Maths – Year 2 – Autumn Term
Place Value
Addition and Subtraction
Shape

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 lone 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 expended 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

	• Subtract a 1-digit number from a 2-digit number (across a 10) • 10 more, 10 less • Add and subtract 10s • Add two 2-digit numbers (not across 10) • Add two 2-digit numbers (across a 10) • Subtract two 2-digit numbers (not across a 10) • Subtract two 2-digit numbers (across a 10) • Mixed addition and subtraction • Compare number sentences • Missing number problems
Shape	• Recognise 2-D and 3-D shapes • Count sides on 2-D shapes • Count vertices on 2-D shapes • Draw 2-D shapes • Lines of symmetry on shapes • Use lines of symmetry to complete shapes • Sort 2-D shapes • Count faces on 3-D shapes • Count edges on 3-D shapes • Count vertices on 3-D shapes • Make patterns with 2-D and 3-D shapes
Assessment milestones	
Place Value: • Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward. • Recognise the place value of each digit in a two-digit number (tens, ones). • Identify, represent and estimate numbers using different representations, including the number line. • Compare and order numbers from 0 up to 100; use and = signs. • Read and write numbers to at least 100 in numerals and in words. • Use place value and number facts to solve problems	

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.