

Unit overview: Subtraction – Year 1

National Curriculum requirements

By the end of the year, the children will be able to:

- read, write and interpret mathematical statements involving subtraction (–) and equals (=) signs
- represent and use number bonds and related subtraction facts within 20
- subtract one-digit and two-digit numbers to 20, including zero
- solve one-step problems that involve subtraction, using concrete objects and pictorial representations, and missing number problems such as $\square = 17 - 9$.

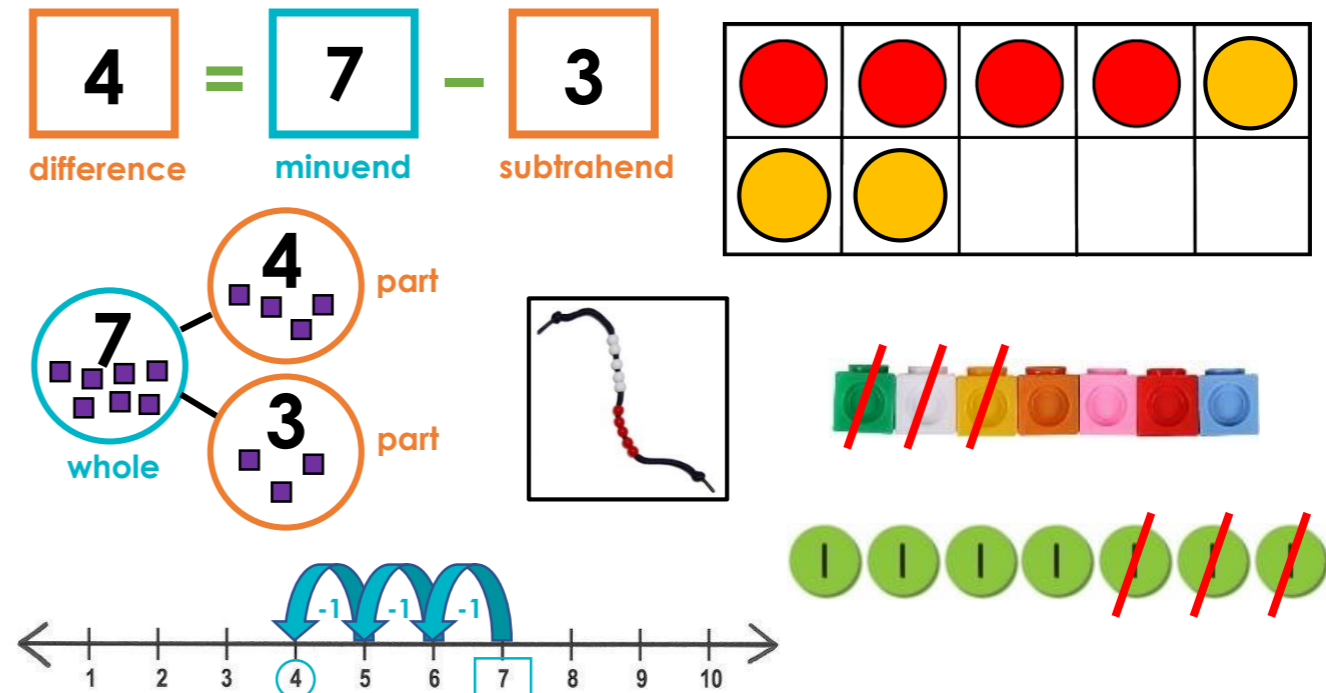
Vocabulary

- number names (0 – 100)
- digit
- number bonds
- minus / subtract / takeaway
- whole / minuend
- part / subtrahend
- part / difference
- equal to

Manipulatives

- number cards
- counters
- dienes
- place value counters
- interlocking cubes
- ten frames
- number lines
- bead strings

Visual representations



Sentence stems

_____ minus _____ is equal to _____.

_____ take away _____ is equal to _____.

When you subtract _____ from _____ the difference is _____.

The whole is _____. _____ is a part. _____ is a part.

_____ is the minuend. _____ is the subtrahend. The difference is _____.

To find the missing _____ you take away the other _____ from the _____.

Learning sequence

- read, write and interpret mathematical statements involving subtraction (–) and equal to (=) signs
- represent and use number bonds and related subtraction facts within 10, e.g. $2 + 6 = 8$ therefore $8 - 6 = 2$
- subtract one-digit numbers within 10, including zero
- represent and use number bonds and related subtraction facts within 20, e.g. $12 + 6 = 18$ therefore $18 - 6 = 12$
- subtract one-digit and two-digit numbers to 20, including zero using concrete objects, pictorial representations, and mentally, including:
 - subtracting a one-digit number from a two-digit number
 - subtracting three one-digit numbers
- solve one-step problems that involve subtraction using concrete objects and pictorial representations, and missing number problems
- estimate to check answers

Unit overview: Subtraction – Year 2

National Curriculum requirements

By the end of the year, the children will be able to:

- solve problems with 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 subtraction facts to 20 fluently, and derive and use related facts up to 100
- 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
- recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.

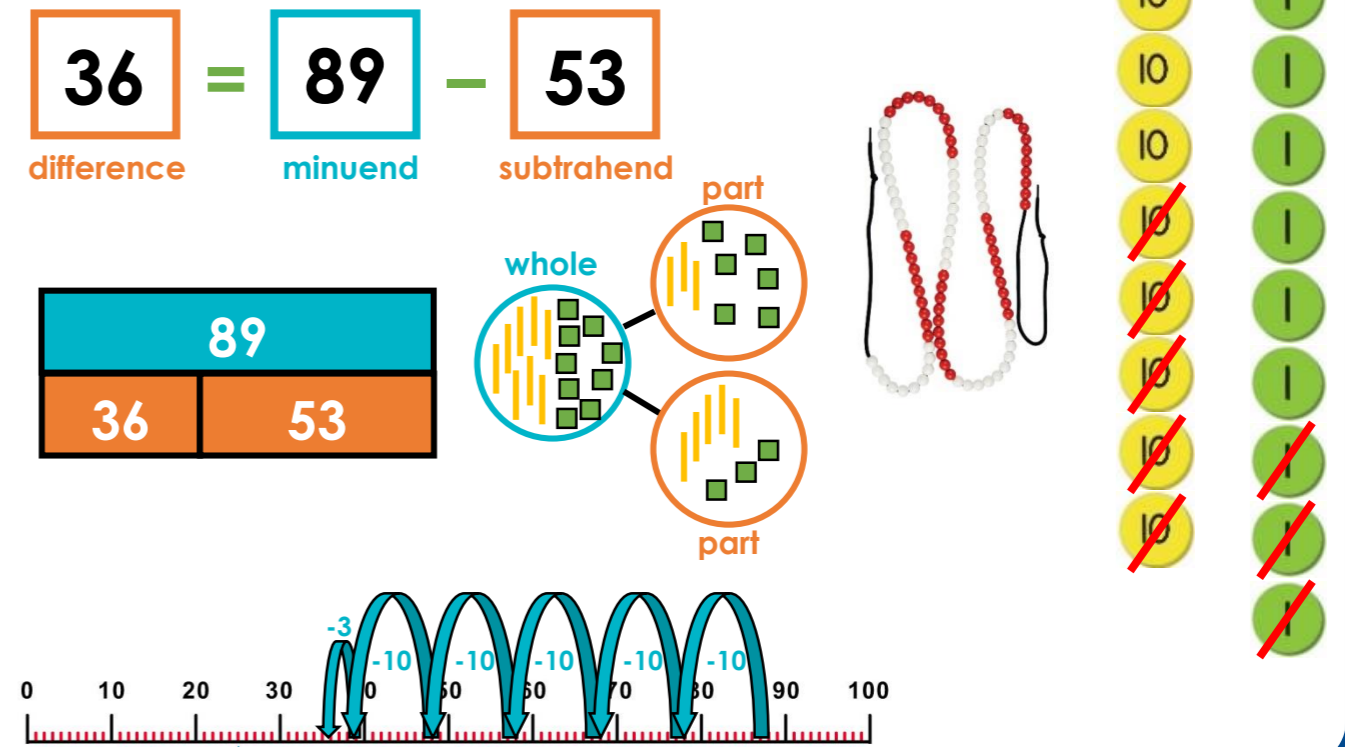
Vocabulary

- digit
- number bonds
- minus / subtract / takeaway
- whole / minuend
- part / subtrahend
- part / difference
- equal to
- partition

Manipulatives

- counters
- dienes
- place value counters
- interlocking cubes
- hundred squares
- ten frames
- number lines
- bead strings

Visual representations



Sentence stems

_____ minus _____ is equal to _____.

_____ take away _____ is equal to _____.

When you subtract _____ from _____ the difference is _____.

The whole is _____. _____ is a part. _____ is a part.

_____ is the minuend. _____ is the subtrahend. The difference is _____.

To find the missing _____ you take away the other _____ from the _____.

Learning sequence

- recall and use subtraction facts to 20 fluently, and derive and use related facts up to 100
- using number bond facts, 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
- using a 'make the previous 10' strategy, subtract numbers using concrete objects, pictorial representations, and mentally, including:
 - two one digit numbers
 - a two-digit number and ones
 - two two-digit numbers
- solve problems with subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures
- recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems
- apply their increasing knowledge of mental and written methods in a range of scenarios.

Unit overview: Subtraction – Year 3

National Curriculum requirements

By the end of the year, the children will be able to:

- subtract numbers mentally, including:
 - a three-digit number and ones
 - a three-digit number and tens
 - a three-digit number and hundreds
- subtract numbers with up to three digits, using formal written methods of columnar subtraction
- estimate the answer to a calculation and use inverse operations to check answers
- solve problems, including missing number problems, using number facts, place value, and more complex subtraction.

Vocabulary

- digit
- number bonds
- minus / subtract / takeaway
- whole / minuend
- part / subtrahend
- part / difference
- equal to
- partition
- estimate

Manipulatives

- counters
- dienes
- place value counters
- interlocking cubes
- hundred squares
- ten frames
- number lines
- bead strings

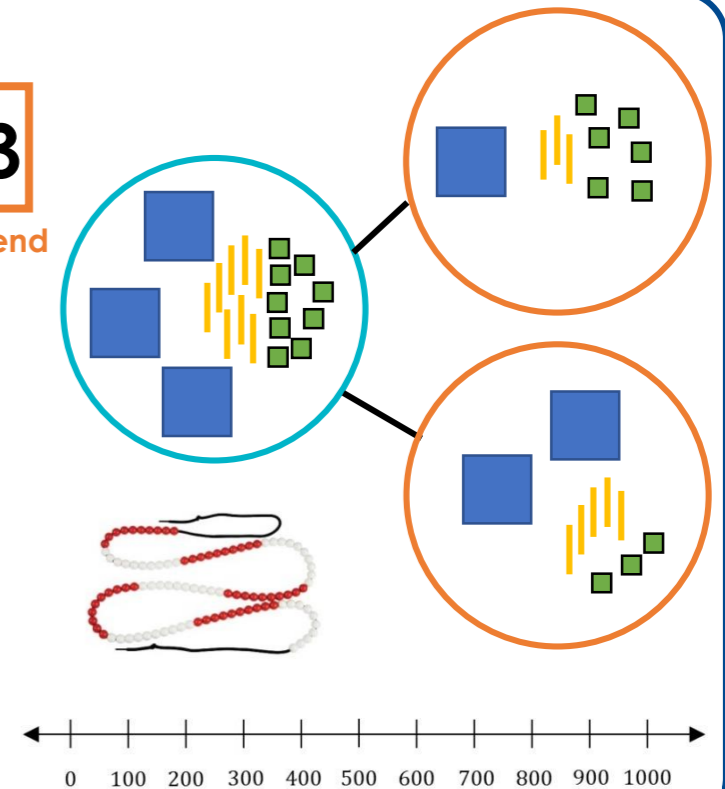
Visual representations

$$\boxed{136} = \boxed{389} - \boxed{253}$$

difference
minuend
subtrahend



H	T	O
3	8	9
-		
2	5	3
—		
1	3	6



Sentence stems

_____ minus _____ is equal to _____.

_____ take away _____ is equal to _____.

When you subtract _____ from _____ the difference is _____.

The whole is _____. _____ is a part. _____ is a part.

_____ is the minuend. _____ is the subtrahend. The difference is _____.

To find the missing _____ you take away the other _____ from the _____.

Learning sequence

- using number bond facts, 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
 - a three-digit number and ones
 - a three-digit number and tens
 - a three-digit number and hundreds
- subtract numbers with up to three digits, using formal written methods of columnar subtraction (using number bond facts only)
- using a 'make the previous 10/100' strategy, subtract numbers using concrete objects, pictorial representations, and mentally, including:
 - a two-digit number and ones
 - two two-digit numbers
 - a three-digit number and ones
 - a three-digit number and tens
 - a three-digit number and hundreds
- subtract numbers with up to three digits, using formal written methods of columnar subtraction
- solve problems, including missing number problems, using number facts, place value, and more complex
- estimate the answer to a calculation and use inverse operations to check answers

Unit overview: Subtraction – Year 4

National Curriculum requirements

By the end of the year, the children will be able to:

- subtract numbers with up to 4 digits using the formal written methods of columnar subtraction where appropriate
- estimate and use inverse operations to check answers to a calculation
- solve two-step problems in contexts, deciding which operations and methods to use and why.

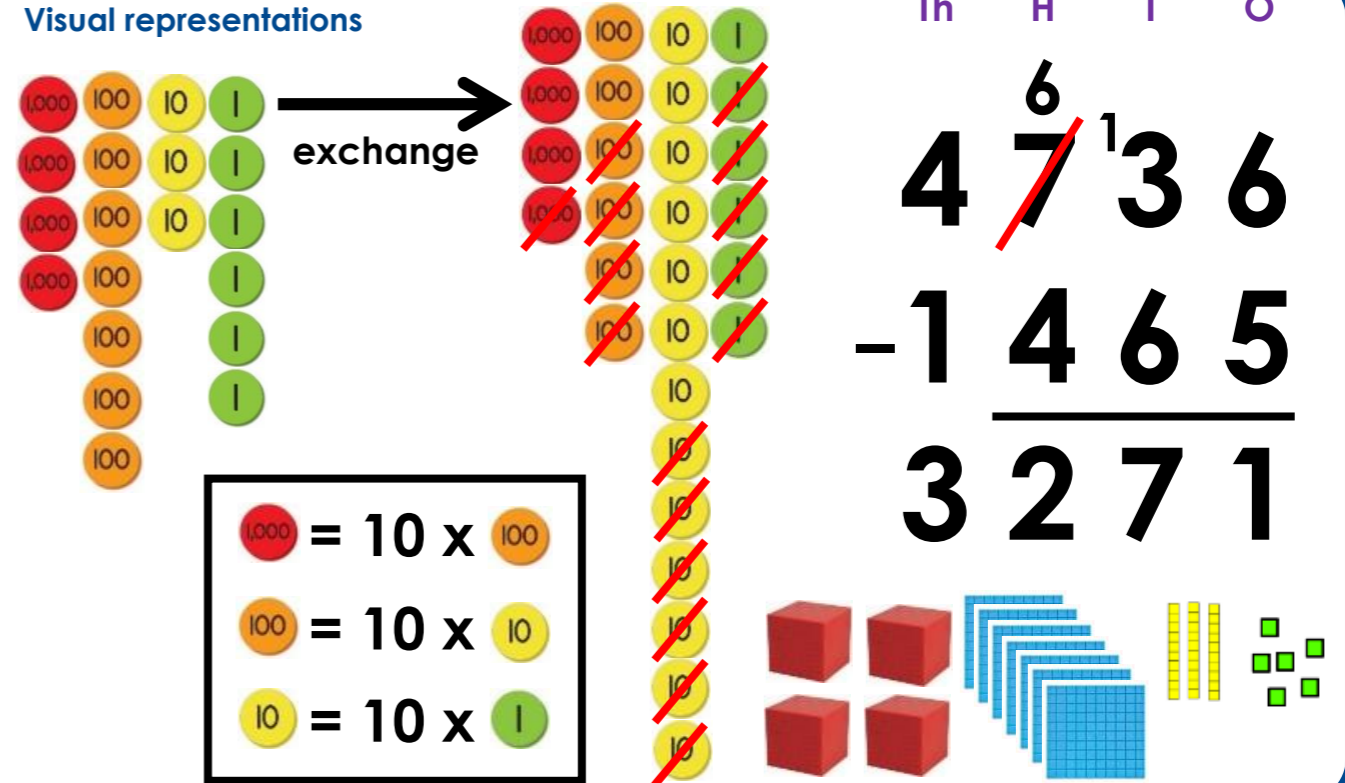
Vocabulary

- digit
- number bonds
- minus / subtract / takeaway
- whole / minuend
- part / subtrahend
- part / difference
- equal to
- exchange
- estimate

Manipulatives

- counters
- dienes
- place value counters
- interlocking cubes
- hundred squares
- ten frames
- number lines
- bead strings

Visual representations



The visual representations show the process of exchanging a 1,000 counter for ten 100 counters, and a 100 counter for ten 10 counters. A box explains the relationships: 1,000 = 10 x 100, 100 = 10 x 10, and 10 = 10 x 1. To the right, a columnar subtraction diagram shows 4,736 minus 1,465. The result is 3,271. The diagram uses place value labels (Th, H, T, O) and shows the borrowing process with arrows and a '6' above the 7 in the hundreds column.

Sentence stems

_____ minus _____ is equal to _____.

_____ take away _____ is equal to _____.

When you subtract _____ from _____ the difference is _____.

The whole is _____. _____ is a part. _____ is a part.

_____ is the minuend. _____ is the subtrahend. The difference is _____.

To find the missing _____ you take away the other _____ from the _____.

If I know _____ then I can calculate _____

Learning sequence

- using number bond facts, subtract numbers using concrete objects, pictorial representations, and mentally, including:
 - a two- / three- / four- digit number and ones
 - a two- / three- / four- digit number and tens
 - a two- / three- / four- digit number and hundreds
 - a two- / three- / four- digit number and thousands
- subtract numbers with up to four digits, using formal written methods of columnar subtraction (using number bond facts only)
- using a 'make the previous 10/100' strategy, subtract numbers using concrete objects, pictorial representations, and mentally, including:
 - a two- / three- / four- digit number and ones
 - a two- / three- / four- digit number and tens
 - a two- / three- / four- digit number and hundreds
 - a two- / three- / four- digit number and thousands
- subtract numbers with up to four digits, using formal written methods of columnar subtraction
- estimate and use inverse operations to check answers to a calculation
- solve two-step problems in contexts, deciding which methods to use and why

Unit overview: Subtraction – Year 5

National Curriculum requirements

By the end of the year, the children will be able to:

- subtract whole numbers with more than 4 digits, including using formal written methods (columnar subtraction)
- subtract numbers mentally with increasingly large numbers
- use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy
- solve multi-step problems in contexts, deciding which operations and methods to use and why.

Vocabulary

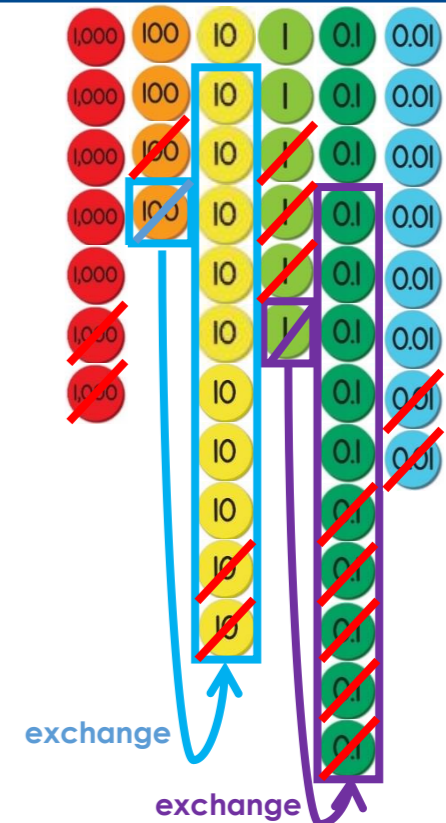
- digit
- number bonds
- minus / subtract / takeaway
- whole / minuend
- part / subtrahend
- part / difference
- equal to
- exchange
- estimate

Manipulatives

- counters
- dienes
- place value counters
- interlocking cubes
- hundred squares
- ten frames
- number lines
- bead strings

Visual representations

	Th	H	T	O	t	h
		3		5		
	7	4 ¹	1	6	.	3 ¹ 8
-	2	1	2	3	.	5 2
<hr/>						
	5	2	9	2	.	8 6



Sentence stems

_____ minus _____ is equal to _____.

_____ take away _____ is equal to _____.

When you subtract _____ from _____ the difference is _____.

The whole is _____. _____ is a part. _____ is a part.

_____ is the minuend. _____ is the subtrahend. The difference is _____.

To find the missing _____ you take away the other _____ from the _____.

If I know _____ then I can calculate _____

Learning sequence

- using a combination of number bond facts and 'make the previous 10/100' strategy, subtract numbers using concrete objects, pictorial representations, and mentally, including:
 - a two- / three- / four- digit number and ones
 - a two- / three- / four- digit number and tens
 - a two- / three- / four- digit number and hundreds
 - a two- / three- / four- digit number and thousands
 - decimal numbers, up to three decimal places
- subtract numbers (as sequence above) using formal written methods (columnar subtraction)
- subtract whole numbers with more than 4 digits – and up to three decimal places – using formal written methods (columnar subtraction)
- subtract numbers mentally with increasingly large numbers
- use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy
- solve subtraction multi-step problems in contexts, deciding which methods to use and why
- solve problems involving numbers up to three decimal places

Unit overview: Subtraction – Year 6

National Curriculum requirements

By the end of the year, the children will be able to:

- perform mental calculations, including with mixed operations and large numbers
- solve multi-step problems in contexts, deciding which operations and methods to use and why

Vocabulary

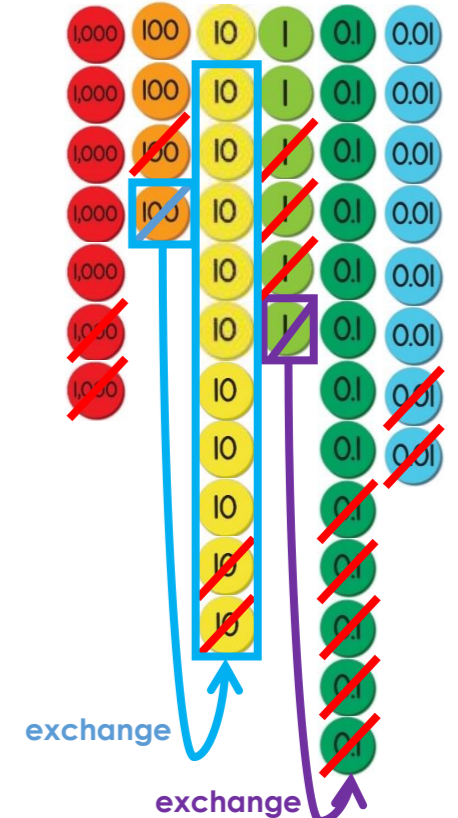
- digit
- number bonds
- minus / subtract / takeaway
- whole / minuend
- part / subtrahend
- part / difference
- equal to
- exchange
- estimate

Manipulatives

- counters
- dienes
- place value counters
- interlocking cubes
- hundred squares
- ten frames
- number lines
- bead strings

Visual representations

	Th	H	T	O	.	t	h
	7	4 ³	1 ¹	6 ⁵	.	3 ¹	8
-	2	1	2	3	.	5	2
<hr/>							
	5	2	9	2	.	8	6



Sentence stems

_____ minus _____ is equal to _____.

_____ take away _____ is equal to _____.

When you subtract _____ from _____ the difference is _____.

The whole is _____. _____ is a part. _____ is a part.

_____ is the minuend. _____ is the subtrahend. The difference is _____.

To find the missing _____ you take away the other _____ from the _____.

If I know _____ then I can calculate _____

Learning sequence

- using a combination of number bond facts and 'make the previous 10/100' strategy, subtract numbers using concrete objects, pictorial representations, and mentally, including:
 - a two- / three- / four- digit number and ones
 - a two- / three- / four- digit number and tens
 - a two- / three- / four- digit number and hundreds
 - a two- / three- / four- digit number and thousands
 - decimal numbers, up to three decimal places
- subtract numbers (as sequence above) using formal written methods (columnar subtraction)
- subtract whole numbers with more than 4 digits – and up to three decimal places – using formal written methods (columnar subtraction)
- subtract numbers mentally with increasingly large numbers
- use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy
- solve subtraction multi-step problems in contexts, deciding which methods to use and why
- solve problems involving numbers up to three decimal places