ST PHILOMENA'S PRIMARY SCHOOL
MATHS MEDIUM TERM PLANNING RECEPTION
2026 - 2027

AUTUMN 1 | Match, sort and compare

	WHITE ROSE STEPS	WHITE ROSE CONTENT	LEARNING OBJECTIVES	KEY KNOWLEDGE
WEEK 1	Step 1	Match objects	I can match, sort and explain what is the same or different.	Know that objects can be grouped by shared attributes and compared.
	Step 2	Match pictures and objects	I can match, sort and explain what is the same or different.	Know that objects can be grouped by shared attributes and compared.
	Step 3	Identify a set	I can explore this idea using objects, pictures, talk and play.	Use practical resources and mathematical vocabulary to describe, compare and explain.
	Step 4	Sort objects to a type	I can match, sort and explain what is the same or different.	Know that objects can be grouped by shared attributes and compared.
	Number fluency	Daily counting, subitising and number talk	I can count, notice quantities and explain what I see.	Revisit counting principles, composition and mathematical language.
EYFS LINKS	Mathematics	Number; Numerical Patterns; shape, space and measure	Develop deep understanding of number, patterns and relationships through adult-led teaching and continuous provision.	Assessment: observation, mathematical talk, practical tasks and revisiting prior learning.

AUTUMN 1 | Match, sort and compare

	WHITE ROSE STEPS	WHITE ROSE CONTENT	LEARNING OBJECTIVES	KEY KNOWLEDGE
WEEK 2	Step 5	Explore sorting techniques	I can match, sort and explain what is the same or different.	Know that objects can be grouped by shared attributes and compared.
	Step 6	Create sorting rules	I can match, sort and explain what is the same or different.	Know that objects can be grouped by shared attributes and compared.
	Step 7	Compare amounts	I can explore this idea using objects, pictures, talk and play.	Use practical resources and mathematical vocabulary to describe, compare and explain.
	Step 7 (application)	Compare amounts – revisit	I can explore this idea using objects, pictures, talk and play.	Use practical resources and mathematical vocabulary to describe, compare and explain.
	Number fluency	Daily counting, subitising and number talk	I can count, notice quantities and explain what I see.	Revisit counting principles, composition and mathematical language.
EYFS LINKS	Mathematics	Number; Numerical Patterns; shape, space and measure	Develop deep understanding of number, patterns and relationships through adult-led teaching and continuous provision.	Assessment: observation, mathematical talk, practical tasks and revisiting prior learning.

AUTUMN 1 | Talk about measure and pattern

	WHITE ROSE STEPS	WHITE ROSE CONTENT	LEARNING OBJECTIVES	KEY KNOWLEDGE
WEEK 3	Step 1	Compare size	I can explore this idea using objects, pictures, talk and play.	Use practical resources and mathematical vocabulary to describe, compare and explain.
	Step 2	Compare mass	I can explore and compare measures using everyday language.	Use practical resources and mathematical vocabulary to describe, compare and explain.
	Step 3	Compare capacity	I can explore and compare measures using everyday language.	Use practical resources and mathematical vocabulary to describe, compare and explain.
	Step 4	Explore simple patterns	I can notice, copy, continue and describe a pattern.	Know that repeating patterns follow a rule; identify and continue the repeating unit.
	Number fluency	Daily counting, subitising and number talk	I can count, notice quantities and explain what I see.	Revisit counting principles, composition and mathematical language.
EYFS LINKS	Mathematics	Number; Numerical Patterns; shape, space and measure	Develop deep understanding of number, patterns and relationships through adult-led teaching and continuous provision.	Assessment: observation, mathematical talk, practical tasks and revisiting prior learning.

AUTUMN 1 | Talk about measure and pattern

	WHITE ROSE STEPS	WHITE ROSE CONTENT	LEARNING OBJECTIVES	KEY KNOWLEDGE
WEEK 4	Step 5	Copy and continue simple patterns	I can notice, copy, continue and describe a pattern.	Know that repeating patterns follow a rule; identify and continue the repeating unit.
	Step 6	Create simple patterns	I can notice, copy, continue and describe a pattern.	Know that repeating patterns follow a rule; identify and continue the repeating unit.
	Step 6 (application)	Create simple patterns – explain and reason	I can notice, copy, continue and describe a pattern.	Know that repeating patterns follow a rule; identify and continue the repeating unit.
	Step 6 (application) (application)	Create simple patterns – explain and reason – revisit	I can notice, copy, continue and describe a pattern.	Know that repeating patterns follow a rule; identify and continue the repeating unit.
	Number fluency	Daily counting, subitising and number talk	I can count, notice quantities and explain what I see.	Revisit counting principles, composition and mathematical language.
EYFS LINKS	Mathematics	Number; Numerical Patterns; shape, space and measure	Develop deep understanding of number, patterns and relationships through adult-led teaching and continuous provision.	Assessment: observation, mathematical talk, practical tasks and revisiting prior learning.

AUTUMN 2 | It's me 1, 2, 3

	WHITE ROSE STEPS	WHITE ROSE CONTENT	LEARNING OBJECTIVES	KEY KNOWLEDGE
WEEK 5	Step 1	Find 1, 2 and 3	I can count, represent and talk about numbers using objects and pictures.	Use practical resources and mathematical vocabulary to describe, compare and explain.
	Step 2	Subitise 1, 2 and 3	I can recognise how many there are without counting each object.	Know that small quantities can be recognised without counting; explain groups within a whole.
	Step 3	Represent 1, 2 and 3	I can explore this idea using objects, pictures, talk and play.	Use practical resources and mathematical vocabulary to describe, compare and explain.
	Step 4	1 more	I can find one more or one less using practical objects.	Know that one more increases a quantity by one and one less decreases it by one.
	Number fluency	Daily counting, subitising and number talk	I can count, notice quantities and explain what I see.	Revisit counting principles, composition and mathematical language.
EYFS LINKS	Mathematics	Number; Numerical Patterns; shape, space and measure	Develop deep understanding of number, patterns and relationships through adult-led teaching and continuous provision.	Assessment: observation, mathematical talk, practical tasks and revisiting prior learning.

AUTUMN 2 | It's me 1, 2, 3

	WHITE ROSE STEPS	WHITE ROSE CONTENT	LEARNING OBJECTIVES	KEY KNOWLEDGE
WEEK 6	Step 5	1 less	I can find one more or one less using practical objects.	Know that one more increases a quantity by one and one less decreases it by one.
	Step 6	Composition of 1, 2 and 3	I can show how a number is made of smaller parts.	Know that a whole number can be composed of two or more parts.
	Step 6 (application)	Composition of 1, 2 and 3 – explain and reason	I can show how a number is made of smaller parts.	Know that a whole number can be composed of two or more parts.
	Step 6 (application) (application)	Composition of 1, 2 and 3 – explain and reason – revisit	I can show how a number is made of smaller parts.	Know that a whole number can be composed of two or more parts.
	Number fluency	Daily counting, subitising and number talk	I can count, notice quantities and explain what I see.	Revisit counting principles, composition and mathematical language.
EYFS LINKS	Mathematics	Number; Numerical Patterns; shape, space and measure	Develop deep understanding of number, patterns and relationships through adult-led teaching and continuous provision.	Assessment: observation, mathematical talk, practical tasks and revisiting prior learning.

AUTUMN 2 | Circles and triangles

	WHITE ROSE STEPS	WHITE ROSE CONTENT	LEARNING OBJECTIVES	KEY KNOWLEDGE
WEEK 7	Step 1	Identify and name circles and triangles	I can explore, recognise and describe shapes in my environment.	Use practical resources and mathematical vocabulary to describe, compare and explain.
	Step 2	Compare circles and triangles	I can explore, recognise and describe shapes in my environment.	Use practical resources and mathematical vocabulary to describe, compare and explain.
	Step 3	Shapes in the environment	I can explore, recognise and describe shapes in my environment.	Know familiar shape names and describe visible properties and positions.
	Step 4	Describe position	I can describe positions and represent familiar places.	Use practical resources and mathematical vocabulary to describe, compare and explain.
	Number fluency	Daily counting, subitising and number talk	I can count, notice quantities and explain what I see.	Revisit counting principles, composition and mathematical language.
EYFS LINKS	Mathematics	Number; Numerical Patterns; shape, space and measure	Develop deep understanding of number, patterns and relationships through adult-led teaching and continuous provision.	Assessment: observation, mathematical talk, practical tasks and revisiting prior learning.

AUTUMN 2 | 1, 2, 3, 4, 5

	WHITE ROSE STEPS	WHITE ROSE CONTENT	LEARNING OBJECTIVES	KEY KNOWLEDGE
WEEK 8	Step 1	Find 4 and 5	I can count, represent and talk about numbers using objects and pictures.	Use practical resources and mathematical vocabulary to describe, compare and explain.
	Step 2	Subitise 4 and 5	I can recognise how many there are without counting each object.	Know that small quantities can be recognised without counting; explain groups within a whole.
	Step 3	Represent 4 and 5	I can explore this idea using objects, pictures, talk and play.	Use practical resources and mathematical vocabulary to describe, compare and explain.
	Step 4	1 more	I can find one more or one less using practical objects.	Know that one more increases a quantity by one and one less decreases it by one.
	Number fluency	Daily counting, subitising and number talk	I can count, notice quantities and explain what I see.	Revisit counting principles, composition and mathematical language.
EYFS LINKS	Mathematics	Number; Numerical Patterns; shape, space and measure	Develop deep understanding of number, patterns and relationships through adult-led teaching and continuous provision.	Assessment: observation, mathematical talk, practical tasks and revisiting prior learning.

AUTUMN 2 | 1, 2, 3, 4, 5

	WHITE ROSE STEPS	WHITE ROSE CONTENT	LEARNING OBJECTIVES	KEY KNOWLEDGE
WEEK 9	Step 5	1 less	I can find one more or one less using practical objects.	Know that one more increases a quantity by one and one less decreases it by one.
	Step 6	Composition of 4 and 5	I can show how a number is made of smaller parts.	Know that a whole number can be composed of two or more parts.
	Step 7	Composition of 1−5	I can show how a number is made of smaller parts.	Know that a whole number can be composed of two or more parts.
	Step 7 (application)	Composition of 1−5 – revisit	I can show how a number is made of smaller parts.	Know that a whole number can be composed of two or more parts.
	Number fluency	Daily counting, subitising and number talk	I can count, notice quantities and explain what I see.	Revisit counting principles, composition and mathematical language.
EYFS LINKS	Mathematics	Number; Numerical Patterns; shape, space and measure	Develop deep understanding of number, patterns and relationships through adult-led teaching and continuous provision.	Assessment: observation, mathematical talk, practical tasks and revisiting prior learning.

AUTUMN 2 | Shapes with 4 sides

	WHITE ROSE STEPS	WHITE ROSE CONTENT	LEARNING OBJECTIVES	KEY KNOWLEDGE
WEEK 10	Step 1	Identify and name shapes with 4 sides	I can explore, recognise and describe shapes in my environment.	Know familiar shape names and describe visible properties and positions.
	Step 2	Combine shapes with 4 sides	I can explore, recognise and describe shapes in my environment.	Know familiar shape names and describe visible properties and positions.
	Step 3	Shapes in the environment	I can explore, recognise and describe shapes in my environment.	Know familiar shape names and describe visible properties and positions.
	Step 4	My day and night	I can explore this idea using objects, pictures, talk and play.	Use practical resources and mathematical vocabulary to describe, compare and explain.
	Number fluency	Daily counting, subitising and number talk	I can count, notice quantities and explain what I see.	Revisit counting principles, composition and mathematical language.
EYFS LINKS	Mathematics	Number; Numerical Patterns; shape, space and measure	Develop deep understanding of number, patterns and relationships through adult-led teaching and continuous provision.	Assessment: observation, mathematical talk, practical tasks and revisiting prior learning.

AUTUMN 2 | Consolidation and assessment

	WHITE ROSE STEPS	WHITE ROSE CONTENT	LEARNING OBJECTIVES	KEY KNOWLEDGE
WEEK 11	Consolidation	Subitise and compare numbers to 5	I can recognise, compare and explain quantities to 5.	Know that a quantity stays the same when objects are rearranged.
	Consolidation	Explore number composition to 5	I can show different ways to make numbers to 5.	Know that a whole number can be composed of smaller parts.
	Consolidation	Sort and describe 2-D shapes	I can describe and sort circles, triangles and four-sided shapes.	Know that shapes have properties that can be compared.
	Consolidation	Create and explain repeating patterns	I can make and explain a repeating pattern.	Know the repeating unit and how a pattern continues.
	Number fluency	Daily counting, subitising and number talk	I can count, subitise and explain what I notice.	Revisit counting principles, composition and mathematical language.
EYFS LINKS	Mathematics	Number; Numerical Patterns; shape, space and measure	Develop deep understanding of number, patterns and relationships through adult-led teaching and continuous provision.	Assessment: observation, mathematical talk, practical tasks and revisiting prior learning.

AUTUMN 2 | Consolidation and assessment

	WHITE ROSE STEPS	WHITE ROSE CONTENT	LEARNING OBJECTIVES	KEY KNOWLEDGE
WEEK 12	Consolidation	Represent and compare 1 to 5	I can represent and compare quantities to 5.	Know the number names, order and matching quantities to 5.
	Consolidation	Explore one more and one less	I can find one more and one less using objects.	Know how quantities change when one object is added or removed.
	Consolidation	Explore shapes and spatial language	I can use shape and position words in play.	Know shape names and words for position and direction.
	Consolidation	Apply measuring and pattern knowledge	I can compare size, mass and capacity and explain patterns.	Know comparative language and how to identify a repeating unit.
	Number fluency	Daily counting, subitising and number talk	I can count, subitise and explain what I notice.	Revisit counting principles, composition and mathematical language.
EYFS LINKS	Mathematics	Number; Numerical Patterns; shape, space and measure	Develop deep understanding of number, patterns and relationships through adult-led teaching and continuous provision.	Assessment: observation, mathematical talk, practical tasks and revisiting prior learning.

SPRING 1 | Alive in 5

	WHITE ROSE STEPS	WHITE ROSE CONTENT	LEARNING OBJECTIVES	KEY KNOWLEDGE
WEEK 1	Step 1	Introduce zero	I can represent, compare and explain numbers using practical resources.	Use one-to-one counting, cardinality and number representations accurately.
	Step 2	Find 0 to 5	I can represent, compare and explain numbers using practical resources.	Use one-to-one counting, cardinality and number representations accurately.
	Step 3	Subitise 0 to 5	I can recognise and explain a quantity without counting one by one.	Recognise small quantities and parts within a whole without counting each item.
	Step 4	Represent 0 to 5	I can represent, compare and explain numbers using practical resources.	Use one-to-one counting, cardinality and number representations accurately.
	Number fluency	Daily counting, subitising and number talk	I can count, notice quantities and explain what I see.	Revisit counting principles, composition and mathematical language.
EYFS LINKS	Mathematics	Number; Numerical Patterns; shape, space and measure	Develop deep understanding of number, patterns and relationships through adult-led teaching and continuous provision.	Assessment: observation, mathematical talk, practical tasks and revisiting prior learning.

SPRING 1 | Alive in 5

	WHITE ROSE STEPS	WHITE ROSE CONTENT	LEARNING OBJECTIVES	KEY KNOWLEDGE
WEEK 2	Step 5	1 more	I can show one more or one less with objects and explain the change.	One more increases the quantity by one; one less decreases it by one.
	Step 6	1 less	I can show one more or one less with objects and explain the change.	One more increases the quantity by one; one less decreases it by one.
	Step 7	Composition	I can show and explain how a whole number is made from parts.	A whole can be partitioned into smaller parts in different ways.
	Step 8	Conceptual subitising to 5	I can recognise and explain a quantity without counting one by one.	Recognise small quantities and parts within a whole without counting each item.
	Number fluency	Daily counting, subitising and number talk	I can count, notice quantities and explain what I see.	Revisit counting principles, composition and mathematical language.
EYFS LINKS	Mathematics	Number; Numerical Patterns; shape, space and measure	Develop deep understanding of number, patterns and relationships through adult-led teaching and continuous provision.	Assessment: observation, mathematical talk, practical tasks and revisiting prior learning.

SPRING 1 | Mass and capacity

	WHITE ROSE STEPS	WHITE ROSE CONTENT	LEARNING OBJECTIVES	KEY KNOWLEDGE
WEEK 3	Step 1	Compare mass	I can explore and compare measurements using objects and precise language.	Compare measures using longer, shorter, taller, heavier, lighter, full and empty.
	Step 2	Find a balance	I can represent, compare and explain numbers using practical resources.	Use one-to-one counting, cardinality and number representations accurately.
	Step 3	Explore capacity	I can explore and compare measurements using objects and precise language.	Compare measures using longer, shorter, taller, heavier, lighter, full and empty.
	Step 4	Compare capacity	I can explore and compare measurements using objects and precise language.	Compare measures using longer, shorter, taller, heavier, lighter, full and empty.
	Number fluency	Daily counting, subitising and number talk	I can count, notice quantities and explain what I see.	Revisit counting principles, composition and mathematical language.
EYFS LINKS	Mathematics	Number; Numerical Patterns; shape, space and measure	Develop deep understanding of number, patterns and relationships through adult-led teaching and continuous provision.	Assessment: observation, mathematical talk, practical tasks and revisiting prior learning.

SPRING 1 | Growing 6, 7, 8

	WHITE ROSE STEPS	WHITE ROSE CONTENT	LEARNING OBJECTIVES	KEY KNOWLEDGE
WEEK 4	Step 1	Find 6, 7 and 8	I can represent, compare and explain numbers using practical resources.	Use one-to-one counting, cardinality and number representations accurately.
	Step 2	Represent 6, 7 and 8	I can represent, compare and explain numbers using practical resources.	Use one-to-one counting, cardinality and number representations accurately.
	Step 3	1 more	I can show one more or one less with objects and explain the change.	One more increases the quantity by one; one less decreases it by one.
	Step 4	1 less	I can show one more or one less with objects and explain the change.	One more increases the quantity by one; one less decreases it by one.
	Number fluency	Daily counting, subitising and number talk	I can count, notice quantities and explain what I see.	Revisit counting principles, composition and mathematical language.
EYFS LINKS	Mathematics	Number; Numerical Patterns; shape, space and measure	Develop deep understanding of number, patterns and relationships through adult-led teaching and continuous provision.	Assessment: observation, mathematical talk, practical tasks and revisiting prior learning.

SPRING 1 | Growing 6, 7, 8

	WHITE ROSE STEPS	WHITE ROSE CONTENT	LEARNING OBJECTIVES	KEY KNOWLEDGE
WEEK 5	Step 5	Composition of 6, 7 and 8	I can show and explain how a whole number is made from parts.	A whole can be partitioned into smaller parts in different ways.
	Step 6	Make pairs – odd and even	I can make pairs and explore odd and even quantities.	Even groups can be paired equally; odd groups leave one unpaired.
	Step 7	Double to 8 (find a double)	I can find and make doubles using practical resources.	A double is two equal groups; make and recognise doubles.
	Step 8	Double to 8 (make a double)	I can find and make doubles using practical resources.	A double is two equal groups; make and recognise doubles.
	Number fluency	Daily counting, subitising and number talk	I can count, notice quantities and explain what I see.	Revisit counting principles, composition and mathematical language.
EYFS LINKS	Mathematics	Number; Numerical Patterns; shape, space and measure	Develop deep understanding of number, patterns and relationships through adult-led teaching and continuous provision.	Assessment: observation, mathematical talk, practical tasks and revisiting prior learning.

SPRING 1 | Growing 6, 7, 8 / Length, height and time

	WHITE ROSE STEPS	WHITE ROSE CONTENT	LEARNING OBJECTIVES	KEY KNOWLEDGE
WEEK 6	Step 9	Combine two groups	I can combine groups and explain how many there are altogether.	Combining two groups gives a total that can be counted.
	Step 10	Conceptual subitising	I can recognise and explain a quantity without counting one by one.	Recognise small quantities and parts within a whole without counting each item.
	Step 1	Explore length	I can explore and compare measurements using objects and precise language.	Compare measures using longer, shorter, taller, heavier, lighter, full and empty.
	Step 2	Compare length	I can explore and compare measurements using objects and precise language.	Compare measures using longer, shorter, taller, heavier, lighter, full and empty.
	Number fluency	Daily counting, subitising and number talk	I can count, notice quantities and explain what I see.	Revisit counting principles, composition and mathematical language.
EYFS LINKS	Mathematics	Number; Numerical Patterns; shape, space and measure	Develop deep understanding of number, patterns and relationships through adult-led teaching and continuous provision.	Assessment: observation, mathematical talk, practical tasks and revisiting prior learning.

SPRING 2 | Length, height and time

	WHITE ROSE STEPS	WHITE ROSE CONTENT	LEARNING OBJECTIVES	KEY KNOWLEDGE
WEEK 7	Step 3	Explore height	I can explore and compare measurements using objects and precise language.	Compare measures using longer, shorter, taller, heavier, lighter, full and empty.
	Step 4	Compare height	I can explore and compare measurements using objects and precise language.	Compare measures using longer, shorter, taller, heavier, lighter, full and empty.
	Step 5	Talk about time	I can talk about and sequence familiar events using time vocabulary.	Events can be sequenced using before, after, first, next and last.
	Step 6	Order and sequence time	I can talk about and sequence familiar events using time vocabulary.	Events can be sequenced using before, after, first, next and last.
	Number fluency	Daily counting, subitising and number talk	I can count, notice quantities and explain what I see.	Revisit counting principles, composition and mathematical language.
EYFS LINKS	Mathematics	Number; Numerical Patterns; shape, space and measure	Develop deep understanding of number, patterns and relationships through adult-led teaching and continuous provision.	Assessment: observation, mathematical talk, practical tasks and revisiting prior learning.

SPRING 2 | Building 9 and 10

	WHITE ROSE STEPS	WHITE ROSE CONTENT	LEARNING OBJECTIVES	KEY KNOWLEDGE
WEEK 8	Step 1	Find 9 and 10	I can represent, compare and explain numbers using practical resources.	Use one-to-one counting, cardinality and number representations accurately.
	Step 2	Compare numbers to 10	I can represent, compare and explain numbers using practical resources.	Use one-to-one counting, cardinality and number representations accurately.
	Step 3	Represent 9 and 10	I can represent, compare and explain numbers using practical resources.	Use one-to-one counting, cardinality and number representations accurately.
	Step 4	Conceptual subitising to 10	I can recognise and explain a quantity without counting one by one.	Recognise small quantities and parts within a whole without counting each item.
	Number fluency	Daily counting, subitising and number talk	I can count, notice quantities and explain what I see.	Revisit counting principles, composition and mathematical language.
EYFS LINKS	Mathematics	Number; Numerical Patterns; shape, space and measure	Develop deep understanding of number, patterns and relationships through adult-led teaching and continuous provision.	Assessment: observation, mathematical talk, practical tasks and revisiting prior learning.

SPRING 2 | Building 9 and 10

	WHITE ROSE STEPS	WHITE ROSE CONTENT	LEARNING OBJECTIVES	KEY KNOWLEDGE
WEEK 9	Step 5	1 more	I can show one more or one less with objects and explain the change.	One more increases the quantity by one; one less decreases it by one.
	Step 6	1 less	I can show one more or one less with objects and explain the change.	One more increases the quantity by one; one less decreases it by one.
	Step 7	Composition to 10	I can show and explain how a whole number is made from parts.	A whole can be partitioned into smaller parts in different ways.
	Step 8	Bonds to 10 (2 parts)	I can show and explain how a whole number is made from parts.	A whole can be partitioned into smaller parts in different ways.
	Number fluency	Daily counting, subitising and number talk	I can count, notice quantities and explain what I see.	Revisit counting principles, composition and mathematical language.
EYFS LINKS	Mathematics	Number; Numerical Patterns; shape, space and measure	Develop deep understanding of number, patterns and relationships through adult-led teaching and continuous provision.	Assessment: observation, mathematical talk, practical tasks and revisiting prior learning.

SPRING 2 | Building 9 and 10

	WHITE ROSE STEPS	WHITE ROSE CONTENT	LEARNING OBJECTIVES	KEY KNOWLEDGE
WEEK 10	Step 9	Make arrangements of 10	I can represent, compare and explain numbers using practical resources.	Use one-to-one counting, cardinality and number representations accurately.
	Step 10	Bonds to 10 (3 parts)	I can show and explain how a whole number is made from parts.	A whole can be partitioned into smaller parts in different ways.
	Step 11	Doubles to 10 (find a double)	I can find and make doubles using practical resources.	A double is two equal groups; make and recognise doubles.
	Step 12	Doubles to 10 (make a double)	I can find and make doubles using practical resources.	A double is two equal groups; make and recognise doubles.
	Number fluency	Daily counting, subitising and number talk	I can count, notice quantities and explain what I see.	Revisit counting principles, composition and mathematical language.
EYFS LINKS	Mathematics	Number; Numerical Patterns; shape, space and measure	Develop deep understanding of number, patterns and relationships through adult-led teaching and continuous provision.	Assessment: observation, mathematical talk, practical tasks and revisiting prior learning.

SPRING 2 | Building 9 and 10 / Explore 3-D shape

	WHITE ROSE STEPS	WHITE ROSE CONTENT	LEARNING OBJECTIVES	KEY KNOWLEDGE
WEEK 11	Step 13	Explore even and odd	I can make pairs and explore odd and even quantities.	Even groups can be paired equally; odd groups leave one unpaired.
	Step 1	Recognise and name 3-D shapes	I can recognise, describe and use 3-D shapes in practical activities.	3-D shapes have recognisable properties and can be found in the environment.
	Step 2	Find 2-D shapes within 3-D shapes	I can recognise, describe and use 3-D shapes in practical activities.	3-D shapes have recognisable properties and can be found in the environment.
	Step 3	Use 3-D shapes for tasks	I can recognise, describe and use 3-D shapes in practical activities.	3-D shapes have recognisable properties and can be found in the environment.
	Number fluency	Daily counting, subitising and number talk	I can count, notice quantities and explain what I see.	Revisit counting principles, composition and mathematical language.
EYFS LINKS	Mathematics	Number; Numerical Patterns; shape, space and measure	Develop deep understanding of number, patterns and relationships through adult-led teaching and continuous provision.	Assessment: observation, mathematical talk, practical tasks and revisiting prior learning.

SPRING 2 | Explore 3-D shape

	WHITE ROSE STEPS	WHITE ROSE CONTENT	LEARNING OBJECTIVES	KEY KNOWLEDGE
WEEK 12	Step 4	3-D shapes in the environment	I can recognise, describe and use 3-D shapes in practical activities.	3-D shapes have recognisable properties and can be found in the environment.
	Step 5	Identify more complex patterns	I can identify, continue and describe a repeating pattern.	A repeating pattern follows a rule that can be copied and extended.
	Step 6	Copy and continue patterns	I can identify, continue and describe a repeating pattern.	A repeating pattern follows a rule that can be copied and extended.
	Step 7	Patterns in the environment	I can identify, continue and describe a repeating pattern.	A repeating pattern follows a rule that can be copied and extended.
	Number fluency	Daily counting, subitising and number talk	I can count, notice quantities and explain what I see.	Revisit counting principles, composition and mathematical language.
EYFS LINKS	Mathematics	Number; Numerical Patterns; shape, space and measure	Develop deep understanding of number, patterns and relationships through adult-led teaching and continuous provision.	Assessment: observation, mathematical talk, practical tasks and revisiting prior learning.

SUMMER 1 | To 20 and beyond

	WHITE ROSE STEPS	WHITE ROSE CONTENT	LEARNING OBJECTIVES	KEY KNOWLEDGE
WEEK 1	Step 1	Build numbers beyond 10 (10–13)	I can count, represent and talk about numbers using objects and pictures.	Know the stable counting sequence, one-to-one correspondence and that the last count gives the total.
	Step 2	Continue patterns beyond 10 (10–13)	I can notice, copy, continue and describe a pattern.	Know that repeating patterns follow a rule; identify and continue the repeating unit.
	Step 3	Build numbers beyond 10 (14–20)	I can count, represent and talk about numbers using objects and pictures.	Know the stable counting sequence, one-to-one correspondence and that the last count gives the total.
	Step 4	Continue patterns beyond 10 (14–20)	I can notice, copy, continue and describe a pattern.	Know that repeating patterns follow a rule; identify and continue the repeating unit.
	Number fluency	Daily counting, subitising and number talk	I can count, notice quantities and explain what I see.	Revisit counting principles, composition and mathematical language.
EYFS LINKS	Mathematics	Number; Numerical Patterns; shape, space and measure	Develop deep understanding of number, patterns and relationships through adult-led teaching and continuous provision.	Assessment: observation, mathematical talk, practical tasks and revisiting prior learning.

SUMMER 1 | To 20 and beyond

	WHITE ROSE STEPS	WHITE ROSE CONTENT	LEARNING OBJECTIVES	KEY KNOWLEDGE
WEEK 2	Step 5	Verbal counting beyond 20	I can count, represent and talk about numbers using objects and pictures.	Know the stable counting sequence, one-to-one correspondence and that the last count gives the total.
	Step 6	Verbal counting patterns	I can notice, copy, continue and describe a pattern.	Know that repeating patterns follow a rule; identify and continue the repeating unit.
	Step 6 (application)	Verbal counting patterns – explain and reason	I can notice, copy, continue and describe a pattern.	Know that repeating patterns follow a rule; identify and continue the repeating unit.
	Step 6 (application) (application)	Verbal counting patterns – explain and reason – revisit	I can notice, copy, continue and describe a pattern.	Know that repeating patterns follow a rule; identify and continue the repeating unit.
	Number fluency	Daily counting, subitising and number talk	I can count, notice quantities and explain what I see.	Revisit counting principles, composition and mathematical language.
EYFS LINKS	Mathematics	Number; Numerical Patterns; shape, space and measure	Develop deep understanding of number, patterns and relationships through adult-led teaching and continuous provision.	Assessment: observation, mathematical talk, practical tasks and revisiting prior learning.

SUMMER 1 | How many now?

	WHITE ROSE STEPS	WHITE ROSE CONTENT	LEARNING OBJECTIVES	KEY KNOWLEDGE
WEEK 3	Step 1	Add more	I can find one more or one less using practical objects.	Know that one more increases a quantity by one and one less decreases it by one.
	Step 2	How many did I add?	I can use objects to show what happens when a group changes.	Use practical resources and mathematical vocabulary to describe, compare and explain.
	Step 3	Take away	I can use objects to show what happens when a group changes.	Use practical resources and mathematical vocabulary to describe, compare and explain.
	Step 4	How many did I take away?	I can use objects to show what happens when a group changes.	Use practical resources and mathematical vocabulary to describe, compare and explain.
	Number fluency	Daily counting, subitising and number talk	I can count, notice quantities and explain what I see.	Revisit counting principles, composition and mathematical language.
EYFS LINKS	Mathematics	Number; Numerical Patterns; shape, space and measure	Develop deep understanding of number, patterns and relationships through adult-led teaching and continuous provision.	Assessment: observation, mathematical talk, practical tasks and revisiting prior learning.

SUMMER 1 | Manipulate, compose and decompose

	WHITE ROSE STEPS	WHITE ROSE CONTENT	LEARNING OBJECTIVES	KEY KNOWLEDGE
WEEK 4	Step 1	Select shapes for a purpose	I can explore, recognise and describe shapes in my environment.	Know familiar shape names and describe visible properties and positions.
	Step 2	Rotate shapes	I can explore, recognise and describe shapes in my environment.	Know familiar shape names and describe visible properties and positions.
	Step 3	Manipulate shapes	I can explore, recognise and describe shapes in my environment.	Know familiar shape names and describe visible properties and positions.
	Step 4	Explain shape arrangements	I can explore, recognise and describe shapes in my environment.	Know familiar shape names and describe visible properties and positions.
	Number fluency	Daily counting, subitising and number talk	I can count, notice quantities and explain what I see.	Revisit counting principles, composition and mathematical language.
EYFS LINKS	Mathematics	Number; Numerical Patterns; shape, space and measure	Develop deep understanding of number, patterns and relationships through adult-led teaching and continuous provision.	Assessment: observation, mathematical talk, practical tasks and revisiting prior learning.

SUMMER 1 | Manipulate, compose and decompose

	WHITE ROSE STEPS	WHITE ROSE CONTENT	LEARNING OBJECTIVES	KEY KNOWLEDGE
WEEK 5	Step 5	Compose shapes	I can explore, recognise and describe shapes in my environment.	Know familiar shape names and describe visible properties and positions.
	Step 6	Decompose shapes	I can explore, recognise and describe shapes in my environment.	Know familiar shape names and describe visible properties and positions.
	Step 7	Copy 2-D shape pictures	I can explore, recognise and describe shapes in my environment.	Know familiar shape names and describe visible properties and positions.
	Step 8	Find 2-D shapes within 3-D shapes	I can explore, recognise and describe shapes in my environment.	Know familiar shape names and describe visible properties and positions.
	Number fluency	Daily counting, subitising and number talk	I can count, notice quantities and explain what I see.	Revisit counting principles, composition and mathematical language.
EYFS LINKS	Mathematics	Number; Numerical Patterns; shape, space and measure	Develop deep understanding of number, patterns and relationships through adult-led teaching and continuous provision.	Assessment: observation, mathematical talk, practical tasks and revisiting prior learning.

SUMMER 1 | Sharing and grouping

	WHITE ROSE STEPS	WHITE ROSE CONTENT	LEARNING OBJECTIVES	KEY KNOWLEDGE
WEEK 6	Step 1	Explore sharing	I can explore this idea using objects, pictures, talk and play.	Use practical resources and mathematical vocabulary to describe, compare and explain.
	Step 2	Sharing	I can explore this idea using objects, pictures, talk and play.	Use practical resources and mathematical vocabulary to describe, compare and explain.
	Step 3	Explore grouping	I can share and group objects practically and talk about what I notice.	Know that sharing distributes items and grouping makes sets.
	Step 4	Grouping	I can share and group objects practically and talk about what I notice.	Know that sharing distributes items and grouping makes sets.
	Number fluency	Daily counting, subitising and number talk	I can count, notice quantities and explain what I see.	Revisit counting principles, composition and mathematical language.
EYFS LINKS	Mathematics	Number; Numerical Patterns; shape, space and measure	Develop deep understanding of number, patterns and relationships through adult-led teaching and continuous provision.	Assessment: observation, mathematical talk, practical tasks and revisiting prior learning.

SUMMER 2 | Sharing and grouping

	WHITE ROSE STEPS	WHITE ROSE CONTENT	LEARNING OBJECTIVES	KEY KNOWLEDGE
WEEK 7	Step 5	Even and odd sharing	I can explore this idea using objects, pictures, talk and play.	Use practical resources and mathematical vocabulary to describe, compare and explain.
	Step 6	Play with and build doubles	I can explore this idea using objects, pictures, talk and play.	Use practical resources and mathematical vocabulary to describe, compare and explain.
	Step 6 (application)	Play with and build doubles – explain and reason	I can explore this idea using objects, pictures, talk and play.	Use practical resources and mathematical vocabulary to describe, compare and explain.
	Step 6 (application) (application)	Play with and build doubles – explain and reason – revisit	I can explore this idea using objects, pictures, talk and play.	Use practical resources and mathematical vocabulary to describe, compare and explain.
	Number fluency	Daily counting, subitising and number talk	I can count, notice quantities and explain what I see.	Revisit counting principles, composition and mathematical language.
EYFS LINKS	Mathematics	Number; Numerical Patterns; shape, space and measure	Develop deep understanding of number, patterns and relationships through adult-led teaching and continuous provision.	Assessment: observation, mathematical talk, practical tasks and revisiting prior learning.

SUMMER 2 | Visualise, build and map

	WHITE ROSE STEPS	WHITE ROSE CONTENT	LEARNING OBJECTIVES	KEY KNOWLEDGE
WEEK 8	Step 1	Identify units of repeating patterns	I can notice, copy, continue and describe a pattern.	Know that repeating patterns follow a rule; identify and continue the repeating unit.
	Step 2	Create own pattern rules	I can notice, copy, continue and describe a pattern.	Know that repeating patterns follow a rule; identify and continue the repeating unit.
	Step 3	Explore own pattern rules	I can notice, copy, continue and describe a pattern.	Know that repeating patterns follow a rule; identify and continue the repeating unit.
	Step 4	Replicate and build scenes and constructions	I can explore this idea using objects, pictures, talk and play.	Use practical resources and mathematical vocabulary to describe, compare and explain.
	Number fluency	Daily counting, subitising and number talk	I can count, notice quantities and explain what I see.	Revisit counting principles, composition and mathematical language.
EYFS LINKS	Mathematics	Number; Numerical Patterns; shape, space and measure	Develop deep understanding of number, patterns and relationships through adult-led teaching and continuous provision.	Assessment: observation, mathematical talk, practical tasks and revisiting prior learning.

SUMMER 2 | Visualise, build and map

	WHITE ROSE STEPS	WHITE ROSE CONTENT	LEARNING OBJECTIVES	KEY KNOWLEDGE
WEEK 9	Step 5	Visualise from different positions	I can describe positions and represent familiar places.	Use practical resources and mathematical vocabulary to describe, compare and explain.
	Step 6	Describe positions	I can describe positions and represent familiar places.	Use practical resources and mathematical vocabulary to describe, compare and explain.
	Step 7	Give instructions to build	I can explore this idea using objects, pictures, talk and play.	Use practical resources and mathematical vocabulary to describe, compare and explain.
	Step 8	Explore mapping	I can describe positions and represent familiar places.	Use practical resources and mathematical vocabulary to describe, compare and explain.
	Number fluency	Daily counting, subitising and number talk	I can count, notice quantities and explain what I see.	Revisit counting principles, composition and mathematical language.
EYFS LINKS	Mathematics	Number; Numerical Patterns; shape, space and measure	Develop deep understanding of number, patterns and relationships through adult-led teaching and continuous provision.	Assessment: observation, mathematical talk, practical tasks and revisiting prior learning.

SUMMER 2 | Visualise, build and map

	WHITE ROSE STEPS	WHITE ROSE CONTENT	LEARNING OBJECTIVES	KEY KNOWLEDGE
WEEK 10	Step 9	Represent maps with models	I can describe positions and represent familiar places.	Use practical resources and mathematical vocabulary to describe, compare and explain.
	Step 10	Create own maps from familiar places	I can describe positions and represent familiar places.	Use practical resources and mathematical vocabulary to describe, compare and explain.
	Step 11	Create own maps and plans from story situations	I can describe positions and represent familiar places.	Use practical resources and mathematical vocabulary to describe, compare and explain.
	Step 11 (application)	Create own maps and plans from story situations – revisit	I can describe positions and represent familiar places.	Use practical resources and mathematical vocabulary to describe, compare and explain.
	Number fluency	Daily counting, subitising and number talk	I can count, notice quantities and explain what I see.	Revisit counting principles, composition and mathematical language.
EYFS LINKS	Mathematics	Number; Numerical Patterns; shape, space and measure	Develop deep understanding of number, patterns and relationships through adult-led teaching and continuous provision.	Assessment: observation, mathematical talk, practical tasks and revisiting prior learning.

SUMMER 2 | Make connections

	WHITE ROSE STEPS	WHITE ROSE CONTENT	LEARNING OBJECTIVES	KEY KNOWLEDGE
WEEK 11	Step 1	Deepen understanding – represent numbers in different ways	I can represent the same number using objects, fingers and marks.	A number can be represented in different ways.
	Step 1	Deepen understanding – compose numbers from parts	I can combine parts to make a whole number.	The same whole can be composed of different parts.
	Step 2	Patterns and relationships – notice what changes	I can identify and describe what changes in a pattern.	Patterns have features and relationships that can be explained.
	Step 2	Patterns and relationships – continue a rule	I can use a rule to predict and make what comes next.	A pattern rule can be used to extend a sequence.
	Number fluency	Daily counting, subitising and number talk	I can count, notice quantities and explain what I see.	Revisit counting principles, composition and mathematical language.
EYFS LINKS	Mathematics	Number; Numerical Patterns; shape, space and measure	Develop deep understanding of number, patterns and relationships through adult-led teaching and continuous provision.	Assessment: observation, mathematical talk, practical tasks and revisiting prior learning.

SUMMER 2 | Make connections – direct teaching

	WHITE ROSE STEPS	WHITE ROSE CONTENT	LEARNING OBJECTIVES	KEY KNOWLEDGE
WEEK 12	Step 1	Deepen understanding – compose and decompose numbers to 10	I can make a number in different ways and explain its parts.	Know that a whole can be composed of different parts.
	Step 1	Deepen understanding – apply number bonds in practical problems	I can use known number bonds to solve a practical problem.	Know and use number bonds and relationships within 10.
	Step 2	Patterns and relationships – identify and describe a rule	I can spot a number or shape pattern and explain its rule.	Know that patterns follow a rule that can be described.
	Step 2	Patterns and relationships – extend and create patterns	I can extend and create patterns and explain what comes next.	Know that the same pattern rule can be applied to new examples.
	Number fluency	Daily counting, subitising and number talk	I can count, notice quantities and explain what I see.	Revisit counting principles, composition and mathematical language.
EYFS LINKS	Mathematics	Number; Numerical Patterns; shape, space and measure	Develop deep understanding of number, patterns and relationships through adult-led teaching and continuous provision.	Assessment: observation, mathematical talk, practical tasks and revisiting prior learning.