 12-hour clock
Greenwich Mean Time, British Summer Time
International Date Line
how often?
always, never, often, sometimes, usually

Patterns and symmetry

size
bigger, larger, smaller
symmetrical
line of symmetry, axis of symmetry
line symmetry, reflective symmetry
fold
match
mirror line, reflection, reflect
pattern, repeating pattern, translation

Area

area, covers, surface
square centimetre (cm2), square metre (m2)
square millimetre (mm2)

General

same, identical, different
missing number/s
number facts, number pairs, number bonds
greatest value, least value
number line, number track
number square, hundred square
number cards, number grid
abacus
counters, cubes, blocks, rods
die, dice, spinner
dominoes
pegs, peg board, pin board
geo-strips
same way, different way
best way, another way
in order, in a different order

Multiplication and division

lots of, groups of
times, multiplication, multiply, multiplied by
multiple of, product
once, twice, three times
four times, five times... ten times
times as (big, long, wide, and so on)
repeated addition
array, row, column
double, halve
share, share equally
one each, two each, three each...
group in pairs, threes... tens
equal groups of
divide, division, divided by, divided into
remainder
factor, quotient, divisible by
inverse

Fractions, decimals, percentages, ratio and proportion

part, equal parts
fraction, proper/improper fraction
mixed number
numerator, denominator
equivalent, reduced to, cancel
one whole
half, quarter, eighth
third, sixth, ninth, twelfth
fifth, tenth, twentieth
hundredth, thousandth
proportion, ratio, in every, for every
to every, as many as
decimal, decimal fraction
decimal point, decimal place
percentage, per cent, %

Instructions

listen, join in, say, recite
think, imagine, remember
start from, start with, start at
look at, point to, show me
put, place
arrange, rearrange
change, change over
adjusting, adjust
split, separate
carry on, continue, repeat
what comes next?, predict
describe the pattern, describe the rule
find, find all, find different
investigate
choose, decide
collect
use, make, build, construct, bisect
tell me, define, describe, name, pick out, identify
discuss, talk about
explain
explain your method/answer/reasoning
give an example of…
show how you…
show your working
justify
make a statement
read, write, record
write in figures
present, represent
interpret
trace, copy
complete, finish, end
fill in, shade, colour
label, plot
tick, cross
draw, sketch
draw a line between, join (up), ring, arrow
cost, count, tally
calculate, work out, solve, convert
investigate, interrogate (data), question, prove
answer
check

Probablity

fair, unfair
likely, unlikely, likelihood, equally likely
certain, uncertain
probable, possible, impossible
chance, good chance,
poor chance, no chance
equal chance, even chance, fifty-fifty chance
risk, doubt
biased, random

Handling data

count, tally, sort, vote
survey, questionnaire
data, database
graph, block graph, line graph
pictogram,
represent
group, set
list, chart, bar chart, bar line chart
tally chart
table, frequency table
Carroll diagram, Venn diagram
label, title, axis, axes
diagram
most popular, most common
least popular, least common
mode, range, mean, average, median
statistics, distribution
maximum/minimum value
classify, outcome

Position, direction and movement

position
over, under, underneath
above, below, top, bottom, side
on, in, outside, inside, around
in front, behind, front, back
before, after, beside, next to
opposite, apart
between, middle, edge, centre
corner
direction
journey, route, map, plan
left, right
up, down, higher, lower
forwards, backwards, sideways, across
close, far, near
along, through, to, from, towards, away from
ascend, descend
grid, row, column
origin, coordinates
clockwise, anti-clockwise
compass point, north, south, east, west (N, S, E, W)
north-east, north-west, south-east, south-west (NE, NW, SE, SW)
horizontal, vertical, diagonal
parallel, perpendicular
x-axis, y-axis
quadrant
movement
slide, roll
whole turn, half turn, quarter turn, rotate, rotation
angle, …is a greater/smaller angle than
right angle, acute, obtuse, reflex
degree
straight line
stretch, bend
ruler, set square
angle measurer, compasses, protractor

Shape and Space

shape, pattern
flat, line
curved, straight
round
hollow, solid
corner
point, pointed
face, side, edge, end
sort
make, build, construct, draw, sketch
centre, radius, diameter, perimeter
circumference, concentric, arc
net
surface
angle, right-angled
congruent
intersecting, intersection
plane
base, square-based
vertex, vertices
layer, diagram
regular, irregular
concave, convex
open, closed

3D shapes

3D, three-dimensional
cube, cuboid
pyramid
sphere, hemi-sphere, spherical
cone
cylinder, cylindrical
prism
tetrahedron, polyhedron, octahedron, dodecahedron

2D shapes

2D, two-dimensional
circle, circular, semi-circle
triangle, triangular
equilateral triangle, isosceles triangle, scalene triangle
square, rhombus
rectangle, rectangular, oblong
pentagon, pentagonal
hexagon, hexagonal
heptagon
octagon, octagonal
polygon
quadrilateral
kite
parallelogram, trapezium