Banks Lane Infant & Nursery
Maths Curriculum

Collaboration | Effort |Excellence | Respect
And that we can make a difference

Intention

At Banks Lane Infant and Nursery School, we strongly promote our belief that maths plays a central role in everyday life, enabling our children to measure, organise, and make sense of the world. Our aim is to make maths an inspiring and engaging subject that empowers our children to confidently and efficiently apply problem-solving, reasoning, and logic skills in their daily lives.

Maths Experiences & Opportunities (Cultural Capital)

Daily Mastering Number sessions
Working walls
Maths opportunities through outdoor learning
Maths Toolkit
Build a Sequence approach
Calculation Policy
Maths work celebrated through Celebration Assembly
Milo's money

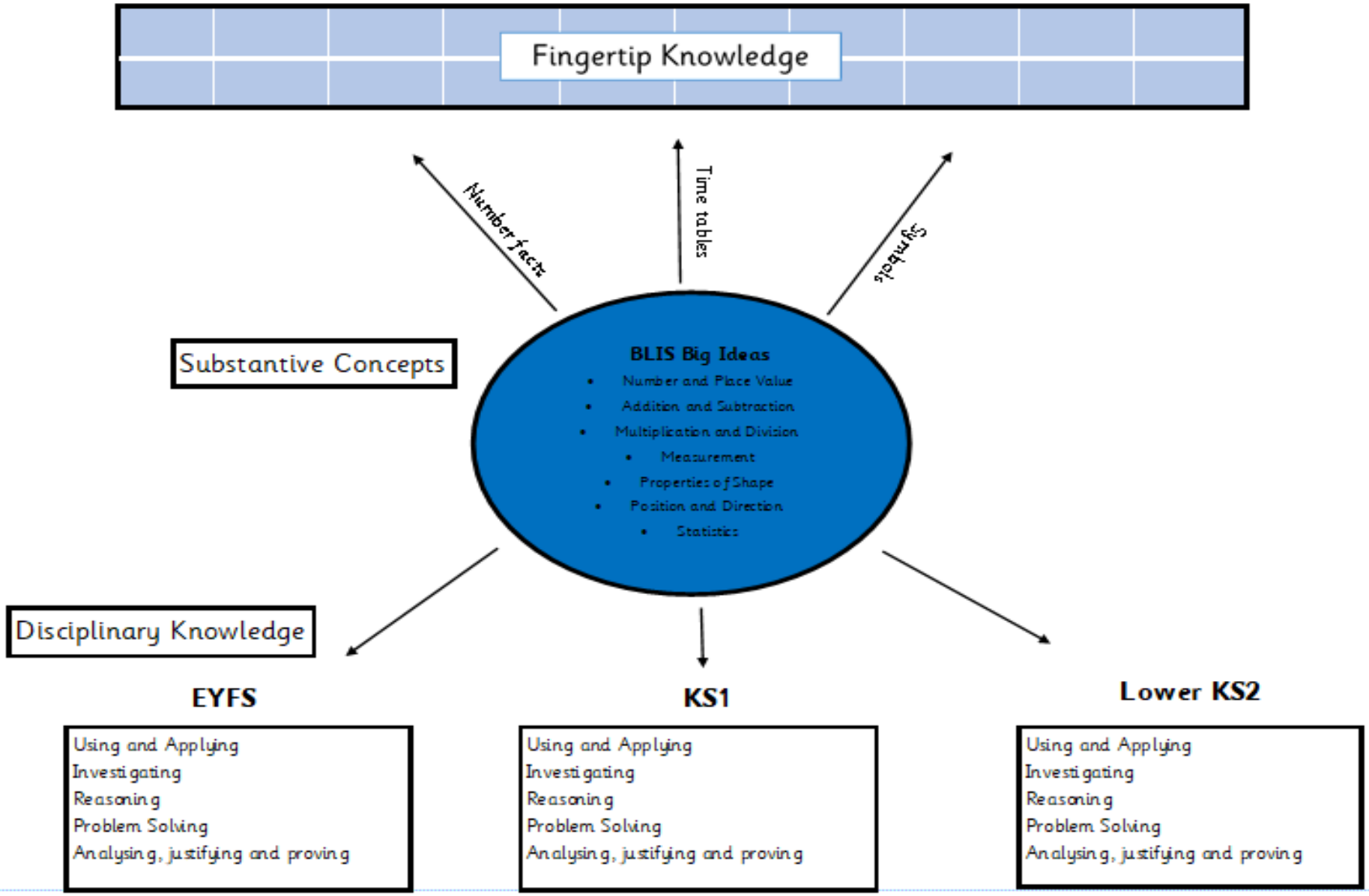
Knowledge and enquiry in Maths

Knowledge and enquiry in maths are divided into distinct areas and children need to be able to move fluidly between these and be able to make connections when solving sophisticated problems. These areas are: ● Number and Place Value ● Addition and Subtraction ● Multiplication and Division ● Measurement ● Properties of Shape ● Position and Direction ● Statistics. In the early years foundation stage they are: ● Number ● Shape, Space and Measure.

Children need substantive knowledge in mathematics (eg. number facts, times tables) and disciplinary knowledge (how to work things out, reason and problem solve).

Substantive Concepts - Pupils need a comprehensive understanding, including knowledge of number bonds and multiplication facts, to effectively grasp intricate concepts. Through intentional and repeated practice, children develop confidence, fluency and efficiency, embedding this essential knowledge in their long-term memory. Children are guided to establish connections between various mathematical elements, enhancing their substantive knowledge. Our school adopts a mastery approach, utilising White Rose Maths to structure units, ensuring seamless continuity and progression. This methodology empowers pupils to construct a robust foundational understanding.

Disciplinary knowledge - Children will apply their Substantive Knowledge through reasoning and problem-solving activities. These opportunities are woven into their daily maths and Mastering Number lessons. Mathematical Sentence Stems and Can you Still? retrieval activities are taught and displayed in all classrooms to support this.


Fingertip Knowledge
Number facts
Time tables
Symbols
Substantive Concepts
BLIS Big Ideas
Number and Place Value
Addition and Subtraction
Multiplication and Division
Measurement
Properties of Shape
Position and Direction
Statistics
Disciplinary Knowledge
EYFS
Using and Applying
Investigating
Reasoning
Problem Solving
Analysing, justifying and proving
KS1
Using and Applying
Investigating
Reasoning
Problem Solving
Analysing, justifying and proving
Lower KS2
Using and Applying
Investigating
Reasoning
Problem Solving
Analysing, justifying and proving

EY Overview of Progression

Educational Programme-EYFS Framework

Developing a strong grounding in number is essential so that all children develop the necessary building blocks to excel mathematically. Children should be able to count confidently, develop a deep understanding of the numbers to 10, the relationships between them and the patterns within those numbers. By providing frequent and varied opportunities to build and apply this understanding - such as using manipulatives, including small pebbles and tens frames for organising counting - children will develop a secure base of knowledge and vocabulary from which mastery of mathematics is built. In addition, it is important that the curriculum includes rich opportunities for children to develop their spatial reasoning skills across all areas of mathematics including shape, space and measures. It is important that children develop positive attitudes and interests in mathematics, look for patterns and relationships, spot connections, 'have a go', talk to adults and peers about what they notice and not be afraid to make mistakes.

Nursery Development Matters	Reception Development Matters	Early Learning Goals
• Fast recognition of up to 3 objects, without having to count them individually ('subitising). • Recite numbers past 5. • Say one number for each item in order: 1,2,3,4,5. • Know that the last number reached when counting a small set of objects tells you how many there are in total ('cardinal principle'). • Show 'finger numbers' up to 5. • Links numerals and amounts: for example, showing the right number of objects to match the numerals, up to 5. • Experiment with their own symbols and mars as well as numerals. • Solve real world mathematical problems with numbers up to 5. • Compare quantities using language: 'more than', 'fewer than'. • Tal about and explore 2D and 3D shapes (for example, circles, rectangles, triangles and cuboids) using informal and mathematical language: 'sides', 'corners', 'straight', 'flat', 'round'. • Understand position through word alone- for example, "The bag is under the table," - with no pointing. • Describe a familiar route. • Discuss routes and locations, using words like 'in front of and 'behind'. • Make comparisons between objects relating to size, length, weight and capacity. • Select shapes appropriately: flat surfaces for a building, a triangular prism for a roof etc.	• Count objects, actions and sounds. • Subitise. • Link the number symbol (numeral) with its cardinal number value. • Count beyond ten. • Compare numbers. • Understand the 'one more than/one less than' relationship between consecutive numbers. • Explore the composition of numbers to 10. • Automatically recall number bonds for numbers 0–5 and some to 10. • Select, rotate and manipulate shapes to develop spatial reasoning skills. • Compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can. • Continue, copy and create repeating patterns. • Compare length, weight and capacity.	**<u>Number</u>** • Have a deep understanding of number to 10, including the composition of each number. • Subitise (recognise quantities without counting) up to 5. • Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts. **<u>Numerical Patterns</u>** • Verbally count beyond 20, recognising the pattern of the counting system. • Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity. • Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally

• Combine shapes to make new ones – an arch, a bigger triangle etc. • Combine shapes to make new ones – an arch, a bigger triangle etc. • Talk about and identifies the patterns around them. For example: stripes on clothes, designs on rugs and wall paper. Use informal language like 'pointy', 'spotty', 'blobs' etc. • Extend and create ABAB patterns – stick, leaf, stick, leaf. • Notice and correct an error in a repeating pattern. • Begin to describe a sequence of events, real or fictional, using words such as 'first', 'then ….'		

Nursery Planning

Autumn 1 **Text: I like me!**	Autumn 2 **Text: The Happy Hedgehog Band**	Spring 1 **Text: Snowmen at Night**	Spring 2 **Text: I want to Be**	Summer 1 **Text: This is the Way**	Summer 2 **Text: Night Monkey, Day Monkey**
• Colours • Matching • Sorting • Number 1 • Number 2 • Pattern • Consolidation		• Number 3 • Number 4 • Number 5 • Consolidation • Number 6 • Height and length • Mass • Capacity • Consolidation		• Sequencing • Postional language • More than/fewer than • Shape 2D • Shape 3D • Consolidation • Number composition • What comes after? • What comes before? • Numbers to 5 • Consolidation	

Reception Planning

Autumn 1 **Text: Jack and the Flum Flum Tree**	Autumn 2 **Text: Naughty Bus, The PaperDolls, Stickman**	Spring 1 **Text: Max, Juniper Jupiter**	Spring 2 **Text: How to Catch a Rainbow**	Summer 1 **Text: The Night Pirates**	Summer 2 **Text: The Way Back Home, Whatever Next**
• Getting to know you • Match, sort and compare		• Alive in 5 • Mass and capacity		• To 20 and beyond • How many now?	

• Talk about measure and pattern • It's me 1,2,3 • Circles and triangles • 1,2,3,4,5 • Shapes with 4 sides	• Growing 6,7,8 • Length, height and time • Building 9 and 10 • Explore 3D Shapes	• Manipulate, compose and decompose • Sharing and grouping • Visualise, build and map • Make connections • Consolidation

Mastering Number

Reception Overview

Term 1	Term 2	Term 3
Pupils will build on previous experiences of number from their home and nursery environments, and further develop their subitising and counting skills. They will explore the composition of numbers within 5. They will begin to compare sets of objects and use the language of comparison. **Pupils will:** • identify when a set can be subitised and when counting is needed • subitise different arrangements, both unstructured and structured, including using the Hungarian number frame • make different arrangements of numbers within 5 and talk about what they can see, to develop their conceptual subitising skills • spot smaller numbers 'hiding' inside larger numbers	Pupils will continue to develop their subitising and counting skills and explore the composition of numbers within and beyond 5. They will begin to identify when two sets are equal or unequal and connect two equal groups to doubles. They will begin to connect quantities to numerals. **Pupils will:** • continue to develop their subitising skills for numbers within and beyond 5, and increasingly connect quantities to numerals • begin to identify missing parts for numbers within 5 • explore the structure of the numbers 6 and 7 as '5 and a bit' and connect this to finger patterns and the Hungarian number frame • focus on equal and unequal groups when comparing numbers	Pupils will consolidate their counting skills, counting to larger numbers and developing a wider range of counting strategies. They will secure knowledge of number facts through varied practice. **Pupils will:** • continue to develop their counting skills, counting larger sets as well as counting actions and sounds • explore a range of representations of numbers, including the 10-frame, and see how doubles can be arranged in a 10-frame • compare quantities and numbers, including sets of objects which have different attributes • continue to develop a sense of magnitude, e.g. knowing that 8 is quite a lot more than 2, but 4 is only a little bit more than 2

• connect quantities and numbers to finger patterns and explore different ways of representing numbers on their fingers • hear and join in with the counting sequence, and connect this to the 'staircase' pattern of the counting numbers, seeing that each number is made of one more than the previous number • develop counting skills and knowledge, including: that the last number in the count tells us 'how many' (cardinality); to be accurate in counting, each thing must be counted once and once only and in any order; the need for 1:1 correspondence; understanding that anything can be counted, including actions and sounds • compare sets of objects by matching • begin to develop the language of 'whole' when talking about objects which have parts	• understand that two equal groups can be called a 'double' and connect this to finger patterns • sort odd and even numbers according to their 'shape' • continue to develop their understanding of the counting sequence and link cardinality and ordinality through the 'staircase' pattern • order numbers and play track games • join in with verbal counts beyond 20, hearing the repeated pattern within the counting numbers	• begin to generalise about 'one more than' and 'one less than' numbers within 10 • continue to identify when sets can be subitised and when counting is necessary • develop conceptual subitising skills including when using a rekenrek

RECEPTION

Counting and recognising numbers

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

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

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

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

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

Measures, shape and space

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

MASS

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

CAPACITY

full
half full
empty
holds
container

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

EXPLORING PATTERNS, SHAPE AND SPACE

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

3D SHAPES

cube
pyramid
sphere
cone

2D SHAPES

circle
triangle
square
rectangle
star

PATTERNS AND SYMMETRY

size
bigger, larger, smaller
symmetrical
pattern
repeating pattern
match

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

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

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

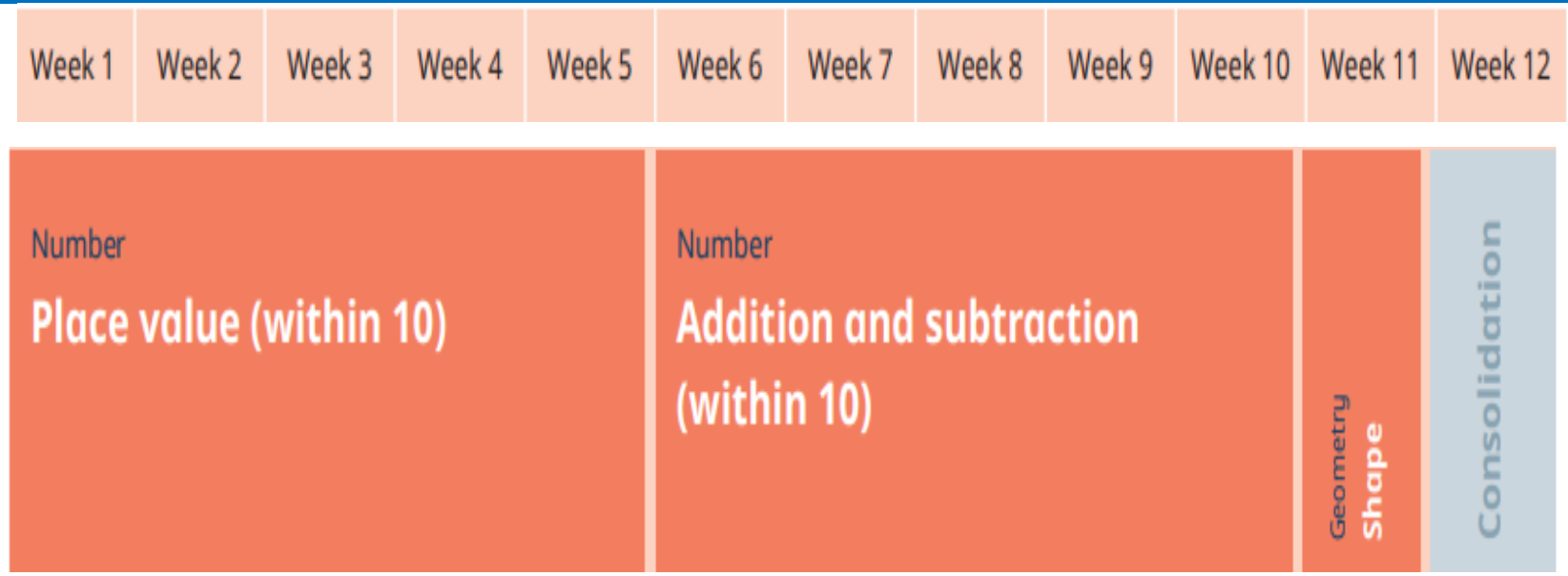
same way, different way
best way, another way
in order, in a different order

not
all, every, each

Year 1

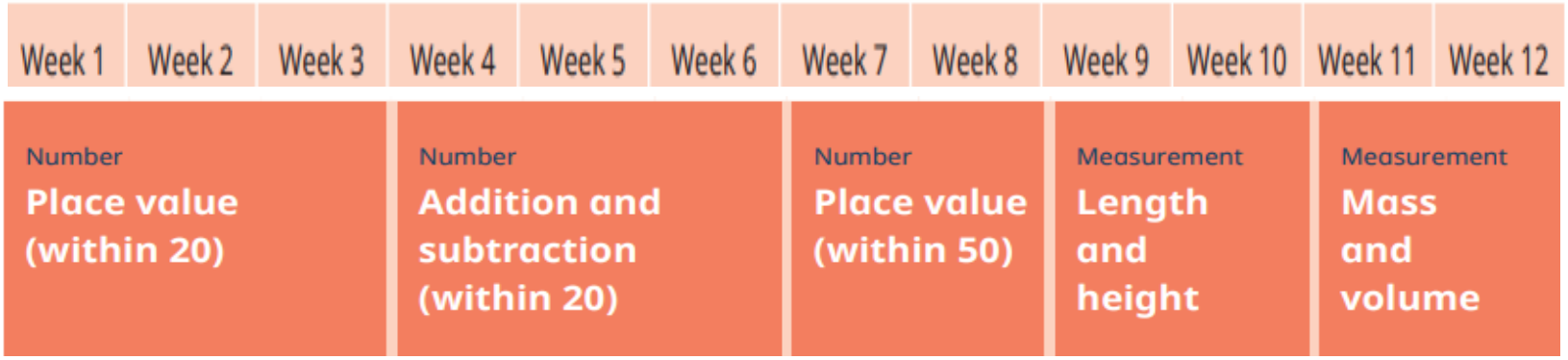
1:1
Big Question: How did the dinosaurs leave their mark on the world? What will your Year 1 footprint look like?
Topic: The Land before Time
Theme: Forever changing
Book: Katie And The Dinosaurs

1:2
Big Question: How do we all help each other?
Topic: Into the Woods
Theme: Respect
Book: It Starts With A Seed. The Tree. The Gruffalo



2:1
Big Question: What can we learn from fairy tales?
Topic: Once Upon A Time
Theme: Actions/consequences/right and wrong/keeping safe
Book: Little Red Riding Hood & Various Fairy Tales

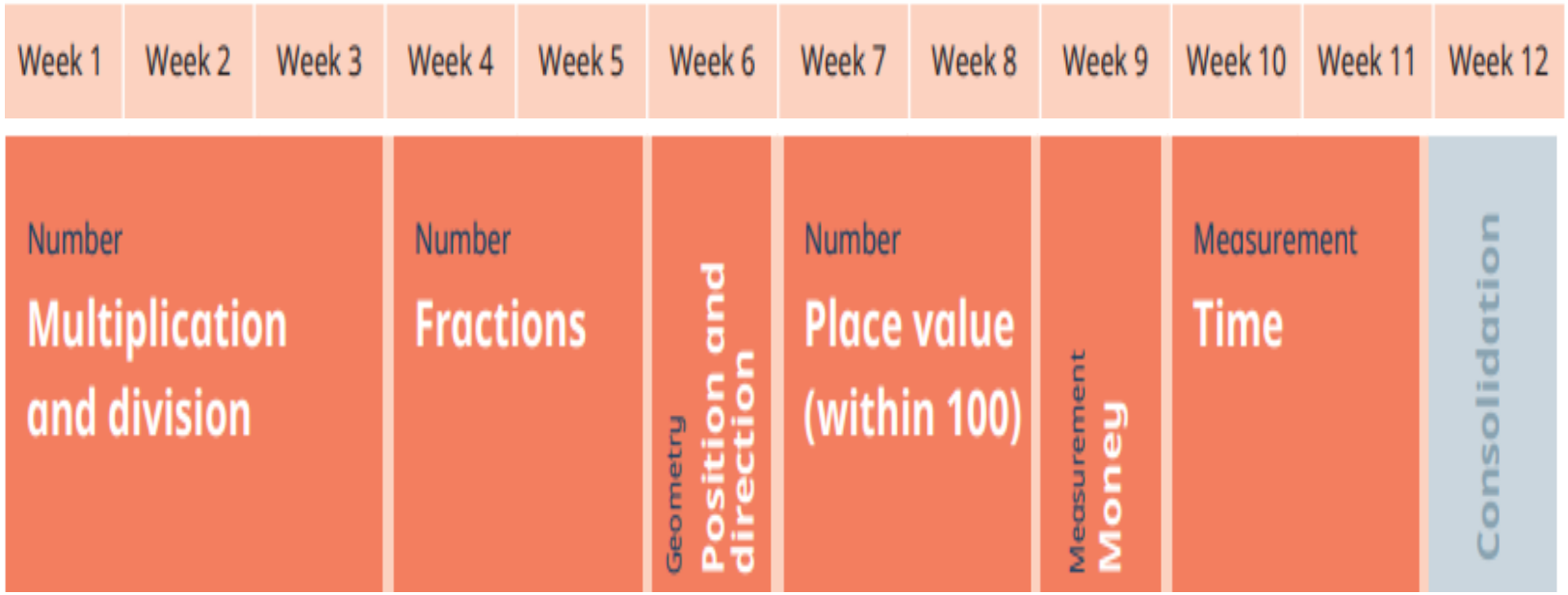
2:2



Big Question: What makes a good leader?
Topic: Marvellous Monarchs
Theme: Fairness/British Values
Book: Teeny Weeny Queenie

3.1
Big Question: What makes a house a home?
Topic: There's No Place Like Home
Theme: Belonging/special people/diversity
Book: On The Way Home The House That Once Was

3:2
Big Question: Do we have a responsibility to help future generations?
Topic: What a wonderful world!
Theme: Responsibility/flourishing
Book: Bog Baby



Banks Lane Infant & Nursery School | Year 1 Maths End Points: Number

Number	2014 NC: Number and Place Value	2014 NC: Addition and Subtraction	2014 NC: Multiplication and Division	2014 NC: Fractions
Year One	• Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number. • Count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens. • Given a number, identify one more and one less. • Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least. • Read and write numbers from 1 to 20 in numerals and words.	• Read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs. • Represent and use number bonds and related subtraction facts within 20. • Add and subtract one-digit and two-digit numbers to 20, including zero. • Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = - 9.	• Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.	• Recognise, find and name a half as one of two equal parts of an object, shape or quantity. • Recognise, find and name a quarter as one of our equal parts of an object, shape or quantity.

Children working below ARE	Children exceeding ARE

Banks Lane Infant & Nursery School | Year 1 Maths End Points: Shape, Space and Measure

Shape, Space and Measure	2014 NC: Measure	2014 NC: Geometry: Properties of Shapes	2014 NC: Geometry: Position, Direction and Motion
Year One	➢ Compare, describe and solve practical problems for: • lengths and heights (e.g. long/short, longer/shorter, tall/short, double/half) • mass or weight (e.g. heavy/light, heavier than, lighter than) • capacity/volume (e.g. full/empty, more than, less than, half, half full, quarter) • time (e.g. quicker, slower, earlier, later) ➢ Measure and begin to record the following: • lengths and heights • mass/weight • capacity and volume • time (hours, minutes, seconds) ➢ Recognise and know the value of different denominations of coins and notes. ➢ Sequence events in chronological order using language (e.g. before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening) ➢ Recognise and use language relating to dates, including days of the week, weeks, months and years. ➢ Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.	➢ Recognise and name common 2-D and 3-D shapes, including: • 2-D shapes (e.g. rectangles (including squares), circles and triangles) • 3-D shapes (e.g. cuboids (including cubes), pyramids and spheres.	➢ Describe position, directions and movements, including half, quarter and three-quarter turns.

Children working below ARE	Children exceeding ARE

Year 1 Maths Moderation Grid

Name of Child:	Class:	Objective Achieved		
	Working Towards the Expected Standard	**1**	**2**	**3**
WT1	Count to and across 20, forwards and backwards, beginning with 0 or 1, or from any given number.			
WT2	Count, read and write numbers to 20 in numerals. Count in multiples of twos and tens.			
WT3	Given a number, identify one more and one less.			
WT4	Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer).			
WT5	Read and write numbers from 1 to 10 in numerals and words.			
WT6	Write mathematical statements involving addition (+), subtraction (–) and equals (=) signs.			
WT7	Represent and use number bonds and related subtraction facts within 10.			
WT8	Add and subtract one-digit and two-digit numbers to 10, including zero.			
WT9	Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations.			
WT10	Solve one-step problems involving multiplication, by calculating the answer using concrete objects and pictorial representations with the support of the teacher.			
WT11	Recognise, find and name a half as one of two equal parts of an object or shape.			
WT12	Recognise, find and name a quarter as one of four equal parts of an object or shape.			
WT13	Compare and describe: • lengths and heights [for example, long/short, longer/shorter, tall/short, double/half] • mass/weight [for example, heavy/light, heavier than, lighter than] • capacity and volume [for example, full/ empty, more than, less than, half, half full, quarter] time [for example, quicker, slower, earlier, later]			
WT14	Measure the following: • lengths and heights • mass/weight • capacity and volume time (hours, minutes, seconds)			
WT15	Recognise and know the value of different denominations of coins to 20p.			
WT16	Sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening].			
WT17	Recognise and use language relating to dates, including days of the week, weeks, months and years.			
WT18	Tell the time to the hour and draw the hands on a clock face to show these times.			
WT19	Recognise and name common 2D shapes, including: • 2D shapes [for example, rectangles (including squares), circles and triangles]			
WT20	Describe position, direction and movement, including whole and half turns.			

Year 1 Maths Moderation Grid

Name of Child:	Class:	Objective Achieved		
	Working At the Expected Standard	**1**	**2**	**3**
E1	Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number.			
E2	Count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens.			
E3	Given a number, identify one more and one less.			
E4	Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least.			
E5	Read and write numbers from 1 to 20 in numerals and words.			
E6	Read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs.			
E7	Represent and use number bonds and related subtraction facts within 20.			
E8	Add and subtract one-digit and two-digit numbers to 20, including zero.			
E9	Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems, such as 7 = ☐ – 9.			
E10	Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.			
E11	Recognise, find and name a half as one of two equal parts of an object, shape or quantity.			
E12	Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.			
E13	Compare, describe and solve practical problems for: • lengths and heights [for example, long/short, longer/shorter, tall/short, double/half] • mass/weight [for example, heavy/light, heavier than, lighter than] • capacity and volume [for example, full/ empty, more than, less than, half, half full, quarter] time [for example, quicker, slower, earlier, later]			
E14	Measure and begin to record the following: • lengths and heights • mass/weight • capacity and volume time (hours, minutes, seconds)			
E15	Recognise and know the value of different denominations of coins and notes.			
E16	Sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening].			
E17	Recognise and use language relating to dates, including days of the week, weeks, months and years.			
E18	Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.			
E19	Recognise and name common 2D and 3D shapes, including: • 2D shapes [for example, rectangles (including squares), circles and triangles] • 3D shapes [for example, cuboids (including cubes), pyramids and spheres]			
E20	Describe position, direction and movement, including whole, half, quarter and three-quarter turns.			

Year 1 Maths Moderation Grid

Name of Child:	Class:	Objective Achieved		
	Working At the Greater Depth Standard	**1**	**2**	**3**
GD1	Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number.			
GD2	Count, read and write numbers to 200 in numerals. Count forwards and backwards in multiples of twos, fives and tens up to and beyond 100.			
GD3	Given a number, identify one and ten more and one less up to and beyond 100.			
GD4	Identify and represent numbers using objects and pictorial representations including the number line, beyond 100; and use the language of: equal to, more than, less than (fewer), most, least.			
GD5	Read and write numbers from 1 to 50 in numerals and words.			
GD6	Read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs.			
GD7	Represent and use number bonds and related subtraction facts within 20, beginning to memorise the facts.			
GD8	Add and subtract one-digit and two-digit numbers to 20, including zero.			
GD9	Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems, such as 7 = [ ] – 9.			
GD10	Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.			
GD11	Recognise, find and name a half as one of two equal parts of an object, shape or quantity, in various contexts, using reasoning.			
GD12	Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity, in various contexts, using reasoning.			
GD13	Compare, describe and solve practical problems for: • lengths and heights [for example, long/short, longer/shorter, tall/short, double/half] • mass/weight [for example, heavy/light, heavier than, lighter than] • capacity and volume [for example, full/ empty, more than, less than, half, half full, quarter] time [for example, quicker, slower, earlier, later]			
GD14	Measure and begin to record the following: • lengths and heights • mass/weight • capacity and volume • time (hours, minutes, seconds) *using non-standard units, moving to standard units*			
GD15	Recognise and know the value of different denominations of coins and notes.			
GD16	Sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening].			
GD17	Recognise and use language relating to dates, including days of the week, weeks, months and years.			
GD18	Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.			
GD19	Recognise and name common 2D and 3D shapes, including: • 2D shapes [for example, rectangles (including squares), circles, triangles] • 3D shapes [for example, cuboids (including cubes), pyramids and spheres] explaining some of the properties that indicate the name of the shape.			
GD20	Describe position, direction and movement, including whole, half, quarter and three-quarter turns, being able to plan a short route using simple commands.			

Banks Lane Infant & Nursery School | Year 1 Maths Assessment: Number – Whole Class

Year 1 Number	Number and Place Value					Addition and Subtraction				Multiplication and Division	Fractions	
Name	Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number.	Count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens.	Given a number, identify one more and one less.	Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least.	Read and write numbers from 1 to 20 in numerals and words.	Read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs.	Represent and use number bonds and related subtraction facts within 20.	Add and subtract one-digit and two-digit numbers to 20, including zero.	Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = - 9.	Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.	Recognise, find and name a half as one of two equal parts of an object, shape or quantity.	Recognise, find and name a quarter as one of our equal parts of an object, shape or quantity.

Banks Lane Infant & Nursery School | Year 1 Maths Assessment: Shape, Space and Measure – Whole Class

Year 1 Shape, Space and Measure	Measure												Geometry: Properties of Shapes		Geometry: Position, Direction and Motion
Name	Compare, describe and solve practical problems for: lengths and heights (e.g. long/short, longer/shorter, tall/short, double/half)	Compare, describe and solve practical problems for: mass or weight (e.g. heavy/light, heavier than, lighter than)	Compare, describe and solve practical problems for: capacity/volume (e.g. full/empty, more than, less than, half, half full, quarter)	Compare, describe and solve practical problems for: time (e.g.	Measure and begin to record the following :lengths and heights	Measure and begin to record the following: mass/weight	Measure and begin to record the following: capacity and volume	Measure and begin to record the following: time (hours, minutes, seconds)	Recognise and know the value of different denominations of coins and notes.	Sequence events in chronological order using language (e.g. before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening)	Recognise and use language relating to dates, including days of the week, weeks, months and years.	Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.	Recognise and name common 2-D shapes, including: e.g. rectangles (including squares), circles and triangles)	Recognise and name common 3-D shapes, including: cuboids (including cubes), pyramids and spheres.	Describe position, directions and movements, including half, quarter and three-quarter turns.

Banks Lane Infant & Nursery School | Year 1 Maths Assessment: Number - Group

Year 1 Number	Number and Place Value					Addition and Subtraction				Multiplication and Division	Fractions	
Name	Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number.	Count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens.	Given a number, identify one more and one less.	Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least.	Read and write numbers from 1 to 20 in numerals and words.	Read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs.	Represent and use number bonds and related subtraction facts within 20.	Add and subtract one-digit and two-digit numbers to 20, including zero.	Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = - 9.	Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.	Recognise, find and name a half as one of two equal parts of an object, shape or quantity.	Recognise, find and name a quarter as one of our equal parts of an object, shape or quantity.

Banks Lane Infant & Nursery School | Year 1 Maths Assessment: Shape, Space and Measure – Group

Year 1 Shape, Space and Measure	Measure												Geometry: Properties of Shapes		Geometry: Position, Direction and Motion
Name	Compare, describe and solve practical problems for: lengths and heights (e.g. long/short, longer/shorter, tall/short, double/half)	Compare, describe and solve practical problems for: mass or weight (e.g. heavy/light, heavier than, lighter than)	Compare, describe and solve practical problems for: capacity/volume (e.g. full/empty, more than, less than, half, half full, quarter)	Compare, describe and solve practical problems for: time (e.g. quicker, slower, earlier, later)	Measure and begin to record the following :lengths and heights	Measure and begin to record the following: mass/weight	Measure and begin to record the following: capacity and volume	Measure and begin to record the following: time (hours, minutes, seconds)	Recognise and know the value of different denominations of coins and notes.	Sequence events in chronological order using language (e.g. before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening)	Recognise and use language relating to dates, including days of the week, weeks, months and years.	Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.	Recognise and name common 2-D shapes, including:_e.g. rectangles (including squares), circles and triangles)	Recognise and name common 3-D shapes, including: cuboids (including cubes), pyramids and spheres.	Describe position, directions and movements, including half, quarter and three-quarter turns.

Mastering Number

Year 1 Overview

Term 1	Term 2	Term 3
Pupils will have an opportunity to consolidate the Early Learning Goals and continue to explore the composition of numbers within 10, and the position of these numbers in the linear number system. **Pupils will:** • subitise within 5, including when using a rekenrek, and re-cap the composition of 5 • develop their understanding of the numbers 6 to 9 using the '5 and a bit' structure • compare numbers within 10 and use precise mathematical language when doing so • re-cap the order of numbers within 10 and connect this to '1 more' and '1 less' than a given number	Pupils will continue to explore the composition of numbers within 10 and explore addition and subtraction structures and the related language (without the use of symbols). **Pupils will:** • explore the composition of each of the numbers 7 and 9 • explore the composition of odd and even numbers, seeing that even numbers can be made of two odd or two even parts, and that odd numbers can be composed of one odd part and one even part • identify the number that is two more or two less than a given odd or even number, identifying that two more/ less than an odd number is the next/ previous odd number, and two more/ less than an even number is the next/ previous even number	Pupils will explore the composition of numbers within 20 and their position in the linear number system. They will connect addition and subtraction expressions and equations to 'number stories'). **Pupils will:** • explore the composition of the numbers 11 to 19 as '10 and a bit' and compare numbers within 20 • connect the composition of the numbers 11 to 19 to their position in the linear number system, including identifying the midpoints of 5, 10 and 15 • compare numbers within 20 • understand how addition and subtraction equations can represent previously explored structures of addition and subtraction (aggregation/ partitioning/ augmentation/ reduction)

• explore the structure of even numbers (including that even numbers can be composed by doubling any number, and can be composed of 2s) • explore the structure of the odd numbers as being composed of 2s and 1 more • explore the composition of each of the numbers 6, 8, and 10 • explore number tracks and number lines and identify the differences between them	• explore the aggregation and partitioning structures of addition and subtraction through systematically partitioning and re-combining numbers within 10 and connecting this to the part-part-whole diagram, including using the language of parts and wholes • explore the augmentation and reduction structures of addition and reduction using number stories, including introducing the 'first, then, now' language structure	• practise retrieving previously taught facts and reason about these
This term will build and consolidate the Early Learning Goals and support the teaching and consolidation of the following RtP criteria: • 1AS-1 • 1NF-1 • 1NPV-2	This term will particularly support the teaching and consolidation of the following RtP criteria: • 1AS-1 • 1NF-1	This term will particularly support the teaching and consolidation of the following RtP criteria: 1AS-2 1NF-1 1NPV-2

YEAR 1

NUMBER

Number and place value

Number

number
numeral
zero
one, two, three … twenty
teens numbers, eleven, twelve … twenty
twenty-one, twenty-two … one hundred
none
how many …?
count, count (up) to, count on (from, to), count back (from, to)
forwards
backwards
count in ones, twos, fives, tens
equal to
equivalent to
is the same as
more, less
most, least
many
odd, even
multiple of
few
pattern
pair

Place value

ones
tens
digit
the same number as, as many as
more, larger, bigger, greater
fewer, smaller, less
fewest, smallest, least
most, biggest, largest, greatest
one more, ten more
one less, ten less
equal to
one more, ten more
one less, ten less
compare
order
size
first, second, third… twentieth
last, last but one
before, after
next
between
half-way between
above, below

Estimating

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

Addition and subtraction

addition
add, more, and
make, sum, total
altogether
double
near double
half, halve
one more, two more … ten more
how many more to make …?
how many more is … than …?
how much more is …?
subtract
take away
how many are left/left over?
how many have gone?
one less, two less, ten less …
how many fewer is … than …?
how much less is …?
difference between
equals
is the same as
number bonds/pairs
missing number

Multiplication and division

multiplication
multiply
multiplied by
multiple
division
dividing
grouping
sharing
doubling
halving
array
number patterns

Fractions

fraction
equal part
equal grouping
equal sharing
parts of a whole
half
one of two equal parts
quarter
one of four equal parts

MEASUREMENT

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

Length

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

Weight

kilogram, half kilogram
weigh, weighs, balances
heavy, light
heavier than, lighter than
heaviest, lightest
scales

Capacity and volume

litre, half litre
capacity
volume
full
empty
more than
less than
half full
quarter full
holds
container

Time

time
days of the week, Monday, Tuesday …
months of the year (January, February …)
seasons: spring, summer, autumn, winter
day, week, weekend, month, year
birthday, holiday
morning, afternoon, evening, night
bedtime, dinner time, playtime
today, yesterday, tomorrow
before, after
earlier, later
next, first, last
midnight
date
now, soon, early, late
quick, quicker, quickest, quickly
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 …?
how often?
always, never, often, sometimes

usually
once, twice
hour, o'clock, half past, quarter past, quarter to
clock, clock face, watch, hands
hour hand, minute hand
hours, minutes

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

GEOMETRY

Properties of shape

shape, pattern
flat
curved, straight
round
hollow, solid
sort
make, build, draw
size
bigger, larger, smaller
symmetry, symmetrical, symmetrical pattern
pattern, repeating pattern
match

2-D shape

corner, side
point, pointed
rectangle (including square)
circle
triangle

3-D shape

face, edge, vertex, vertices
cube, cuboid
pyramid
sphere
cone
cylinder

Position and direction

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

STATISTICS

count, sort, vote
group, set
list, table

GENERAL

pattern
puzzle
problem, problem solving
mental, mentally
what could we try next?
how did you work it out?
explain your thinking
recognise
describe
draw
compare
sort

Banks Lane Infant & Nursery School **Class _____** **Cohort _____**

Year 2

1:1
Big Question: Are mistakes always a bad thing?
Topic: London's Burning
Theme: Learning from the past
Book: Vlad Katie In London

1:2
Big Question: A Victorian Childhood: more challenging than yours?
Topic: What the Dickens?
Theme: Differences and changes over time
Book: Oliver Twist, Chimney Charlie

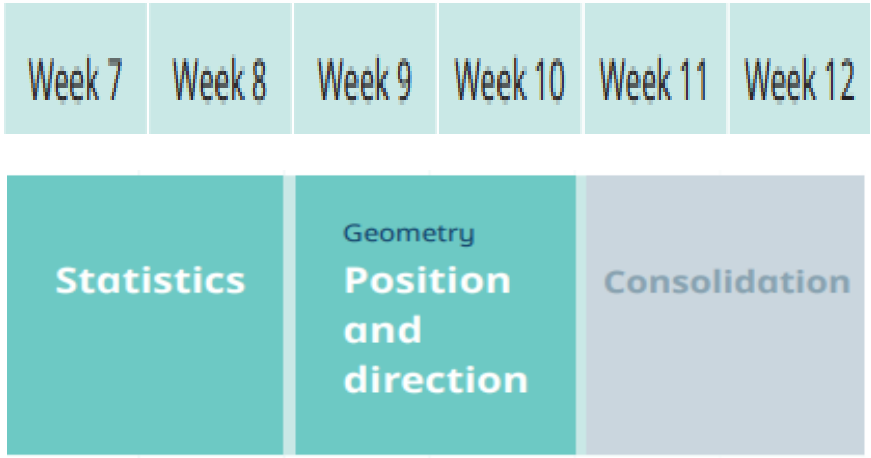
Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Number Place value					Number Addition and subtraction				Geometry Shape		

2:1
Big Question: Should we forgive others?
Topic: Where the Dragons Dance
Theme: Culture/loss and forgiveness
Book: Tell me a Dragon
The Willow Pattern

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Measurement **Money**		Number **Multiplication and division**					Measurement **Length and height**		Measurement **Mass, capacity and temperature**		

2:2 and 3:1
Big Question: In the future, will wild animals only exist in picture books?
Topic: Into the Wild
Theme: Being respectful
Book: There's an Rang Tan in my Bedroom
The Clue Is In The Poo
Interview With a Tiger and Other Clawed Beasts

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Number **Fractions**			Measurement **Time**		

Leaf	
3:2 **Big Question:** Do good things come in small packages? **Topic:** It's a Bug's Life **Theme:** Positive changes **Book:** The King of Tiny Things Matisse's Magical Trail Evelyn the Adventurous Entomologist	

Banks Lane Infant & Nursery School | Year 2 Maths End Points: Number

Number	2014 NC: Number and Place Value	2014 NC: Addition and Subtraction	2014 NC: Multiplication and Division	2014 NC: Fractions
Year Two	• Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward. • Recognise the place value of each digit in a two-digit number (tens, ones). • identify, represent and estimate numbers using different representations, including the number line. • Compare and order numbers from 0 up to 100; use >, < and = signs. • Read and write numbers to at least 100 in numerals and in words. • Use place value and number facts to solve problems.	• Solve problems with addition and subtraction: • using concrete objects and pictorial representations, including those involving numbers, quantities and measures. • applying their increasing knowledge of mental and written methods. • Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100. • Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: • two-digit number and ones • a two-digit number and tens • two two-digit numbers • adding three one-digit	• Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers. • Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs. • Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot. • Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division	• Recognise, find, name and write fractions 1/3, 1/4, 2/4 and 3/4 of a length, shape, set of objects or quantity. • Write simple fractions for example, 1/2 of 6 = 3 and recognise the equivalence of o 2/4 and ½.

		numbers • Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot. • Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.	facts, including problems in contexts.	

Children working below ARE	Children exceeding ARE

Banks Lane Infant & Nursery School | Year 2 Maths End Points: Shape, Space and Measure

Shape, Space and Measure	2014 NC: Measure	2014 NC: Geometry: Properties of Shapes	2014 NC: Geometry: Position, Direction and Motion	2014 NC: Statistics
Year Two	• Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels. • Compare and order lengths, mass, volume/capacity and record the results using >, < and =. • Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value. • Find different combinations of coins that equal the same amounts of money. • Solve simple problems in a	• Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line. • Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces. • Identify 2-D shapes on the surface of 3-D shapes (e.g. a circle on a cylinder and a triangle on a pyramid) • Compare and sort common 2-D and 3-D shapes and everyday objects.	• Order and arrange combinations of mathematical objects in patterns and sequences. • Use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three quarter turns (clockwise and ○ anti-clockwise)	• Interpret and construct simple pictograms, tally charts, block diagrams and simple tables. • Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity. • Ask and answer questions about totalling and comparing categorical data.

	practical context involving addition and subtraction of money of the same unit, including giving change. • Compare and sequence intervals of time. • Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times. • Know the number of minutes in an hour and the number of hours in a day.			

Children working below ARE	Children exceeding ARE

Maths Moderation Grid

Name of Child:	Class:	Objective Achieved		
Working Towards the Expected Standard		1	2	3
WT1	read and write numbers in numerals up to 100			
WT2	partition a two-digit number into tens and ones to demonstrate an understanding of place value, though they may use structured resources to support them (base ten/part-partwhole/column method)			
WT3	add and subtract two-digit numbers and ones, and two-digit numbers and tens, where no regrouping is required, explaining their method verbally, in pictures or using apparatus (e.g. 23 + 5; 46 + 20; 16 – 5; 88 – 30) Key number bonds to 10 are: 0+10, 1 + 9, 2 + 8, 3 + 7, 4 + 6, 5 + 5.			
WT4	recall at least four of the six number bonds for 10 and reason about associated facts (e.g. 6 + 4 = 10, therefore 4 + 6 = 10 and 10 – 6 = 4)			
WT5	count in twos, fives and tens from 0 and use this to solve problems			
WT6	know the value of different coins			
WT7	name some common 2-D and 3-D shapes from a group of shapes or from pictures of the shapes and describe some of their properties (e.g. triangles, rectangles, squares, circles, cuboids, cubes, pyramids and spheres)			
Working At the Expected Standard		1	2	3
E1	read scales* in divisions of ones, twos, fives and tens The scale can be in the form of a number line, a practical situation or a graph axis.			
E2	partition any two-digit number into different combinations of tens and ones, explaining their thinking verbally, in pictures or using apparatus			
E3	add and subtract any 2 two-digit numbers using an efficient strategy, explaining their method verbally, in pictures or using apparatus (e.g. 48 + 35; 72 – 17)			
E4	recall all number bonds to and within 10 and use these to reason with and calculate bonds to and within 20, recognising other associated additive relationships (e.g. If 7 + 3 = 10, then 17 + 3 = 20; if 7 – 3 = 4, then 17 – 3 = 14; leading to if 14 + 3 =17, then 3 + 14 = 17, 17 – 14 = 3 and 17 – 3 = 14)			
E5	· recall multiplication and division facts for 2, 5 and 10 and use them to solve simple problems, demonstrating an understanding of commutativity as necessary			
E6	identify 1/4, 1/3, 1/2 , 2/4, 3/4, of a number or shape, and know that all parts must be equal parts of the whole			
E7	use different coins to make the same amount			
E8	read the time on a clock to the nearest 15 minutes			
E9	name and describe properties of 2-D and 3-D shapes, including number of sides, vertices, edges, faces and lines of symmetry			
Working at Greater Depth within the Expected Standard		1	2	3
GD1	read scales where not all numbers on the scale are given and estimate points in between. The scale can be in the form of a number line, a practical situation or a graph axis.			
GD2	recall and use multiplication and division facts for 2, 5 and 10 and make deductions outside known multiplication facts			
GD3	use reasoning about numbers and relationships to solve more complex problems and explain their thinking (e.g. 29 + 17 = 15 + 4 + ; 'together Jack and Sam have £14. Jack has £2 more than Sam. How much money does Sam have? etc.)			
GD4	solve unfamiliar word problems that involve more than one step (e.g. 'which has the most biscuits, 4 packets of biscuits with 5 in each packet or 3 packets of biscuits with 10 in each packet?')			
GD5	read the time on a clock to the nearest 5 minutes			
GD6	describe similarities and differences of 2-D and 3-D shapes, using their properties (e.g. that two different 2-D shapes both have only one line of symmetry; that a cube and a cuboid have the same number of edges, faces and vertices, but different dimensions).			

Banks Lane Infant & Nursery School | Year 2 Maths Assessment (TAFs)

Year 2 TAFs	Working towards the expected standard							Working at the expected standard									
Name	read and write numbers in numerals up to 100	partition a two-digit number into tens and ones to demonstrate an understanding of place value, though they may use structured resources to support them	add and subtract two-digit numbers and ones, and two-digit numbers and tens, where no regrouping is required, explaining their method verbally, in pictures or using apparatus	recall at least four of the six2 number bonds for 10 and reason about associated facts	count in twos, fives and tens from 0 and use this to solve problems	know the value of different coins	name some common 2-D and 3-D shapes from a group of shapes or from pictures of the shapes and describe some of their properties	read scales in divisions of ones, twos, fives and tens	partition any two-digit number into different combinations of tens & ones, explaining their thinking verbally, in pictures or using apparatus	Add any 2 two-digit numbers using an efficient strategy, explaining their method verbally, in pictures or using apparatus (e.g. 48 + 35)	Subtract any 2 two-digit numbers using an efficient strategy, explaining their method verbally, in pictures or using apparatus (e.g. 72 – 17)	recall all number bonds to and within 10 and use these to reason with and calculate bonds to and within 20, recognising other associated additive relationships	recall multiplication and division facts for 2, 5 and 10 and use them to solve simple problems, demonstrating an understanding of commutativity as necessary	identify 1 4 , 1 3 , 1 2 , 2 4 , 3 4 , of a number or shape, and know that all parts must be equal parts of the whole	use different coins to make the same amount	read the time on a clock to the nearest 15 minutes	name and describe properties of 2-D and 3-D shapes, including number of sides, vertices, edges, faces and lines of symmetry

Year 2 TAFs	Working at greater depth						Additional Comments
Name	read scales where not all numbers on the scale are given and estimate points in between	recall and use multiplication and division facts for 2, 5 and 10 and make deductions outside known multiplication facts	use reasoning about numbers and relationships to solve more complex problems and explain their thinking (e.g. 29 + 17 = 15 + 4 + ◆; together Jack and Sam have £14. Jack has £2 more than Sam. How much money does Sam have? etc.)	solve unfamiliar word problems that involve more than one step (e.g. which has the most biscuits, 4 packets of biscuits with 5 in each packet or 3 packets of biscuits with 10 in each packet?)	read the time on a clock to the nearest 5 minutes	describe similarities and differences of 2-D and 3-D shapes, using their properties (e.g. that two different 2-D shapes both have only one line of symmetry; that a cube and a cuboid have the same number of edges, faces and vertices, but different dimensions).	

Mastering Number

Year 2 Overview

Term 1	Term 2	Term 3
Pupils will have an opportunity to consolidate their understanding and recall of number bonds within 10; they will re-cap the composition of the numbers 11 to 20 and reason about their position within the linear number system. **Pupils will:** • review the composition of the numbers 6 to 9 as '5 and a bit' • compare numbers using the language of comparison and use the symbols < > = • review the structure of even numbers (including exploring how even numbers can be composed of two odd parts or two even parts) and the composition of each of 6, 8 and 10 • review the structure of odd numbers (including exploring how odd numbers can be composed of one odd part and one even part) and the composition of each of 7 and 9	Pupils will have an opportunity to use their knowledge of the composition of numbers within 10 to calculate within 20; they will explore the links between the numbers in the linear number system within 10 to numbers within 100, focusing on multiples of 10 and the midpoint of 50. **Pupils will:** • explore how the numbers 6 to 9 can be doubled using the '5 and a bit' and '10 and a bit' structure • use doubles to calculate near doubles • use bonds of 10 to reason about bonds of 20, in which the given addend is greater than 10 • use known number bonds within 10 to calculate within 20, working within the 10-boundary	Pupils will have further opportunities to use their knowledge of the composition of numbers within 10 to calculate within 20 and to reason about equations and inequalities. **Pupils will:** • continue to explore a range of strategies to subtract across the 10-boundary • review bonds of 20 in which the given addend is greater than 10, and reason about bonds of 20, in which the given addend is less than 10 • practise previously explored strategies to support their reasoning about inequalities and equations • review doubles and near doubles and transform additions in which two addends are adjacent odd/ even numbers into doubles

• consolidate their understanding of the numbers 10 and 20 as '10 and a bit' • consolidate their understanding of the linear number system to 20 and reason about midpoints	• use their knowledge of bonds of 10 to find three addends that sum to 10 • use their knowledge of the composition of numbers within 20 to add and subtract across the 10-boundary • use their understanding of the linear number system to 10 to position multiples of 10 on a 0–100 number line and reason about midpoints	• consolidate previously taught facts and strategies through continued, varied practice
This term will particularly support the teaching and consolidation of the following RtP criteria: • 1NPV-2 • 2NF-1	This term will particularly support the teaching and consolidation of the following RtP criteria: • 2NPV-2 • 2NF-1 • 2AS-1	This term will particularly support the teaching and consolidation of the following RtP criteria: • 2NF-1 • 2AS-1 • 2AS-2

YEAR 2

NUMBER

Number and place value

Number

number
numeral
zero
one, two, three … twenty
teens numbers, eleven, twelve … twenty
twenty-one, twenty-two … one hundred, two hundred … one thousand
none
how many …?
count, count (up) to, count on (from, to), count back (from, to)
forwards
backwards
count in ones, twos, fives, tens, threes, fours and so on
equal to
equivalent to
is the same as
more, less
most, least
tally
many
odd, even
multiple of
sequence
continue
predict
few
pattern
pair, rule
> greater than
< less than

Place value

ones
tens, hundreds
digit
one-, two- or three-digit number
place, place value
stands for, represents
exchange
the same number as, as many as
more, larger, bigger, greater
fewer, smaller, less
fewest, smallest, least
most, biggest, largest, greatest
one more, ten more
one less, ten less
equal to
compare
order
size
first, second, third … twentieth
twenty-first, twenty-second …
last, last but one
before, after
next
between
halfway between
above, below

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

Addition and subtraction

addition
add, more, and
make, sum, total
altogether
double
near double
half, halve
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
how many are left/left over?
how many have gone?
one less, two less, ten less … one hundred less
how many fewer is … than …?
how much less is …?
difference between
equals
is the same as
number bonds/pairs/facts
tens boundary

Multiplication and division

multiplication
multiply
multiplied by
multiple
groups of
times
once, twice, three times … ten times
repeated addition
division
dividing, divide, divided by, divided into
grouping
sharing, share, share equally
left, left over
one each, two each, three each … ten each
group in pairs, threes … tens
equal groups of
doubling
halving
array
row, column
number patterns
multiplication table
multiplication fact, division fact

Fractions

fraction
equivalent fraction
mixed number
numerator, denominator
equal part
equal grouping
equal sharing
parts of a whole
half, two halves
one of two equal parts
quarter, two quarters, three quarters
one of four equal parts
one third, two thirds
one of three equal parts

MEASUREMENT

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

Length

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

Weight

kilogram, half kilogram, gram
weigh, weighs, balances
heavy, light
heavier than, lighter than
heaviest, lightest
scales

Capacity and volume

litre, half litre, millilitre
capacity
volume
full
empty
more than
less than
half full

quarter full
holds, contains
container

Temperature

temperature
degree

Time

time
days of the week, Monday, Tuesday ...
months of the year (January, February ...)
seasons: spring, summer, autumn, winter
day, week, weekend, fortnight, month, year
birthday, holiday
morning, afternoon, evening, night
bedtime, dinnertime, playtime
today, yesterday, tomorrow
before, after
earlier, later
next, first, last
midnight
date
now, soon, early, late
quick, quicker, quickest, quickly
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 ...?
how often?
always, never, often, sometimes
usually
once, twice
hour, o'clock, half past, quarter past, quarter to
5, 10, 15 ... minutes past
clock, clock face, watch, hands
digital/analogue clock/watch, timer
hour hand, minute hand
hours, minutes, seconds

Money

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

GEOMETRY

Properties of shape

shape, pattern
flat
curved, straight
round
hollow, solid
sort
make, build, draw
surface
size
bigger, larger, smaller
symmetry, symmetrical, symmetrical pattern
line symmetry
pattern, repeating pattern
match

2-D shape

corner, side
point, pointed
rectangle (including square), rectangular
circle, circular
triangle, triangular
pentagon
hexagon
octagon

3-D shape

face, edge, vertex, vertices
cube, cuboid
pyramid
sphere
cone
cylinder

Position and direction

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

STATISTICS

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

GENERAL

pattern
puzzle
problem, problem solving
mental, mentally
what could we try next?
how did you work it out?
show how you ...
explain your thinking
explain your method
describe the pattern
describe the rule
investigate
recognise
describe
draw
compare
sort
mental calculation
written calculation

Banks Lane Infant & Nursery School | Progression from EYFS – NC: Number | Transition Document

Three and Four Year Olds	Reception
Mathematical Vocabulary – Communication and Language Use a wider range of vocabulary. Understand 'why' questions, like: "why do you think the caterpillar is so fat?" Identifying, Representing and Estimating Numbers Develop fast recognition of up to 3 objects, without having to count them individually ('subitising'). Show 'finger numbers' up to 5. Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5. Experiment with their own symbols and marks as well as numerals. Mathematics Solve Problems Solve real world mathematical problems with numbers up to 5. Measurement Describe, Measure, Compare and Solve (All Strands) Make comparisons between objects relating to size, length, weight and capacity. Telling the Time Begin to describe a sequence of events, real or fictional, using words, such as 'first', 'then…' Properties of Shape Recognise 2D and 3D shapes and their Properties Talk about and explore 2D and 3D shapes (for example, circles, rectangles, triangles and cuboids) using informal and mathematical language: 'sides', 'corners', 'straight', 'flat', 'round'. Select shapes appropriately: flat surfaces for a building, a triangular pattern for a roof, etc. Combine shapes to make new ones – an arch, a bigger triangle, etc. Position and Direction Position, Direction and Movement Understand position through words alone – for example, "The bag is under the table," – with no pointing. • Describe a familiar route. • Discuss routes and locations, using words like 'in front of' and 'behind'. Patterns Talk about and identify the patterns around them. For example, stripes on clothes, designs on rugs and wallpaper. Use informal language like 'pointy', 'spotty', 'blobs', etc. • Extend and create ABAB patterns – stick, leaf, stick, leaf. • Notice and correct an error in a repeating pattern.	**Mathematical Vocabulary-Communication and Language** Learn new vocabulary. Use new vocabulary throughout the day. Identifying, Representing and Estimating Numbers Subitise. Link the number symbol (numeral) with its cardinal number value. Understanding Place Value Understand the 'one more than/one less than' relationship between consecutive numbers. Explore the composition of numbers to 10. Addition and Subtraction-Mental Calculations Automatically recall number bonds for numbers 0-5 and some to 10. Mathematics Measurement Describe, Measure, Compare and Solve (All Strands) Compare length, weight and capacity. Properties of Shape Recognise 2D and 3D shapes and their Properties Select, rotate and manipulate shapes in order to develop spatial reasoning skills. Compare and Classify Shapes Compose and decompose shapes so that children can recognise a shape can have other shapes within it, just as numbers can. Position and Direction Position, Direction and Movement Draw information from a simple map. (Understanding the World) Patterns Continue, copy and create repeating patterns.

Statistics Record, Present and Interpret Data Experiment with their own symbols and marks, as well as numerals.	

Expected ELG

Mathematical Vocabulary – Communication and Language-Speaking

Participate in small group, class and one-to-one discussions, offering their own ideas, using recently introduced vocabulary.

Have a deep understanding of number to 10, including the composition of each number.

Subitise (recognise quantities without counting) up to 5.

Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts.

Year1 2014 NC: Number and Place Value	Year 1 2014 NC: Addition and Subtraction	Year 1 2014 NC: Multiplication and Division	Year 1 2014 NC: Fractions
Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number. Count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens. Given a number, identify one more and one less. Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least. Read and write numbers from 1 to 20 in numerals and words.	Read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs. Represent and use number bonds and related subtraction facts within 20. Add and subtract one-digit and two-digit numbers to 20, including zero. Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = – 9.	Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.	Recognise, find and name a half as one of two equal parts of an object, shape or quantity. Recognise, find and name a quarter as one of our equal parts of an object, shape or quantity.
Year 2 2014 NC: Number and Place Value	**Year 2 2014 NC: Addition and Subtraction**	**Year 2 2014 NC: Multiplication and Division**	**Year 2 2014 NC: Fractions**
Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward. Recognise the place value of each digit in a two-digit number (tens, ones). Identify, represent and estimate numbers using different representations, including the number line. Compare and order numbers from 0 up to 100; use >, < and = signs. Read and write numbers to at least 100 in numerals and in words. Use place value and number facts to solve problems.	Solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures. applying their increasing knowledge of mental and written methods. Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100. Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones a two-digit number and tens two two-digit numbers adding three one-digit numbers Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot. Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.	Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers. Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs. Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot. Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.	Recognise, find, name and write fractions 1/3, 1/4, 2/4 and 3/4 of a length, shape, set of objects or quantity Write simple fractions for example, 1/2 of 6 = 3 and recognise the equivalence of 2/4 and 1/2.

Banks Lane Infant & Nursery School | Progression from EYFS – NC: Shape, Space and Measure/Numerical Patterns | Transition Document

Three and Four Year Olds	Reception
Mathematical Vocabulary – Communication and Language Use a wider range of vocabulary. Understand 'why' questions, like: "why do you think the caterpillar is so fat?"	**Mathematical Vocabulary-Communication and Language** Learn new vocabulary. Use new vocabulary throughout the day.
Number and Place Value-Counting Recite numbers past 5. Say one number name for each item in order: 1, 2, 3, 4, 5. Know that the last number reached when counting a small set of objects tells you how many there are in total ('cardinal principle')	**Number and Place Value-Counting** Count objects, actions and sounds. Count beyond ten.
Compare and Order Numbers Compare quantities using language: 'more than', 'fewer than'.	Compare and Order Numbers Compare numbers.
Mathematics	Mathematics
Solve Problems Solve real world mathematical problems with numbers up to 5.	
Measurement Describe, Measure, Compare and Solve (All Strands) Make comparisons between objects relating to size, length, weight and capacity. Telling the Time Begin to describe a sequence of events, real or fictional, using words, such as 'first', 'then…'	Measurement Describe, Measure, Compare and Solve (All Strands) Compare length, weight and capacity.
Properties of Shape Recognise 2D and 3D shapes and their Properties Talk about and explore 2D and 3D shapes (for example, circles, rectangles, triangles and cuboids) using informal and mathematical language: 'sides', 'corners', 'straight', 'flat', 'round'. Select shapes appropriately: flat surfaces for a building, a triangular pattern for a roof, etc. Combine shapes to make new ones – an arch, a bigger triangle, etc.	Properties of Shape Recognise 2D and 3D shapes and their Properties Select, rotate and manipulate shapes in order to develop spatial reasoning skills. Compare and Classify Shapes Compose and decompose shapes so that children can recognise a shape can have other shapes within it, just as numbers can.
Position and Direction Position, Direction and Movement Understand position through words alone – for example, "The bag is under the table," – with no pointing. • Describe a familiar route. • Discuss routes and locations, using words like 'in front of' and 'behind'.	Position and Direction Position, Direction and Movement Draw information from a simple map. (Understanding the World)

Patterns Talk about and identify the patterns around them. For example, stripes on clothes, designs on rugs and wallpaper. Use informal language like 'pointy', 'spotty', 'blobs', etc. • Extend and create ABAB patterns – stick, leaf, stick, leaf. • Notice and correct an error in a repeating pattern. Statistics Record, Present and Interpret Data Experiment with their own symbols and marks, as well as numerals.	Patterns Continue, copy and create repeating patterns.

Expected ELG

Mathematical Vocabulary – Communication and Language-Speaking

Participate in small group, class and one-to-one discussions, offering their own ideas, using recently introduced vocabulary.

Verbally count beyond 20, recognising the pattern of the counting system.
Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity.
Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.

Year 1 2014 NC: Measure Compare, describe and solve practical problems for: lengths and heights (e.g. long/short, longer/shorter, tall/short, double/half) mass or weight (e.g. heavy/light, heavier than, lighter than) capacity/volume (e.g. full/empty, more than, less than, half, half full, quarter) time (e.g. quicker, slower, earlier, later) Measure and begin to record the following: lengths and heights mass/weight capacity and volume time (hours, minutes, seconds) Recognise and know the value of different denominations of coins ad notes. Sequence events in chronological order using language (e.g. before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening) Recognise and use language relating to dates, including days of the week, weeks, months and years. Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.	**Year 1 2014 NC: Geometry: Properties of Shapes** Recognise and name common 2-D and 3-D shapes, including: 2-D shapes (e.g. rectangles (including squares), circles and triangles) 3-D shapes (e.g. cuboids (including cubes), pyramids and spheres.	**Year 1 2014 NC: Geometry: Position, Direction and Motion** Describe position, directions and movements, including half, quarter and three-quarter turns.
Year 2 2014 NC: Measure Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels.Compare and order lengths, mass, volume/capacity and record the results using G, q and =. Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value. Find different combinations of coins that equal the same amounts of money. Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change. Compare and sequence intervals of time. Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times. Know the number of minutes in an hour and the number of hours in a day.	**Year 2 2014 NC: Geometry: Properties of Shapes** Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line. Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces. Identify 2-D shapes on the surface of 3-D shapes (e.g. a circle on a cylinder and a triangle on a pyramid) Compare and sort common 2-D and 3-D shapes and everyday objects.	**Year 2 2014 NC: Geometry: Position, Direction and Motion** Order and arrange combinations of mathematical objects in patterns and sequences. Use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three quarter turns (clockwise and anti-clockwise)

Y2 Statistics

Interpret and construct simple pictograms, tally charts, block diagrams and simple tables.
Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity.
Ask and answer questions about totalling and comparing categorical data.