Year 2.1- Number and Place Value	2 weeks- Autumn 1
• 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 to 100 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 words. • Use place value and number facts to solve problems. • Recognise the multiples of 10 below and above any given 2-digit number.	Useful Links Interactive Teaching Programs Topmarks- diennes and coins Vocabulary document White Rose- Reasoning Mastery Year 2 booklet Calculations guidance nrich
Vocabulary: multiple of, tens, ones, partition, combine, recombine, standard partitioning, compare, more than, less than, sequence, predict.	

Year 2.2- Addition and subtraction	4 weeks- Autumn 1
• **Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100.** • Show that the addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot. • **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.** • Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems. • **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 doubles and halves to 20.** • Use reasoning within addition eg: reason that the sum of 3 odd numbers will always be odd.	Useful Links Interactive Teaching Programs Topmarks- diennes and coins Vocabulary document White Rose- Reasoning Mastery Year 2 booklet Calculations guidance nrich
Vocabulary: sum, tens, units, partition, addition, column, tens boundary, difference, count on, strategy, units, ones, inverse, commutative, not commutative, double, half, digit.	

Year 2.3- Measures- Length and mass	2 week – Autumn 2
Measures • Choose and use appropriate standard units to estimate and	Useful Links Vocabulary document

measure length/height in any direction (m/cm) and mass (kg/g) to the nearest appropriate unit, using rulers and scales. • Compare and order length and mass and record the results using >, < and =. **Addition and subtraction** • Use estimation to check that answers to calculations are reasonable eg: knowing that 48 + 35 will be less than 100. • 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. • 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.	White Rose- Reasoning Mastery Year 2 booklet Calculations guidance Nrich Interactive Teaching Programs Topmarks- diennes and coins
Vocabulary: **Length and mass:** centimetre, metre, furthest, longest, tape measure, weight, kilogram, gram, half-kilogram, balance, scales. **Addition and subtraction:** sum, tens, units, partition, addition, column, tens boundary, difference, count on, strategy, units, ones, inverse, commutative, not commutative, double, half, digit, exchange.	

Year 2.4- Statistics	1 week- Autumn 2
• Interpret and construct simple pictograms, tally charts, block diagrams and simple tables. • Ask+ answer simple questions by counting the number of objects in each category and sorting the categories by quantity. • Ask and answer questions about totalling and comparing categorical data	Useful Links Vocabulary document White Rose- Reasoning Mastery Year 2 booklet nrich Interactive Teaching Programs Topmarks- diennes and coins
Vocabulary: tally, graph, data, block graph, pictogram, group, set, sort, list, table, label, title, most popular, least popular, vote.	

Year 2.5- Multiplication and division	3 weeks- Autumn 2
• Recall and use multiplication and division facts for the 2, 5 and 10 times tables, including recognising odd and even numbers. • Calculate mathematical statements for multiplication and	Useful Links Interactive Teaching Programs Topmarks- diennes and

division within the multiplication tables and write them using the multiplication (x), division (÷) and equals (=) sign. • Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods and multiplication and division facts, including problems in contexts. • Show that the multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot.	coins Vocabulary document White Rose- Reasoning Mastery Year 2 booklet Calculations guidance nrich
Vocabulary: multiplied by, repeated addition, column, row, commutative, sets of, equal groups, times as big as, once, equal, groups of, divide, divided by, divided into, division, grouping, number line, left, left over, share, not commutative, multiple.	

Year 2.6- Fractions	2 weeks- Spring 1
• Recognise, find and name fractions 1/3 ¼ ¾ and 2/4 of a shape, length, set of objects or quantity. • Write simple fractions eg: ½ of 6 = 3 • Recognise the equivalence of ½ and 2/4	Useful Links Vocabulary document White Rose- Reasoning Mastery Year 2 booklet Nrich Interactive Teaching Programs Topmarks- diennes and coins
Vocabulary: whole, half, fraction, part, equal, quarter, third, equivalent, two quarters, three quarters, four quarters.	

Year 2.7- Number and Place Value	1 weeks- Spring 1
• Demonstrate an understanding of place value supported by the use of apparatus if required eg: by stating the difference in the tens and ones between 2 numbers. 77 and 33 has a difference of 40 for the tens and difference of 4 for the ones; by writing number statements such as 35 < 53 and 42 > 36. • Partition two-digit numbers unto different combinations of tens and ones using apparatus if needed eg: 23 is the same as 2 tens and 3 ones which is the same as 1 ten and 13 ones.	Useful Links Interactive Teaching Programs Topmarks- diennes and coins Vocabulary document White Rose- Reasoning Mastery Year 2 booklet nrich
Vocabulary: multiple of, tens, ones, partition, combine, recombine, standard partitioning, compare, more than, less than, sequence, predict, exchange, creative partitioning.	

Year 2.8- Geometry	2 weeks- Spring 1
• Identify and describe the properties of 2D shapes, including the number of sides and line symmetry in a vertical line. • Identify and describe the properties of 3D shapes, including the number of edges, vertices and faces.	Useful Links Vocabulary document White Rose- Reasoning Mastery Year 2 booklet

• Identify 2D shapes on the surface of 3D shapes, [for example, a circle on a cylinder and a triangle on a pyramid]. • Compare and sort common 2D and 3D shapes and everyday objects. • Order and arrange combinations of mathematical objects in patterns and sequences. • Use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and turns in terms of right angles for quarter, half and three quarter turns (clockwise and anti-clockwise).	Nrich Interactive Teaching Programs Topmarks- diennes and coins
Vocabulary: flat, solid, face, edge, vertices, corner, side, properties, symmetrical, vertical, compare, sort. 2D- circle, circular, triangle, triangular, square, rectangle, rectangular, star, pentagon, hexagon, octagon 3D- cube, cuboid, pyramid, sphere, cone, cylinder.	

Year 2.9- Money and time	2 weeks- Spring 1/2
• Recognise and use symbols of pounds (£) and pence (p); combine amounts to make a particular value. • Find different combinations of coins that equal the same amounts of money. • Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change. • Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times. • Know the number of minutes in an hour & the number of hours in a day. • Compare and sequence intervals of time.	Useful Links Interactive Teaching Programs Topmarks- diennes and coins Vocabulary document White Rose- Reasoning Mastery Year 2 booklet nrich
Vocabulary: **Money:** pound, pence, combine, penny, total, change, more, less, equal, buy, bought, sell, total **Time:** hour, minute, second, minute hand, hour hand, o'clock, quarter past, quarter to, intervals, analogue, face, sequence.	

Year 2.10- Multiplication and division	3 weeks- Spring 2
• Show that the multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot. • Recall and use multiplication and division facts for the 2, 5 and 10 times tables, including recognising odd and even numbers. • Solve problems involving multiplication and division, using arrays, repeated addition and mental skills, including	Useful Links Interactive Teaching Programs Topmarks- diennes and coins Vocabulary document White Rose- Reasoning Mastery Year 2 booklet

problems in context. Eg: knowing that 2 x 7 = 14 and 2 x 8 = 16 explains that making pairs of socks from 15 identical socks will give 7 pairs and one sock will be left. • Solve word problems involving multiplication and division with more than one step eg: which has the most biscuits, 4 packs of biscuits with 5 in each packet or 3 packets of biscuits with 10 in each. • Recognise the relationship between addition and multiplication and rewrite addition statements as simplified multiplication statements eg: 10 + 10 + 10 + 5 + 5 = 3 x 10 + 2 x 5 = 4 x 10 • Use multiplication facts to make deductions outside known multiplication facts eg: knowing that multiples of 5 have on digit of 0 or 5 and use this to reason that 18 x 5 cannot be 92 as it's not a multiple of 5.	Calculations guidance nrich
Vocabulary: multiplied by, repeated addition, column, row, commutative, sets of, equal groups, times as big as, once, equal, groups of, divide, divided by, divided into, division, grouping, number line, left, left over, share, not commutative, multiple.	

Year 2.11- Measures- Capacity and volume	2 weeks- Spring 2
Measure • Choose and use appropriate standard units to estimate and measure capacity (l/ml) and temperature (oC) to the nearest appropriate unit, using thermometers and measuring vessels. • Compare and order volume/capacity & record the results using >, < and =. **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. • Use estimation to check that answers to calculations are reasonable eg: knowing that 48 + 35 will be less than 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. **Multiplication and division** • Solve problems involving multiplication and division, using arrays, repeated addition and mental skills, including problems in context. Eg: knowing that 2 x 7 = 14 and 2 x 8 = 16 explains that making pairs of socks from 15 identical socks will give 7 pairs and one sock will be left. • Solve word problems involving multiplication and division with more than one step eg: which has the most biscuits, 4	Useful Links Vocabulary document White Rose- Reasoning Mastery Year 2 booklet Calculations guidance Interactive Teaching Programs Topmarks- diennes and coins nrich

packs of biscuits with 5 in each packet or 3 packets of biscuits with 10 in each.	
Vocabulary: **Capacity and volume:** capacity, full, half full, millilitres, litres, half-litre, empty full, degrees, thermometer. **Addition and subtraction:** sum, tens, units, partition, addition, column, tens boundary, difference, count on, strategy, units, ones, inverse, commutative, not commutative, double, half, digit, exchange. **Multiplication and division:** multiplied by, repeated addition, column, row, commutative, sets of, equal groups, times as big as, once, equal, groups of, divide, divided by, divided into, division, grouping, number line, left, left over, share, not commutative, multiple.	

Year 2.12- Number and Place Value	1 weeks- Summer 1
• Compare and order numbers from 0 up to 100; use <, > and = signs. • Recognise the multiples of 10 below and above any given 2-digit number. • Partition two-digit numbers unto different combinations of tens and ones using apparatus if needed eg: 23 is the same as 2 tens and 3 ones which is the same as 1 ten and 13 ones. • Use reasoning within addition eg: reason that the sum of 3 odd numbers will always be odd.	Useful Links Interactive Teaching Programs Topmarks- diennes and coins Vocabulary document White Rose- Reasoning Mastery Year 2 booklet nrich
Vocabulary: multiple of, tens, ones, partition, combine, recombine, standard partitioning, compare, more than, less than, sequence, predict, exchange, creative partitioning.	

Year 2.13- Four Operations	3 weeks- Summer 1
Addition and subtraction • Show that the addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot. • 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. • Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems. • 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. • Use estimation to check that answers to calculations are reasonable eg: knowing that 48 + 35 will be less than 100 **Multiplication and division**	Useful Links Context- Money and measures Interactive Teaching Programs Topmarks- diennes and coins Vocabulary document White Rose- Reasoning Mastery Year 2 booklet Calculations guidance nrich

• Show that the multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot. • Recall and use multiplication and division facts for the 2, 5 and 10 times tables, including recognising odd and even numbers. • Solve problems involving multiplication and division, using arrays, repeated addition and mental skills, including problems in context. Eg: knowing that 2 x 7 = 14 and 2 x 8 = 16 explains that making pairs of socks from 15 identical socks will give 7 pairs and one sock will be left. • Solve word problems involving multiplication and division with more than one step eg: which has the most biscuits, 4 packs of biscuits with 5 in each packet or 3 packets of biscuits with 10 in each. • Use multiplication facts to make deductions outside known multiplication facts eg: knowing that multiples of 5 have on digit of 0 or 5 and use this to reason that 18 x 5 cannot be 92 as it's not a multiple of 5. **Measures** • Choose and use appropriate standard units to measure length/height in any direction (m/cm) and mass (kg/g) to the nearest appropriate unit, using rulers and scales. **Money** • Find different combinations of coins that equal the same amounts of money. • Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change.	
Vocabulary: **Money:** pound, pence, combine, penny, total, change, more, less, equal, buy, bought, sell, total **Measures:** capacity, full, half full, millilitres, litres, half-litre, empty full, degrees, thermometer, centimetre, metre, furthest, longest, tape measure, weight, kilogram, gram, half-kilogram, balance, scales. **Addition and subtraction:** sum, tens, units, partition, addition, column, tens boundary, difference, count on, strategy, units, ones, inverse, commutative, not commutative, double, half, digit, exchange. **Multiplication and division:** multiplied by, repeated addition, column, row, commutative, sets of, equal groups, times as big as, once, equal, groups of, divide, divided by, divided into, division, grouping, number line, left, left over, share, not commutative, multiple.	

Year 2.14- Fractions	2 weeks- Summer 1

• Recognise, find and name fractions 1/3 ¼ ¾ and 2/4 of a shape, length, set of objects or quantity. • Write simple fractions eg: ½ of 6 = 3 • Recognise the equivalence of ½ and 2/4	Useful Links Vocabulary document White Rose- Reasoning Mastery Year 2 booklet nrich
Vocabulary: whole, half, fraction, part, equal, quarter, third, equivalent, two quarters, three quarters, four quarters.	