



#### Links to other subject units this term

These are stand-alone units and do not link directly to any other units studied this term

#### Prior Learning

This work has been covered in Year 1:

##### **Place Value:**

- Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number.
- Count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens.
- Given a number, identify one more and one less.
- Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least.
- Read and write numbers from 1 to 20 in numerals and words

##### **Addition and Subtraction:**

- Read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs.
- Represent and use number bonds and related subtraction facts within 20.
- Add and subtract one-digit and two-digit numbers to 20, including zero.
- Solve one-step problems that involve addition and subtraction, using concrete objects.

##### **Shape:**

- Recognise and name common 2-D and 3-D shapes,  
including: 2-D shapes [for example, rectangles (including squares), circles and triangles]  
3-D shapes [for example, cuboids (including cubes), pyramids and spheres]

Key vocabulary for this unit

**Place Value:**

least, lesser, fewest, fewer, smallest  
most, greater  
multiples  
before, after  
compare, order  
more than, the same as, less than, equal to  
hundreds, tens, ones  
numerals, digit  
odd, even  
value, place value  
partition, recombine  
count

**Addition and Subtraction:**

add, total, sum, plus, and, altogether  
subtract, take away, less, minus, difference  
equals, makes  
numberline addition  
10s facts  
commutativity  
connection between  
doubles  
near doubles

**Shape:**

two dimensional (2D)  
three dimensional (3D)  
flat  
solid  
corner  
vertex, vertices  
side  
edge  
face  
curved, straight  
round  
line of symmetry  
vertical, horizontal

pattern

Learning Sequence

**Place Value**

- Numbers to 20
- Count objects to 100 by making 10s
- Recognise tens and ones
- Use a place value chart
- Partition numbers to 100
- Write numbers to 100 in words
- Flexibly partition numbers to 100
- Write numbers to 100 in expanded form
- 10s on the number line to 100
- 10s and 1s on the number line to 100
- Estimate numbers on a number line
- Compare objects
- Compare numbers
- Order objects and numbers
- Count in 2s, 5s and 10s
- Count in 3s

**Addition and Subtraction**

- Bonds to 10
- Fact families – addition and subtraction bonds within 20
- Related facts
- Bonds to 100 (tens)
- Add and subtract 1s
- Add by making 10
- Add three 1-digit numbers
- Add to the next 10
- Add across a 10
- Subtract across 10
- Subtract from a 10

	<ul style="list-style-type: none"> <li>• Subtract a 1-digit number from a 2-digit number (across a 10)</li> <li>• 10 more, 10 less</li> <li>• Add and subtract 10s</li> <li>• Add two 2-digit numbers (not across 10)</li> <li>• Add two 2-digit numbers (across a 10)</li> <li>• Subtract two 2-digit numbers (not across a 10)</li> <li>• Subtract two 2-digit numbers (across a 10)</li> <li>• Mixed addition and subtraction</li> <li>• Compare number sentences</li> <li>• Missing number problems</li> </ul>
<b>Shape</b>	<ul style="list-style-type: none"> <li>• Recognise 2-D and 3-D shapes</li> <li>• Count sides on 2-D shapes</li> <li>• Count vertices on 2-D shapes</li> <li>• Draw 2-D shapes</li> <li>• Lines of symmetry on shapes</li> <li>• Use lines of symmetry to complete shapes</li> <li>• Sort 2-D shapes</li> <li>• Count faces on 3-D shapes</li> <li>• Count edges on 3-D shapes</li> <li>• Count vertices on 3-D shapes</li> <li>• Make patterns with 2-D and 3-D shapes</li> </ul>
<b>Assessment milestones</b>	
<p><b>Place Value:</b></p> <ul style="list-style-type: none"> <li>• Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward.</li> <li>• Recognise the place value of each digit in a two-digit number (tens, ones).</li> <li>• Identify, represent and estimate numbers using different representations, including the number line.</li> <li>• Compare and order numbers from 0 up to 100; use and = signs.</li> <li>• Read and write numbers to at least 100 in numerals and in words.</li> <li>• Use place value and number facts to solve problems</li> </ul>	

**Addition and Subtraction:**

- Solve problems with addition and subtraction using concrete objects and pictorial representations, including those involving numbers, quantities and measures, applying their increasing knowledge of mental and written methods
- Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100.
- Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones, a two-digit number and tens, two two-digit numbers, adding three one-digit numbers.
- Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot.
- Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.

**Shape:**

- Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line.
- Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces.
- Identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid].
- Compare and sort common 2-D and 3-D shapes and everyday objects.