

Year 1 units

[View interactive sequence online](#) 

1

Counting, recognising and comparing numbers 0 - 10

2

Counting to and from 20

3

Counting in tens - decade numbers

4

Pattern in counting from 20 to 100

5

Comparing quantities - part part whole relationships

6

Composition of numbers 0 to 5

7

Recognise, compose, decompose and manipulate 2D and 3D shapes

8

Composition of numbers 6 to 10

9

Additive structures: addition

10

Additive structures: addition and subtraction

11

Addition and subtraction facts within 10

12

Composition of numbers 11 to 19

13

Numbers 0 to 20 in different contexts

14

Unitising and coin recognition - counting in 2s, 5s and 10s

15

Unitising and coin recognition - value of a set of coins

16

Solving problems in a range of contexts

17

Position and direction including fractions of turns

18

Time - sequencing events and telling the time to the hour and half hour

1. Counting, recognising and comparing numbers 0 - 10

Year 1

[Go to unit resources](#) 

Threads

- Number
- Number: Place value

Unit description

In this unit pupils will review their knowledge from the EYFS of counting in all its forms to and from 10. They will compare and order numbers to 10 practically and will consider the role of zero to represent nothing.

Why this, why now?

This unit gives pupils and teachers the opportunity to revisit and build upon the knowledge of the counting principles they have from the Early Years. It develops the use of representations that will underpin the more formal recording of maths that is to come in Year 1 and onwards whilst also providing familiar contexts for pupils just starting in KS1.

Lessons in unit

1. Counting forwards and backwards within 10
2. Counting objects within ten
3. Counting different groups
4. Representing counting songs
5. Anything can be counted
6. Subitising numbers to five
7. Conservation
8. Using numerals
9. Introducing zero
10. Ordinal numbers
11. Ordering numbers to 10
12. More than and fewer than
13. One more with manipulatives and counting
14. One less with manipulatives and counting
15. Finding the missing numbers

Prior knowledge requirements

- Count reliably to 10 using concrete objects
- Recognise and order numerals from 0 to 10
- Compare quantities using language such as more, fewer, same

2. Counting to and from 20

Year 1

[Go to unit resources](#) 

Threads

- Number
- Number: Place value

Unit description

In this unit pupils will consolidate counting to 20 and back. They will secure their understanding of the teens numbers in a cardinal and an ordinal context.

Why this, why now?

This unit extends and secures the stable order principle of counting forwards and backwards to and from 20 in different contexts and from different starting points. Pupils have the opportunity to rehearse key language and to develop their understanding of how the numbers relate to different representations. This learning will be revisited and developed in later units focusing on composition of numbers to 20.

Lessons in unit

1. Counting to and from 20
2. Counting on
3. Counting back from 20
4. Counting forward to 20 and back from 20
5. Comparing numbers to 20
6. Ordering numbers 11- 20 practically
7. Comparing and ordering numbers 0-20 practically
8. Finding one more and one less using representations
9. Finding one more and one less with manipulatives and images
10. Finding the missing number from 0 to 20

Prior knowledge requirements

- Count forwards and backwards from 0 to 20
- Recognise and write numerals to 20
- Compare small numbers

3. Counting in tens - decade numbers

Year 1

[Go to unit resources](#) 

Threads

- Number
- Number: Place value

Unit description

In this unit pupils will extend their counting to counting the decade numbers which will later be known as multiples of ten and making representations of them using a variety of different manipulatives.

Why this, why now?

Patterns in the number system start from 20 but rely on children knowing the sequence of the decade numbers. This unit prepares them for counting up to 100 as they know the numbers to 20 and will be able to apply this knowledge between the decades in the following unit once the sequence of the decade numbers is secure.

Lessons in unit

1. Counting forwards and backwards in 10s to 50
2. Counting forwards and backwards in 10s to 100
3. Composition of decade numbers to 100: making groups of 10
4. Count groups of 10 in decade numbers
5. Order and compare decade numbers on number tracks

Prior knowledge requirements

- Count in ones to at least 20
- Recognise and name decade numbers
- Understand counting patterns involving tens

4. Pattern in counting from 20 to 100

Year 1

[Go to unit resources](#) 

Threads

- Number
- Number: Place value

Unit description

In this unit pupils will extend their learning by counting to 100. They will explore the pattern in counting and focus on the end of the decade and the start of the new decade numbers. ↗

Why this, why now?

This unit provides opportunities to extend knowledge of counting in ones to counting between the decade numbers or multiples of ten. The unit also explores crossing the tens boundaries, combining knowledge of counting in ones with knowledge of the sequence of the decades both forwards and backwards. These skills are needed to compare and calculate with numbers in later units.

Lessons in unit

1. Counting patterns within a decade
2. Crossing the tens boundary counting forwards
3. Crossing the tens boundary counting backwards
4. Crossing the tens boundary counting forwards and backwards
5. Find missing numbers between 20 and 100

Prior knowledge requirements

- Confidently count in ones to 20
- Recognise tens and ones in numbers to 20
- Continue simple counting sequences and identify number patterns

5. Comparing quantities - part part whole relationships

Year 1

[Go to unit resources](#) 

Threads

- Geometry and Measure
- Number

Unit description

In this unit pupils will explain that items can be compared using length and height, mass and volume/capacity. They will compare sets of objects using equality/inequality symbols. Pupils will also explore part-part-whole relationships with representations.

Why this, why now?

This unit moves on from counting to comparing items and attaching value to those items through various criteria. Equality is seen as a result of comparison and considered alongside inequality. Learning then develops to look at part-part-whole relationships using objects which are then represented with numerals. This provides the language and structure needed to move onto the following units on composition of numbers.

Lessons in unit

1. Explain that items can be compared using length and height
2. Explain that items can be compared using weight and mass
3. Explain that items can be compared using capacity
4. Count a set of objects
5. Solve problems by comparing sets of objects
6. Use equality and inequality symbols to compare sets of objects
7. Use equality and inequality symbols to compare the relative size of two numbers
8. Explain what a whole is
9. Explain that a whole can be split into parts
10. Explain that a whole can represent a group of objects
11. Identify a part of a whole group
12. Explain what a part-part-whole model is
13. Use a part-part-whole model to represent a whole partitioned into two parts
14. Use a part-part-whole model to represent partitioning into more than two parts
15. Solve problems using part-part-whole models with more than two parts

Prior knowledge requirements

- Use bar models to compare two quantities
- Understand language of comparison (more than, less than, difference)

- Represent part-whole relationships using diagrams or equations

6. Composition of numbers 0 to 5

Year 1

[Go to unit resources](#) 

Threads

- Number
- Number: Addition and Subtraction

Unit description

In this unit pupils will revisit how numbers are represented cardinally and ordinally. They will partition 1 - 5 in different ways, find a missing part when one part and the whole are known and explore one more and one less with numbers to five.

Why this, why now?

This unit provides opportunities for pupils to explore the composition of numbers to 5, representing and describing the numbers in different ways and in different contexts. In future units they will apply this to secure understanding the structures of addition and subtraction.

Lessons in unit

1. Explain that numbers can represent how many objects there are in a set
2. Ordinal numbers show the position of an object in relation to another
3. Partition numbers one to five in different ways
4. Partition the numbers one to five in a systematic way
5. Find a missing part when one part and the whole is known
6. Solve problems finding a missing part when one part and the whole is known
7. Show one more and one less than a number using representations
8. Show one more and one less than a number using representations and describe this accurately
9. Use a bar model to represent a whole partitioned into two parts
10. Solve problems using a bar model to represent a whole partitioned into two parts

Prior knowledge requirements

- Count reliably up to 5
- Partition small numbers into parts
- Recognise that the whole is made up of parts

7. Recognise, compose, decompose and manipulate 2D and 3D shapes

Year 1

[Go to unit resources](#) 

Threads

- Geometry and Measure

Unit description

In this unit pupils will compose, copy, extend and develop repeating and radiating patterns. They will explore, discuss and compare 3D and 2D shapes.

Why this, why now?

This unit provides a break from developing number work and an opportunity to develop other key mathematical skills of spatial reasoning and pattern. The unit builds on the spatial reasoning and pattern language and examples they will have encountered in the Early Years.

Lessons in unit

1. Composing pattern block images
2. Copy, extend and describe repeating patterns
3. Radiating patterns
4. Compose tangram images
5. Tetrominoes and pentominoes
6. Examine ways that cubes can be composed into different arrangements
7. Explore, recognise and compare three different 3D shapes
8. Explore, recognise and compare three more 3D shapes
9. Identify 2D shapes within 3D shapes
10. Recognise, describe and sort 3D shapes
11. Explore and recognise 2D shapes
12. Explore, discuss and compare 2D shapes
13. Explore, discuss and identify shapes that are and are not circles
14. Explore, discuss and identify shapes that are and are not triangles
15. Explore, discuss and identify shapes that are and are not rectangles

Prior knowledge requirements

- Identify and describe 2D and 3D shapes
- Explore how shapes can be combined or taken apart
- Understand symmetry and simple transformations

8. Composition of numbers 6 to 10

Year 1

[Go to unit resources](#) 

Threads

- Number
- Number: Addition and Subtraction

Unit description

In this unit pupils will represent numbers 6 - 10 by partitioning in different ways. They will learn what odd and even numbers are and how they can be partitioned. They will identify a missing part when a whole is partitioned into two parts where one of the parts is known.

Why this, why now?

This unit builds on exploring numbers to five by looking at five and a bit to explore the numbers 6 – 10. Cardinal and ordinal aspects of number are explored through representations including a number line. Pupils explore and describe patterns of odd and even numbers and extend their understanding of parts and wholes to include numbers to ten.

Lessons in unit

1. Count a set of objects and match the spoken number to the written numeral and number name
2. Represent the numbers 6 to 10 using a five and a bit structure
3. Compare two numbers and say which is greater than or less than the other
4. Identify the whole and parts of the numbers 6 to 10 using the five and a bit structure
5. Explore the numbers 6 to 10 using the parts and wholes on a number line
6. Explain where 6, 7, 8 and 9 lie on a number line
7. Estimate where 6, 7, 8 and 9 lie on an unmarked number line
8. Order and sort numbers into odd and even sets
9. Skip count in odds and evens
10. Explain what odd and even numbers are and the difference between them
11. Explain how even and odd numbers can be partitioned
12. Partition the numbers 6 and 7 in different ways
13. Partition the numbers 8 and 9 in different ways
14. Partition the numbers 6 to 10 in different ways
15. Identify a missing part when a whole is partitioned into two parts

Prior knowledge requirements

- Count and represent numbers to 10
- Partition numbers into different pairs

- Use concrete resources to explore number combinations

9. Additive structures: addition

Year 1

[Go to unit resources](#) 

Threads

- Number
- Number: Addition and Subtraction

Unit description

In this unit pupils will combine 2 or more parts to make a whole. They will learn addends can be represented in any order and that the = sign shows the whole and sum of the parts are equal.

Why this, why now?

This unit introduces the symbolic representation of addition and subtraction. Learning builds on the understanding of the part-part-whole structure and the composition of the numbers to 10, introducing the use of equations to represent known relationships before moving on, in later units, to solving problems involving addition.

Lessons in unit

1. Combine parts using the addition symbol
2. Understand that parts can be represented in any order
3. Understand the use of the equals sign in equations
4. Understanding part-part-whole relationships
5. Add parts to find the value of the whole and write the equation
6. Find the missing part in an equation
7. Partition a whole into two parts and write as a subtraction equation
8. Using bar models to subtract
9. Understand the relationship between addition and subtraction
10. Understand addition as increasing a quantity

Prior knowledge requirements

- Understand part-part-whole relationships
- Represent problems using bar models and equations
- Use different strategies for solving addition problems

10. Additive structures: addition and subtraction

Year 1

[Go to unit resources](#) 

Threads

- Number
- Number: Addition and Subtraction

Unit description

In this unit pupils will find missing addends in equations. They will partition a whole into 2 parts representing first, then, now stories with subtraction equations. They will learn + and - are inverse operations.

Why this, why now?

This unit develops the use of symbols to represent addition and subtraction stories and contexts. Pupils apply their understanding of the relationship between part-part-whole structures and addition and extend that to include subtraction representing decreasing an amount. Pupils also develop their understanding of the link between addition and subtraction using the inverse.

Lessons in unit

1. Interpret and represent addition stories
2. Understand subtraction as decreasing an amount
3. Interpret and represent subtraction stories
4. Furthering understanding of subtraction as decreasing an amount
5. Create addition and subtraction stories
6. Find the missing part of an addition story
7. Find the missing part in addition and subtraction stories
8. Find the missing part of a subtraction story
9. Know that addition and subtraction are inverse operations
10. Represent the inverse relationship between addition and subtraction

Prior knowledge requirements

- Understand part-whole relationships
- Recognise inverse nature of addition and subtraction
- Use equations and bar models to represent problems

11. Addition and subtraction facts within 10

Year 1

[Go to unit resources](#) 

Threads

- Number
- Number: Addition and Subtraction

Unit description

In this unit pupils will explain that addition is commutative. They will find pairs of numbers to 10 and add or subtract 1 from any number. Pupils will also develop their knowledge and understanding of odd and even numbers and that even numbers relate to doubling and halving.

Why this, why now?

This unit develops understanding and recording of addition and subtraction through exploring number facts within ten. Pupils develop and rehearse their knowledge of the composition of the numbers to ten and explore patterns including odd and even numbers again. They will begin to explore the concepts of doubling and halving as they relate to addition and subtraction facts.

Lessons in unit

1. Explain that addition is commutative
2. Find pairs of numbers that sum to 10
3. Use number pairs to 10 in subtraction contexts
4. Add and subtract one from any number
5. Find the difference between consecutive numbers
6. Add and subtract two from even numbers within 10
7. Add and subtract two from odd numbers within 10
8. Explain the difference between consecutive even numbers
9. Explain the difference between consecutive odd numbers
10. Addition and subtraction involving zero
11. Double numbers and explain what doubling means
12. Halve numbers and explain what halving means
13. Use knowledge of doubles to calculate near-doubles
14. Solve problems by adding 3 to 5 and 6
15. Addition and subtraction facts within 10

Prior knowledge requirements

- Recall number facts and sequences
- Use place value understanding
- Apply basic operations in context

12. Composition of numbers 11 to 19

Year 1

[Go to unit resources](#) 

Threads

- Number
- Number: Place value

Unit description

In this unit pupils will explain 11-19 as cardinal and ordinal numbers. They will double and halve numbers 6-9 and use addition and subtraction facts to add and subtract within 20.

Why this, why now?

This unit introduces two-digit numbers between 10 and 20, rehearsing the counting sequence and beginning to explore two-digit place value, building on the counting pattern to 100 in earlier units. Here pupils will represent 2-digit numbers in different ways to show the composition of ten and a bit. Number facts to ten will be applied within 20 and doubling to ten will be extended to 20.

Lessons in unit

1. Explain that the digits in the numbers 11 to 19 express quantity
2. Explain that the digits in the numbers 11 to 19 express position on a number line
3. Identify the quantity shown in a representation of numbers 11 to 19
4. Use knowledge of 10 and a bit to solve problems
5. Solve subtraction problems using knowledge of 10 and a bit
6. Explore odd and even numbers within 20
7. Double the numbers 6 to 9 and halve the result explaining what doubling and halving is
8. Use knowledge of addition facts within 10 to add within 20
9. Use knowledge of subtraction facts within 10 to subtract within 20
10. Use knowledge of addition and subtraction facts within 10 to add and subtract within 20

Prior knowledge requirements

- Count and represent numbers to 10
- Partition numbers into tens and ones
- Use number bonds to build teen numbers

13. Numbers 0 to 20 in different contexts

Year 1

[Go to unit resources](#) 

Threads

- Geometry and Measure
- Number
- Number: Addition and Subtraction

Unit description

In this unit pupils will consolidate their counting to 20. They will measure objects using non-standard and standard measures and record outcomes, providing a context for counting and comparing numbers to 20.

Why this, why now?

This unit provides further opportunities for pupils to secure the counting sequence to 20 by exploring the numbers in different contexts beginning with non-standard measure and beginning to introduce length in centimetres. Pupils record the numbers to 20 in tables as part of their work and begin to make estimates based on what they know already.

Lessons in unit

1. Comparing lengths
2. Measure length using objects
3. Measure length using objects and record results in a table
4. Measure length using centimetre cubes
5. Measure items using centimetre cubes and record results in a table
6. Measure length using a ruler
7. Solve problems by measuring different lengths in cm using a ruler
8. Estimate length in cm
9. Estimate and measure length and record results in a table
10. Solve addition and subtraction problems involving length

Prior knowledge requirements

- Recognise and count objects to 20
- Represent numbers using words, digits and models
- Compare quantities and solve simple problems

14. Unitising and coin recognition - counting in 2s, 5s and 10s

Year 1

[Go to unit resources](#) 

Threads

- Geometry and Measure
- Number
- Number: Multiplication and division

Unit description

In this unit pupils will count efficiently in groups of 2 5 10. They will recognise and explain the value of 1p 2p 5p 10p coins and how a single coin can be worth several pennies.†

Why this, why now?

This unit introduces 2, 5 and 10 p coins. Pupils explore objects and coins that represent more than one unit. They recognize the value of the coins and use the coins to support skip counting in 2, 10 and 5. This develops their counting and begins to prepare them for ideas of multiplicative thinking in Year 2 and onwards.

Lessons in unit

1. Skip count in twos forwards and backwards
2. Count efficiently in groups of two
3. Count efficiently in groups of ten
4. Skip count in fives forwards and backwards
5. Count efficiently in groups of 5
6. Count efficiently in groups of two, five and ten
7. Recognise and explain the value of 1p in pence
8. Recognise and explain the value of 2p coins in pence
9. Recognise and explain the value of 5p in pence
10. Recognise and explain the value of 10p in pence.

Prior knowledge requirements

- Recall number facts and sequences
- Use place value understanding
- Apply basic operations in context

15. Unitising and coin recognition - value of a set of coins

Year 1

[Go to unit resources](#) 

Threads

- Geometry and Measure
- Number
- Number: Addition and Subtraction

Unit description

In this unit pupils will use knowledge of the value of coins and apply their number facts and counting skills to calculate the total value of the coins in a set of 2p 5p 10p coins. ↯

Why this, why now?

This unit applies the skip counting rehearsed previously to solve problems involving numbers of coins. Pupils also have the opportunity to apply their counting and number facts knowledge to find and make amounts up to 20 p.

Lessons in unit

1. Calculate the total value of a set of 2 p coins
2. Find how many 2 p coins are needed to make a given value
3. Calculate the total value of the coins in a set of 10p coins
4. Find how many ten pence coins are needed to make a given amount
5. Calculate the total value of the coins in a set of 5 p coins
6. Find how many five pence coins are needed to make a given amount
7. Compare sets of 2 p, 5 p, and 10 p coins
8. Find and make amounts within 10p
9. Find and make amounts within 20 p
10. Calculate amounts up to 20 p

Prior knowledge requirements

- Recall number facts and sequences
- Use place value understanding
- Apply basic operations in context

16. Solving problems in a range of contexts

Year 1

[Go to unit resources](#) 

Threads

- Geometry and Measure
- Number
- Number: Addition and Subtraction
- Number: Fractions
- Number: Multiplication and division

Unit description

In this unit pupils have the opportunity to apply their knowledge of counting, comparing and number facts to solve problems in a range of contexts.

Why this, why now?

This unit provides an opportunity to consolidate and apply a range of counting skills and number facts to solve problems. It brings together learning from previous units about numbers to 10 and 20 and counting in steps of 2, 10 and 5.

Lessons in unit

1. Counting and comparing
2. Combining and partitioning numbers within 10
3. Addition and subtraction within 10
4. Using known addition and subtraction facts
5. Counting in multiples of two, five, ten

Prior knowledge requirements

- Recall number facts and sequences
- Use place value understanding
- Apply basic operations in context

17. Position and direction including fractions of turns

Year 1

[Go to unit resources](#) 

Threads

- Geometry and Measure
- Number: Fractions

Unit description

In this unit pupils will describe position direction and movement including whole half quarter and three-quarter turns.

Why this, why now?

This unit builds on position, direction and spatial reasoning work in the Early Years. The learning is developed to include the ideas of turns that are a fraction of a whole to describe position and movement.

Lessons in unit

1. Using directional language
2. Using positional and proportional language
3. Understanding turns
4. Giving directions and describing turns
5. Follow and give directions

Prior knowledge requirements

- Use directional language (left, right, turn)
- Recognise quarter, half and full turns
- Represent turns using fractions

18. Time - sequencing events and telling the time to the hour and half hour

Year 1

[Go to unit resources](#) 

Threads

- Geometry and Measure

Unit description

In this unit pupils will sequence events in chronological order and recognise and use language relating to dates. They will tell the time to the hour and half past the hour linking to fractions.

Why this, why now?

This unit builds both on sequencing events and language relating to dates from Early Years to include the days of the week and months of the year. The unit also builds on the fractional language of position and direction. Pupils apply this to telling the time to the hour and half hour.

Lessons in unit

1. Sequence events in the school day in chronological order
2. Sequence everyday events in chronological order
3. Use language relating to days of the week
4. Sequence events across a week in chronological order
5. Use language relating to months of the year
6. Use language relating to days, weeks, months and years
7. Draw and label a clock face talking about the hours
8. Tell the time to the hour using the hour hand
9. Tell the time to the half hour using the hour hand
10. Tell the time to the hour and half hour using the hour and minute hands

Prior knowledge requirements

- Read time to the hour and half hour
- Understand 12-hour clock notation
- Convert between hours and minutes