

# Unit overview: Subtraction – Year Reception

## National Curriculum requirements

Children at the expected level of development will:

- Have a deep understanding of number to 10, including the composition of each number;
- 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.
- Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.

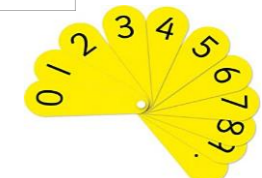
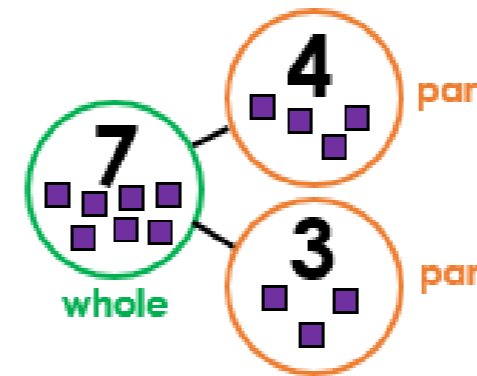
## Vocabulary

- number names (0 – 20 and beyond)
- digit
- number bonds
- minus / subtract / take away
- whole
- part
- difference
- equal to
- less than

## Manipulatives

- number cards
- counters
- interlocking cubes
- ten frames
- number lines
- bead strings
- counting tools (i.e. counting bears)

## Visual representations



## Sentence stems

\_\_\_\_\_ minus \_\_\_\_\_ is equal to \_\_\_\_\_.

\_\_\_\_\_ take away \_\_\_\_\_ is equal to \_\_\_\_\_.

The whole is \_\_\_\_\_. \_\_\_\_\_ is a part. \_\_\_\_\_ is a part.

To find the missing \_\_\_\_\_ you take away the other \_\_\_\_\_ from the \_\_\_\_\_.

When you subtract \_\_\_\_\_ from \_\_\_\_\_ the difference is \_\_\_\_\_.

## Learning sequence

- Solve real-world mathematical problems with number up to 5.
- Counts objects, actions and sounds.
- Explore the composition of numbers up to 5.
- Subitise within numbers up to 5.
- Explore the composition of numbers up to 10.
- Use concrete objects to subtract a part from a whole.
- Automatically recall number bonds for numbers 0-5 and some to 10.
- Explore the composition of numbers to 20.
- Solve real-world mathematical problems that involve subtraction using concrete objects.

# 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  $\square = 17 - 9$ .

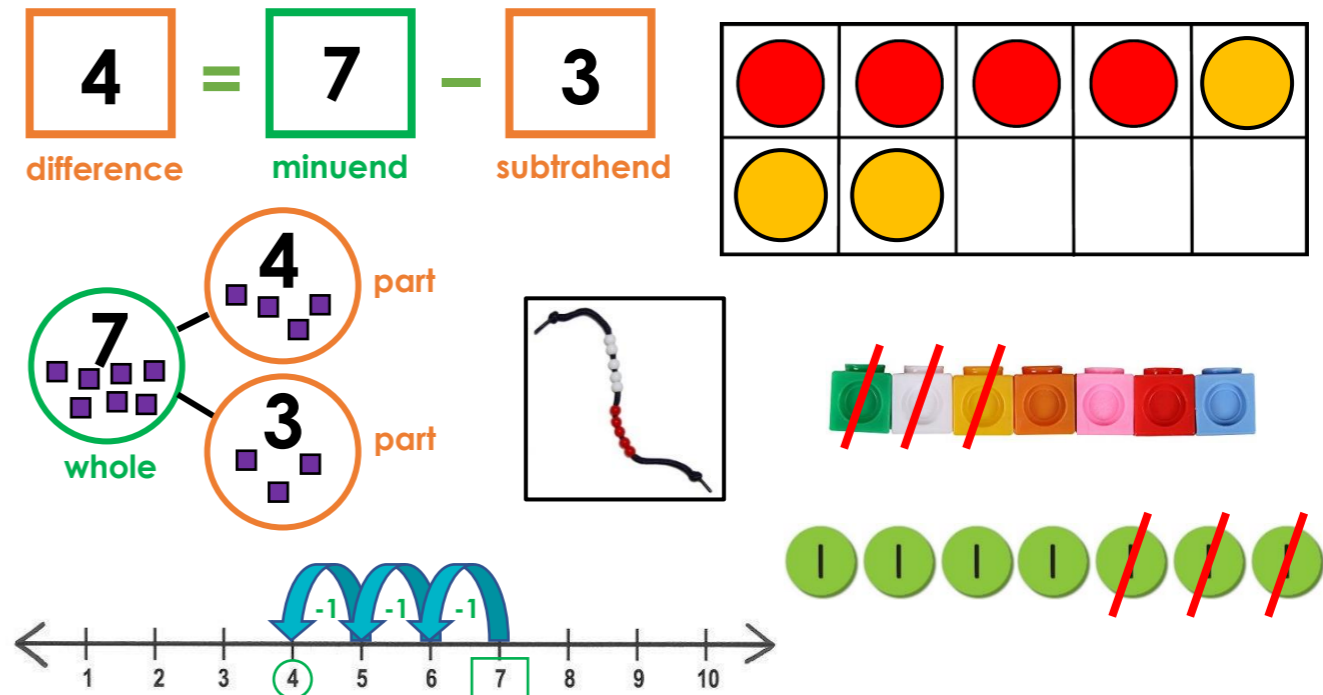
## Vocabulary

- 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.

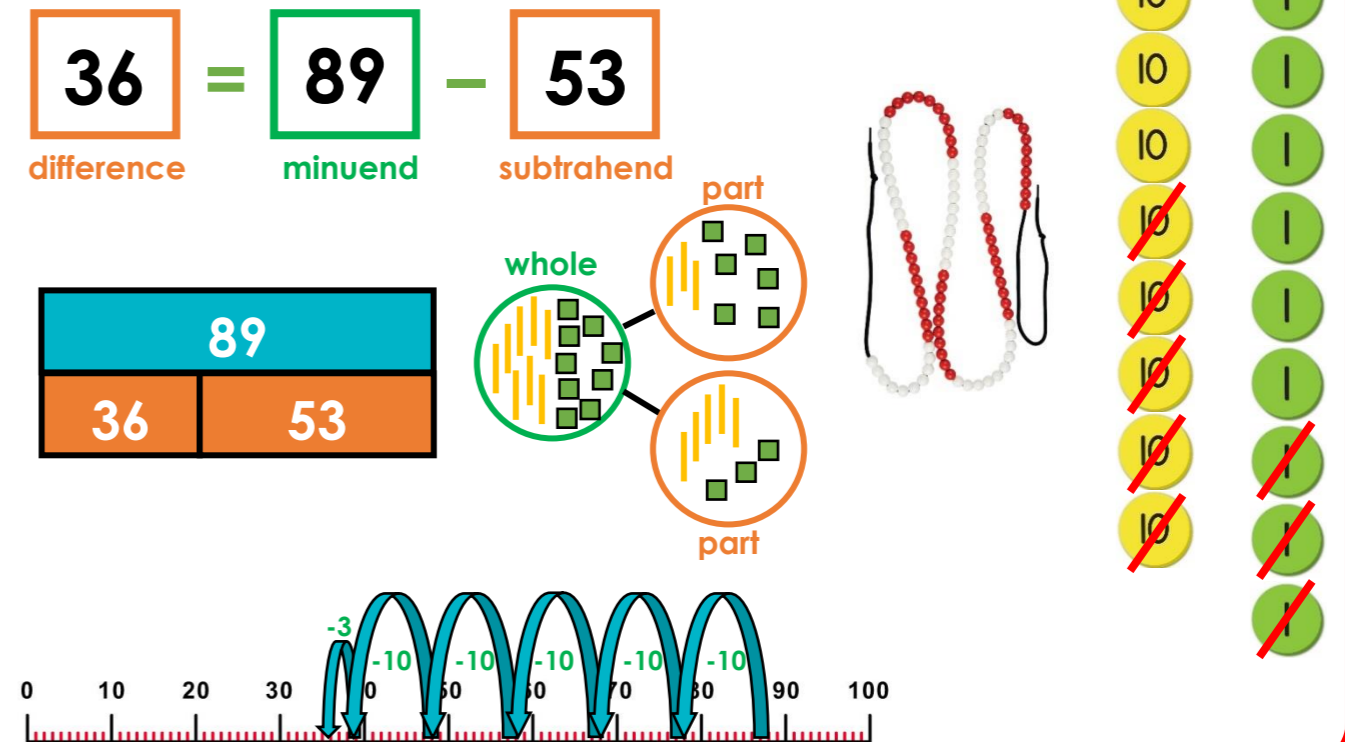
## Vocabulary

- 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

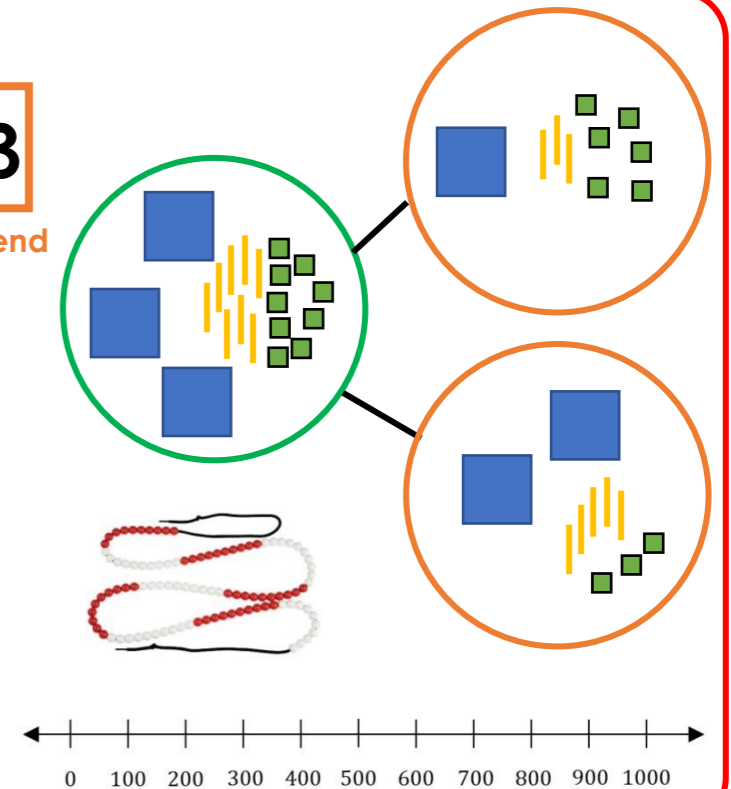
## Visual representations

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

difference      minuend      subtrahend



	H	T	O
	3	8	9
-	2	5	3
<hr/>			
	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.

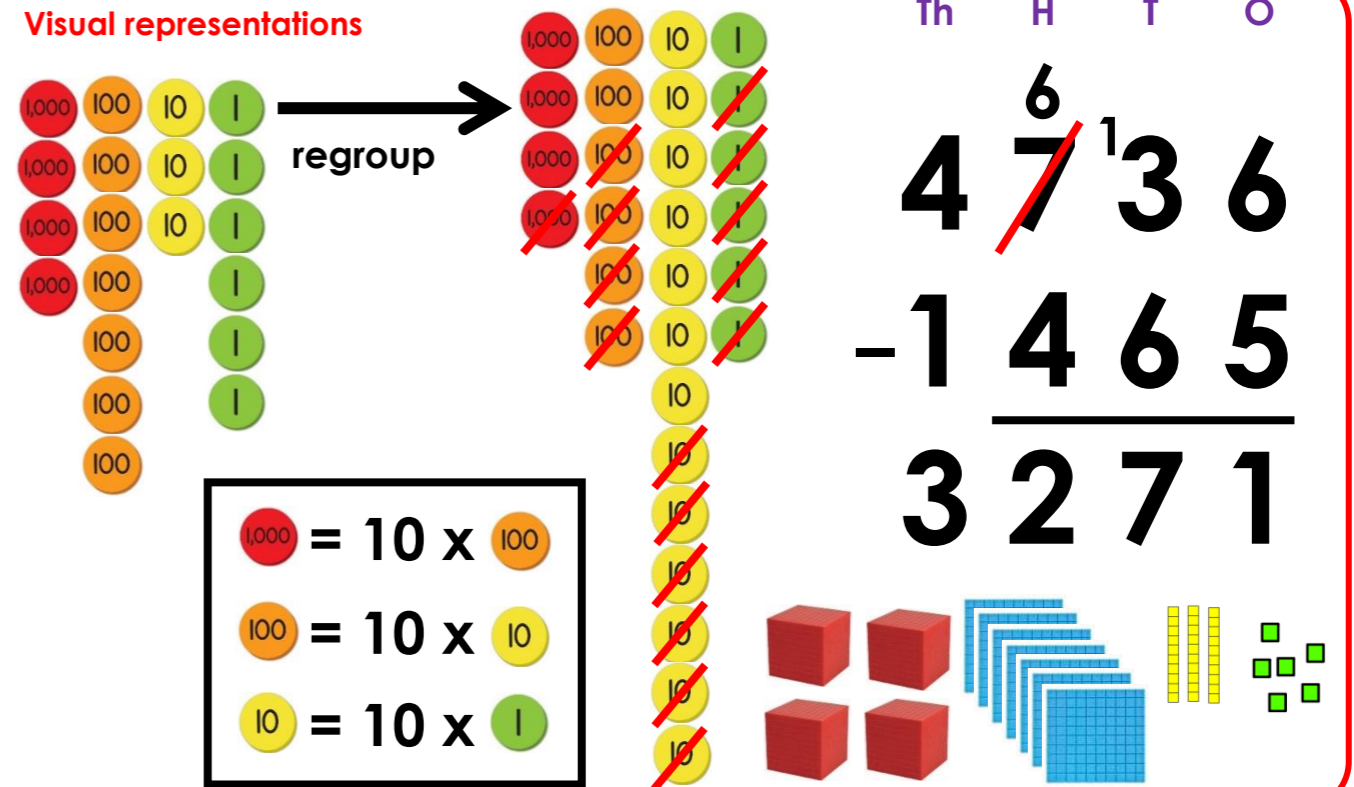
## Vocabulary

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

## Manipulatives

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

## Visual representations



The visual representations section illustrates the concept of regrouping in subtraction. It shows place value counters (1,000, 100, 10, 1) and a diagram where one 1,000 counter is broken down into ten 100 counters. A box explains the relationships:  $1,000 = 10 \times 100$ ,  $100 = 10 \times 10$ , and  $10 = 10 \times 1$ . To the right, a columnar subtraction problem is shown:  $4,736 - 1,465 = 3,271$ . The columns are labeled Th (Thousands), H (Hundreds), T (Tens), and O (Ones). The 7 in the hundreds column is crossed out with a red slash, and a 6 is written above it, with a 1 written above the 3 in the tens column, indicating the regrouping process. Below the problem, there are illustrations of red interlocking cubes, blue hundred squares, and green ten frames.

## 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

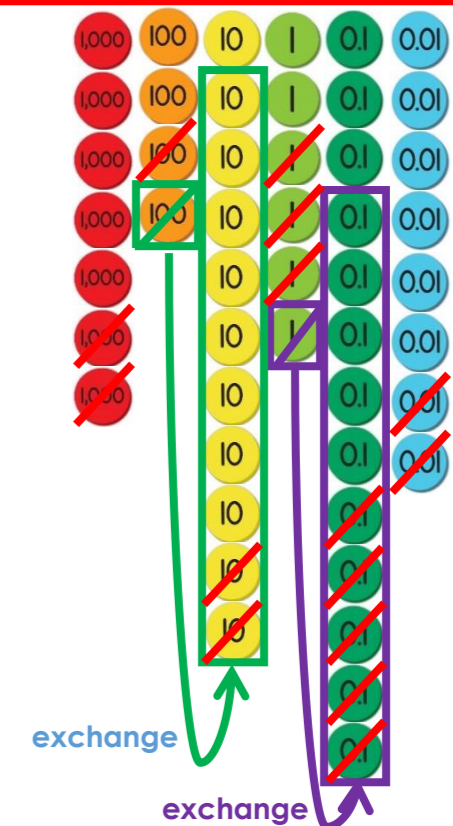
- digit
- number bonds
- minus / subtract / takeaway
- whole / minuend
- part / subtrahend
- part / difference
- equal to
- regroup
- estimate

## 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		
	<del>7</del>	<del>4</del> <sup>1</sup>	<del>1</del>	<del>6</del>	.	<del>3</del> <sup>1</sup> <del>8</del>
-	2	1	2	3	.	5 2
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	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

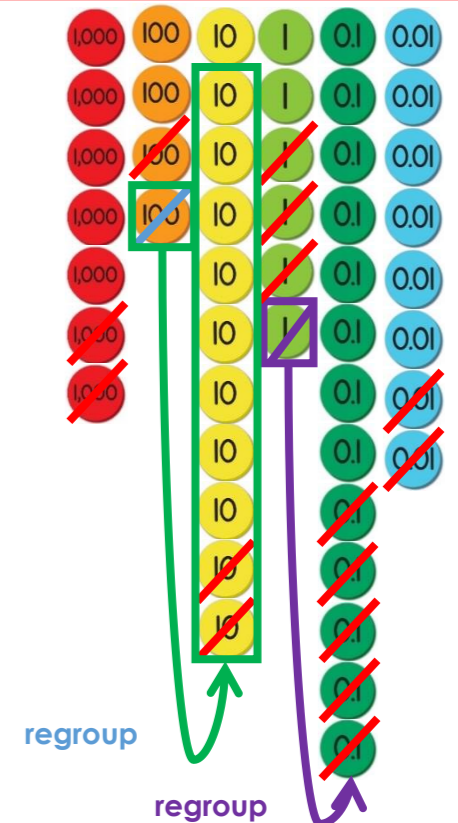
- digit
- number bonds
- minus / subtract / takeaway
- whole / minuend
- part / subtrahend
- part / difference
- equal to
- regroup
- estimate

## 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	<del>4</del> <sup>3</sup>	<del>1</del> <sup>1</sup>	<del>6</del> <sup>5</sup>	.	<del>3</del> <sup>1</sup> 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