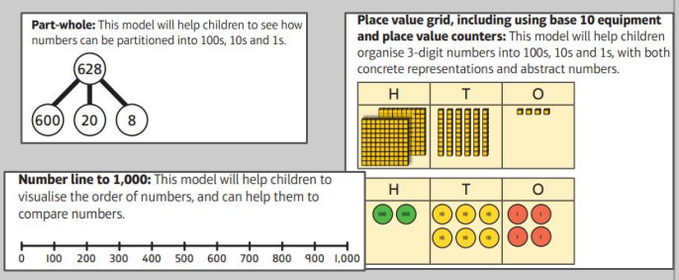
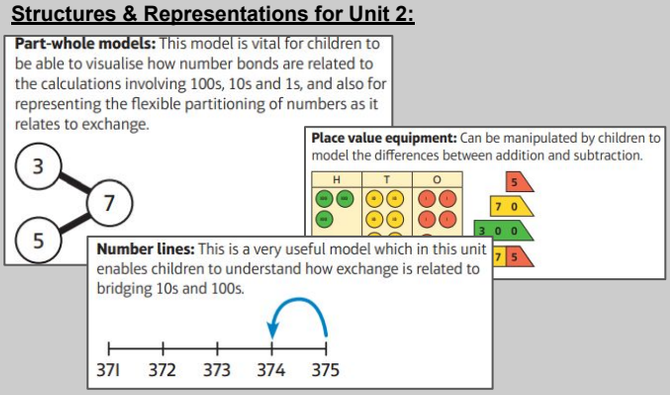
Maths - Year 3 Autumn 1: Scheme of Work

Autumn 1

Focus - Power Maths Lessons	Destinations (I will be able to ..)
Structures & Representations for Unit 1:  	**Key Vocabulary for Unit 1:** **KEY LANGUAGE** There is some key language that children will need to know as part of the learning in this unit. → hundreds (100s), tens (10s), ones (1s) → place value → more, less → greater than (>), less than (<), equal to (=) → order, compare → part-whole model, place value grid, number line → estimate, half-way, exchange → greatest, smallest, most, least, fewest → ascending, descending
Unit 1: Number & Place Value: • Represent and partition numbers to 100 • Number line to 100 • 100s • Represent numbers to 1,000.	• Identify, represent and estimate numbers using different representations. • Recognise the place value of each digit in a three-digit number (hundreds, tens, ones). • Read and write numbers up to 1,000 in numerals and in words.
Unit 1: Number & Place Value: • Partition numbers to 1,000 • Partition numbers to 1,000 flexibly • 100s, 10s, 1s • Use a number line to 1,000 • Estimate on a number line to 1,000	• Recognise the place value of each digit in a three-digit number (hundreds, tens, ones). • Compare and order numbers up to 1,000. •
Unit 1: Number & Place Value: • Find 1, 10 and 100 more or less • Compare numbers to 1,000 • Order numbers to 1,000 • Count in 50s • Unit 1 - Number: Place Value Assessment and Interventions	• Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number. • Solve number problems and practical problems involving these ideas.
Structures & Representations for Unit 2:  	**Key Vocabulary for Unit 2:** **KEY LANGUAGE** There is some key language that children will need to know as part of the learning in this unit. → add, addition, total, altogether, sum → subtract, subtraction, take away, difference → exchange, across → 1s, 10s, 100s → mental method → part-whole model → partition → place value → number bonds to 100
Unit 2: Number - Addition and subtraction (1): • Use known number bonds • Add/Subtract 1s • Add/Subtract 10s • Add/Subtract 100s • Spot the pattern	• Add and subtract numbers mentally, including: - a three-digit number and ones - a three-digit number and tens - a three-digit number and hundreds.
(PiXL Assessments will take two lessons in October) Unit 2: Number - Addition and subtraction (1): • Add 1s across 10s • Add 10s across 100	• Add and subtract numbers mentally, including: - a three-digit number and ones - a three-digit number and tens - a three-digit number and hundreds. • Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction
Unit 2: Number - Addition and subtraction (1): • Subtract 1s across 10s • Subtract 10s across 100s • Make connections • Unit 2 - Number: Addition and Subtraction (1) Assessment and interventions Unit 3: Number - Addition and Subtraction (2): • Add two numbers	• Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction • Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.

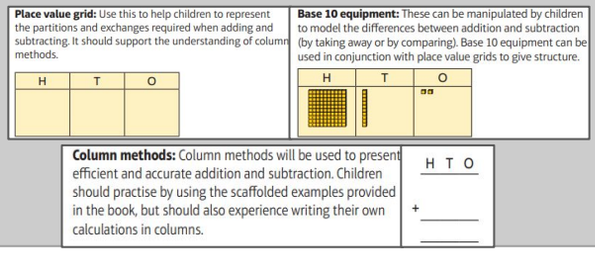
Maths - Year 3 Autumn 2: Scheme of Work

Autumn 2

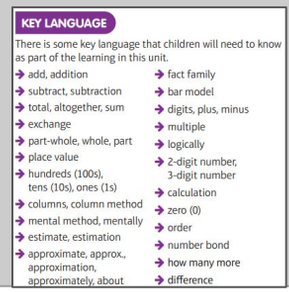
Focus - Power Maths Lessons

Destinations
(I will be able to ..)

Structures & Representations for Unit 3:



Key Vocabulary for Unit 3:



Unit 3: Number - Addition and Subtraction (2):
- Subtract two numbers
- Add two numbers (across 10)
- Add two numbers (across 100)
- Subtract two numbers (across 10)
- Subtract two numbers (across 100)

- Add and subtract numbers mentally, including:
  - a three-digit number and ones
  - a three-digit number and tens
  - a three-digit number and hundreds.
- Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction.

(previously covered Unit 2)

Unit 3: Number - Addition and Subtraction (2):
- Add a 3-digit and a 2-digit number
- Subtract a 2-digit number from a 3-digit number
- Complements to 100
- Estimate answers
- Inverse operations

- Estimate the answer to a calculation and use inverse operations to check answers.
- Solve problems, including missing number problem, using number facts, place value, and more complex addition and subtraction.

(previously covered Unit 2)

Unit 3: Number - Addition and Subtraction (2):
- Problem solving (1)
- Problem solving (2)
- Unit 3 - Number - Addition and Subtraction (2) Assessment and interventions

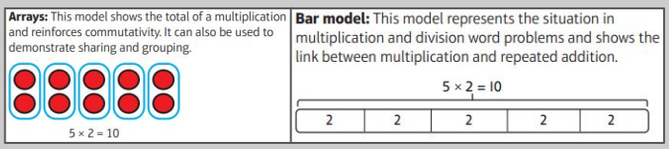
Unit 4: Number - Multiplication and Division (1)
- Multiplication - equal groups
- Use Arrays

- Solve problems, including missing number problem, using number facts, place value, and more complex addition and subtraction.

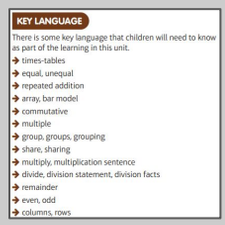
(previously covered Unit 2)

- Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.
- Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know.

Structures & Representations for Unit 4:



Key Vocabulary for Unit 4:

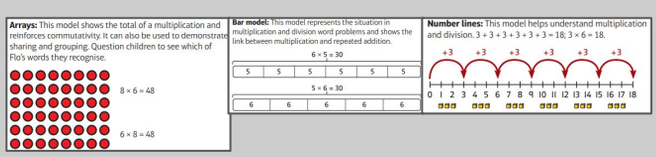


Unit 4: Number - Multiplication and Division (1)
- Multiples of 2
- Multiples of 5 and 10
- Share and group
- Unit 4- Number: Multiplication and Division (1) Assessment and Interventions

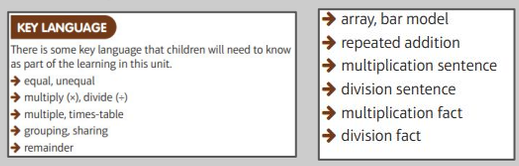
Unit 5: Number - Multiplication and Division (2)
- Multiply by 3

- Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.
- Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods.

Structures & Representations for Unit 5:



Key Vocabulary for Unit 5:



Unit 5: Number - Multiplication and Division (2)
- Divide by 3
- The 3 times-table
- Multiply by 4
- Divide by 4
- The 4 times-table

- Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.
- Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods.

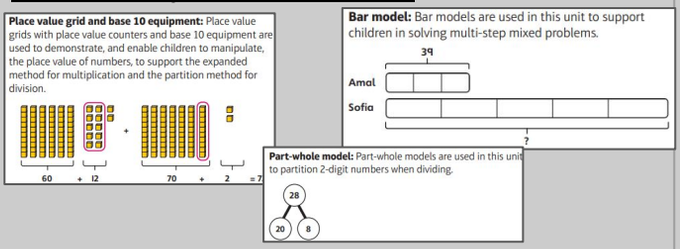
(previously covered Unit 4)

Unit 5: Number - Multiplication and Division (2)
- Multiply by 8
- Divide by 8
- The 8 times-table
- Problem Solving - Multiplication and Division (1)
- Problem Solving - Multiplication and Division (2)

- Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.

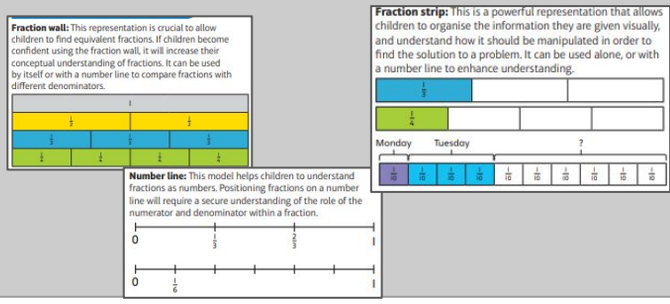
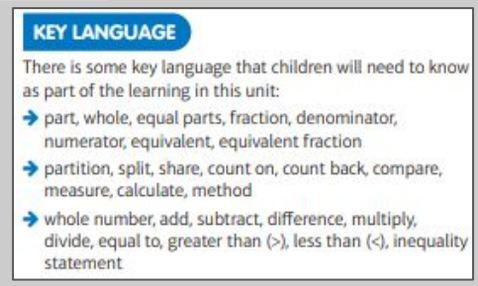
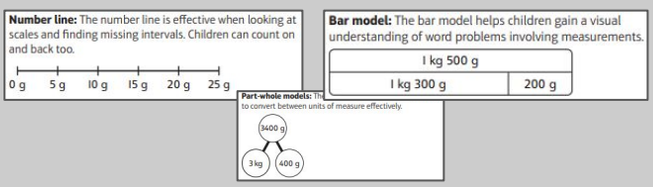
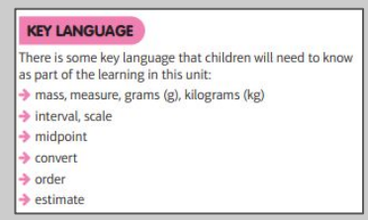
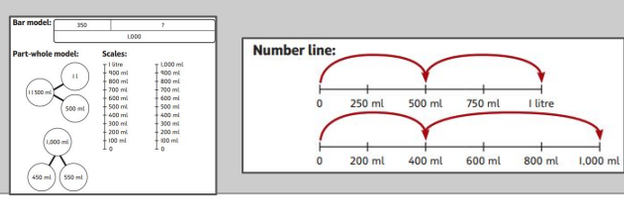
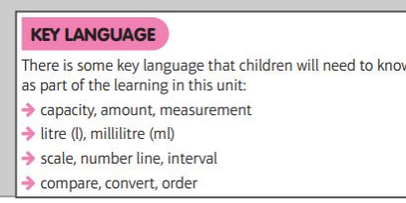
Maths - Year 3 Spring 1: Scheme of Work

Spring 1

Focus - Power Maths Lessons	Destinations (I will be able to ..)
Unit 5: Number - Multiplication and Division (2) • Understanding divisibility (1) • Understanding divisibility (2) • Unit 5-Number: Multiplication and Division (2) Assessment and interventions Unit 6: Number - Multiplication and Division (3) • Multiples of 10 • Related calculations	• Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods. (previously covered Unit 4) • Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.
Structures & Representations for Unit 6:  **Place value grid and base 10 equipment:** Place value grids with place value counters and base 10 equipment are used to demonstrate, and enable children to manipulate, the place value of numbers, to support the expanded method for multiplication and the partition method for division. 60 + 12 70 + 2 = 72 **Bar model:** Bar models are used in this unit to support children in solving multi-step mixed problems. 39 Amal Sofia ? **Part-whole model:** Part-whole models are used in this unit to partition 2-digit numbers when dividing. 28 20 8	**Key Vocabulary for Unit 6:** **KEY LANGUAGE** There is some key language that children will need to know as part of the learning in this unit: → multiplication, division → multiplication statement, division statement, number sentence → greater than (>), less than (<), equal (=), compare, equally, least, most → remainder → share → partition, multi-step, expanded written method → tens (10s), ones (1s) → exchange
Unit 6: Number - Multiplication and Division (3) • Reasoning about multiplication • Multiply 2-digits by 1-digit - no exchange • Multiply 2-digits by 1-digit - exchange • Expanded written method • Link multiplication and division	• Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods. (previously covered Unit 4 & 5) • Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects. (previously covered Unit 5)
Unit 6: Number - Multiplication and Division (3) • Divide 2-digits by 1-digit - no exchange • Divide 2-digits by 1-digit - flexibly partitioning • Divide 2-digits by 1-digit - with remainders • How many ways? • Problem solving - Mixed problems (1)	• Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods. (previously covered Unit 4 & 5) • Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects. (previously covered Unit 5)
Unit 6: Number - Multiplication and Division (3) • Problem solving - mixed problems (2) • Unit 6 - Number: Multiplication (3) Assessment and interventions Unit 7: Measure - Length and Perimeter • Measure in m and cm • Measure in cm and mm • Metres, centimetres and millimetres.	• Measure, compare, add and subtract: lengths (m/cm/mm)
Structures & Representations for Unit 7: **Number line:** Number lines will be used to help children make the link between scales, measurement and counting. +24 +24 0 24 m 48 m **Rulers:** Rulers of varying scales and sizes will be used across the unit to develop children's ability to measure accurately. **Column method for addition and subtraction:** When adding and subtracting lengths, children should be encouraged to use column methods. H T O 2 5 4 5 0 + 3 0 0 7 7 5 **Bar model:** This model will be used to support the representation of children's calculations and problem solving. 320 cm 80 cm 80 cm 80 cm ? cm	**Key Vocabulary for Unit 7:** **KEY LANGUAGE** There is some key language that children will need to know as part of the learning in this unit: → millimetres (mm), centimetres (cm), metres (m) → measure, measurement, unit of measurement → length, height, width, distance, diagonal → how long?, how wide?, how tall?, how high? → ruler, metre stick, metre ruler → longer, shorter, longest, shortest, furthest → perimeter → add, subtract, find the difference, repeated addition, multiply → greater than (>), less than (<) → polygon, quadrilateral, triangle, rectangle → compare, convert, equal, equivalent, ascending, predict, calculate, expression, method
Unit 7: Measure - Length and Perimeter • Equivalent lengths (m and cm) • Equivalent lengths (mm and cm) • Compare lengths • Add lengths • Subtract lengths	• Measure, compare, add and subtract: lengths (m/cm/mm)
Unit 7: Measure - Length and Perimeter • Measure perimeter • Calculate perimeter • Problem solving - length (PiXL Assessments will take two lessons in February)	• Measure the perimeter of simple 2-D shapes.

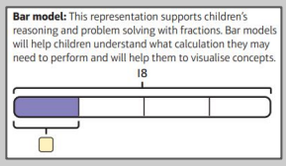
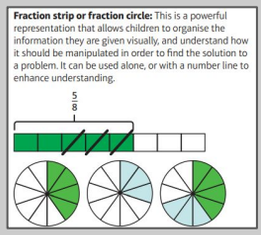
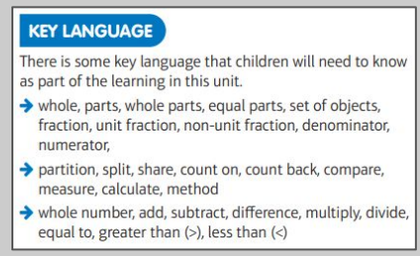
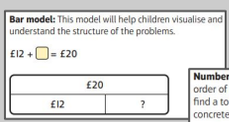
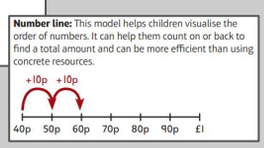
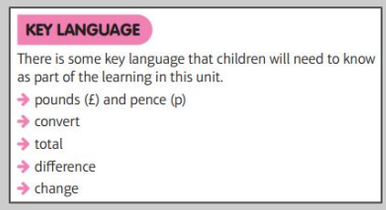
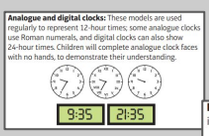
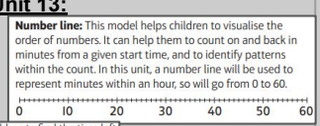
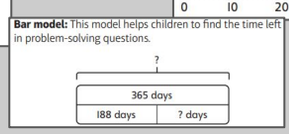
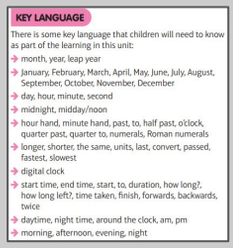
Maths - Year 3 Spring 2: Scheme of Work

Spring 2

Focus - Power Maths Lessons	Destinations (I will be able to ..)
Unit 7: Measure - Length and Perimeter • Unit 7 - Measure: Length and perimeter assessment and interventions Unit 8: Fractions (1) • Understand the denominator of unit fractions • Compare and order unit fractions • Understand the numerator of non-unit fractions • Understand the whole	• Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators. • Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10.
Structures & Representations for Unit 8: 	**Key Vocabulary for Unit 8:** 
Unit 8: Fractions (1) • Compare and order non-unit fractions • Divisions on a number line • Count in fractions on a number line • Equivalent fractions as bar models • Equivalent fraction on a number line	• Compare and order unit fractions, and fractions with the same denominators.
Unit 8: Fractions (1) • Equivalent fractions • Unit 8 -Fractions (1) Assessment and Interventions Unit 9: Measure - Mass • Use scales • Measure mass • Measure mass in kilograms and grams	• Recognise and show, using diagrams, equivalent fractions with small denominators • Measure, compare, add and subtract: mass (kg/g)
Structures & Representations for Unit 9: 	**Key Vocabulary for Unit 9:** 
Unit 9: Measure - Mass • Equivalent masses • Compare mass • Add and subtract mass • Problem solving - mass • Unit 9 - Measure: Mass Assessment and interventions	• Measure, compare, add and subtract: mass (kg/g)
Structures & Representations for Unit 10: 	**Key Vocabulary for Unit 10:** 
Unit 10: Measure - Capacity • Measure capacity and volume in litres and millilitres • Measure in litres and millilitres • Equivalent capacities and volumes (litres and millilitres) • Compare capacity and volume	• Measure, compare, add and subtract: volume/capacity (l/ml)
Unit 10: Measure - Capacity • Add and subtract capacity and volume • Problem solving - capacity • Unit 10 - Measure: Capacity Assessment and interventions	• Measure, compare, add and subtract: volume/capacity (l/ml)

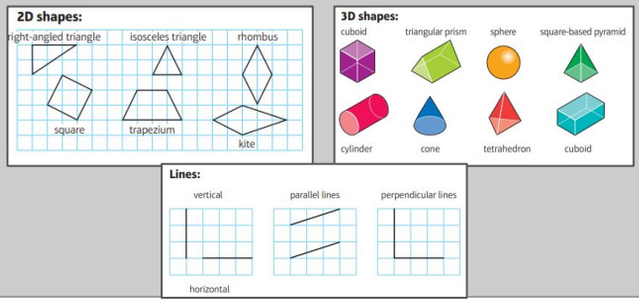
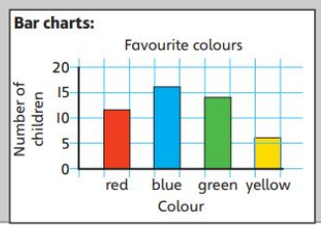
Maths - Year 3 Summer 1: Scheme of Work

Summer 1

Focus - Power Maths Lessons	Destinations (I will be able to ..)
Structures & Representations for Unit 11:  	**Key Vocabulary for Unit 11:** 
Unit 11: Number - Fractions (2) • Add fractions • Subtract fractions • Partition the whole • Problem solving - add and subtract fractions • Unit fractions of a set of objects	• Add and subtract fractions with the same denominator within one whole [for example, 5/7 + 1/7 = 6/7) • Solve problems that involve all of the above.
Unit 11: Number - Fractions (2) • Non-unit fractions of a set of objects • Reason with fractions of an amount • Problem solving - fractions of measures • Unit 11 - Fractions (2) Assessment and Interventions	• Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators. • Solve problems that involve all of the above.
Structures & Representations for Unit 12:   	**Key Vocabulary for Unit 12:** 
Unit 12: Money • Pounds and pence • Convert pounds and pence • Add money • Subtract money	• Add and subtract amounts of money to give change, using both £ and p in practical contexts.
Unit 12: Money • Find change • Unit 11 - Money assessment and interventions Unit 13: Time • Roman numerals to 12 • Tell the time to 5 minutes • Tell the time to the minute	• Add and subtract amounts of money to give change, using both £ and p in practical contexts. • Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12- hour and 24-hour clocks.
Structures & Representations for Unit 13:   	**Key Vocabulary for Unit 13:** 
Unit 13: Time • Read time on a digital clock • Use am and pm • Years, months and days • Days and hours • Hours and minutes - start and end times	• Estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight. • Know the number of seconds in a minute and the number of days in each month, year and leap year. • Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12- hour and 24-hour clocks.
Unit 13: Time • Hours and minutes - durations • Hours and minutes - compare durations • Minutes and seconds • Solve problems with time • Unit 12 - Time assessment and interventions	• Compare durations of events [for example to calculate the time taken by particular events or tasks]. • Estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight.

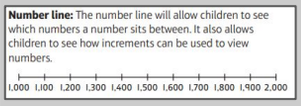
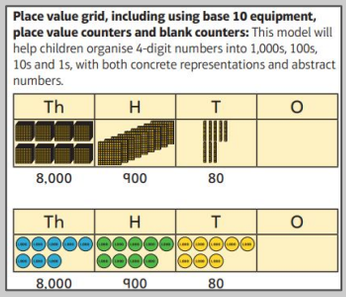
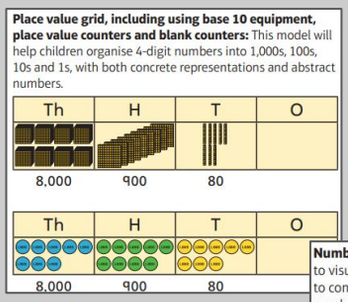
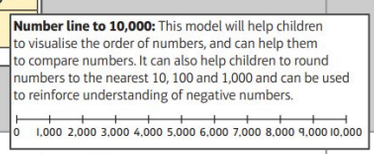
Maths - Year 3 Summer 2: Scheme of Work

Summer 2

Focus - Power Maths Lessons	Destinations (I will be able to ..)
Structures & Representations for Unit 14: 	**Key Vocabulary for Unit 14:** **KEY LANGUAGE** There is some key language that children will need to know as part of the learning in this unit: → right angle, quarter turn, half turn, acute angle, obtuse angle, clockwise, anticlockwise → vertical, horizontal, parallel, perpendicular → triangle, quadrilateral, square, rectangle, parallelogram, trapezium, rhombus, kite, pentagon, hexagon → cube, cuboid, sphere, pyramid, prism, cylinder, cone, triangular prism, square-based pyramid, tetrahedron → describe, property, 2D, 3D, edges, faces, vertices, draw accurately
Unit 14: Geometry - Angles and properties of shapes • Turns and angles • Right angles in shapes • Compare angles • Measure and draw accurately • Horizontal and vertical	• Recognise angles as a property of shape or a description of a turn. • Identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle.
Unit 14: Geometry - Angles and properties of shapes • Parallel and perpendicular • Recognise, draw and describe 2D shapes • Recognised and describe 3D shapes • Make 3D shapes • Unit 14 - Geometry: Angles and properties of shapes assessment and interventions	• Identify horizontal and vertical lines and pairs of perpendicular and parallel lines. • Draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them.
Structures & Representations for Unit 15: **Pictograms:** Sport / Number of people skiing: 5 ☺ snowboarding: 6 ☺ Key: Each ☺ represents 2 people. **Bar charts:** 	**Key Vocabulary for Unit 15:** **KEY LANGUAGE** There is some key language that children will need to know as part of the learning in this unit: → pictogram, key, symbol → compare, least, most, altogether, total → bar chart, horizontal axis, vertical axis, scale → half-way between → table, row, column → order, smallest, largest
(PiXL Assessments will take three lessons in June)	
Unit 15: Statistics • Interpret pictogram (1) • Interpret pictogram (2) • Draw Pictograms	• Interpret and present data using pictograms.. • Solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in pictograms.
Unit 15: Statistics • Interpret bar charts (1) • Interpret bar charts (2) • Collect and represent data in a bar chart	• Interpret and present data using bar charts. • Solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts.
Unit 15: Statistics • Simple two-way tables • Unit 15 - Statistics Assessment and interventions	• Interpret and present data using tables. • Solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in tables.

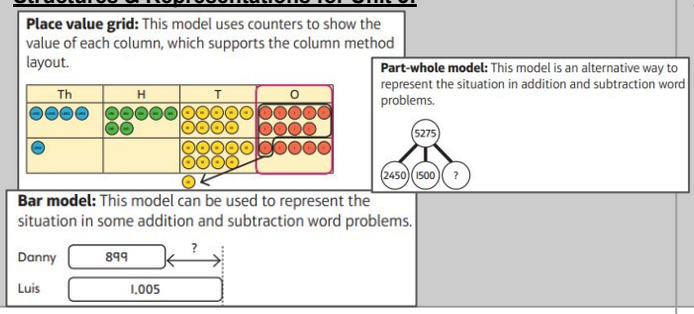
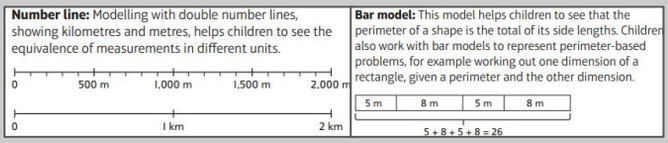
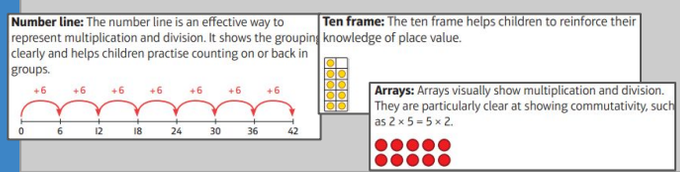
Maths - Year 4 Autumn 1: Scheme of Work

Autumn 1

Focus - Power Maths Lessons	Destinations (I will be able to ..)
Structures & Representations for Unit 1:  **Number line:** The number line will allow children to see which numbers a number sits between. It also allows children to see how increments can be used to view numbers. 1,000 1,100 1,200 1,300 1,400 1,500 1,600 1,700 1,800 1,900 2,000  **Place value grid, including using base 10 equipment, place value counters and blank counters:** This model will help children organise 4-digit numbers into 1,000s, 100s, 10s and 1s, with both concrete representations and abstract numbers. Th H T O 8,000 900 80 Th H T O 8,000 900 80	**Key Vocabulary for Unit 1:** **KEY LANGUAGE** There is some key language that children will need to know as part of the learning in this unit: → tens (10s), hundreds (100s), thousands (1,000s) → rounding, counting, represent, compare, order → more than (>), less than (<) → partition, recombine → numerals → nearest, distance
Unit 1: Number- Place Value 4-digit numbers (1) • Represent and partition numbers to 1,000 • Number line to 1,000 • Multiples of 1,000 • 4-digit numbers	• identify, represent and estimate numbers using different representations • Count in multiples of 6, 7, 9, 25 and 1,000.
Unit 1: Number- Place Value 4-digit numbers (1) • Partition 4-digit numbers • Partition 4-digit numbers flexibly • 1, 10, 100, 1,000 more or less • 1,000s, 100s, 10s and 1s • Unit 1 Place value assessment and interventions.	• Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number **(Destination covered in Y3 Unit 1)** • Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones). • Find 1,000 more or less than a given number.
Structures & Representations for Unit 2:  **Place value grid, including using base 10 equipment, place value counters and blank counters:** This model will help children organise 4-digit numbers into 1,000s, 100s, 10s and 1s, with both concrete representations and abstract numbers. Th H T O 8,000 900 80 Th H T O 8,000 900 80  **Number line to 10,000:** This model will help children to visualise the order of numbers, and can help them to compare numbers. It can also help children to round numbers to the nearest 10, 100 and 1,000 and can be used to reinforce understanding of negative numbers. 0 1,000 2,000 3,000 4,000 5,000 6,000 7,000 8,000 9,000 10,000	**Key Vocabulary for Unit 2:** **KEY LANGUAGE** There is some key language that children will need to know as part of the learning in this unit. → thousands (1,000s), hundreds (100s), tens (10s), ones (1s) → place value → more, less → greater than (>), less than (<), equal to (=) → order, compare → round to, nearest → negative, positive → step → ascending, descending
Unit 2: Number- Place Value 4-digit numbers (2) • Number line to 10,000 • Between two multiples • Estimate on a number line to 10,000 • Compare and order numbers to 10,000 • Round to the nearest 1,000	• Identify, represent and estimate numbers using different representations.(previously covered Unit 1) • Count in multiples of 6, 7, 9, 25 and 1,000.(previously covered Unit 1) • Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones). (previously covered Unit 1) • Order and compare numbers beyond 1,000.
Unit 2: Number- Place Value 4-digit numbers (2) • Round to the nearest 100 • Round to the nearest 10 • Round to the nearest 1,000, 100, or 10	• Round any number to the nearest 10, 100 or 1,000.
Unit 2: Number- Place Value 4-digit numbers (2) • Round to the nearest 1,000, 100 or 10 • Unit 2 Place value assessment and interventions (PiXL Assessments will take two lessons in October)	• Round any number to the nearest 10, 100 or 1,000.
Unit 3: Number - Addition and Subtraction • Add and subtract 1s, 10s, 100s, 1,000s • Add two 4-digit numbers • Add two 4-digit numbers - one exchange • Add with more than one exchange • Subtract two 4-digit numbers	• Solve number and practical problems that involve all of the above and with increasingly large positive numbers. • Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate.

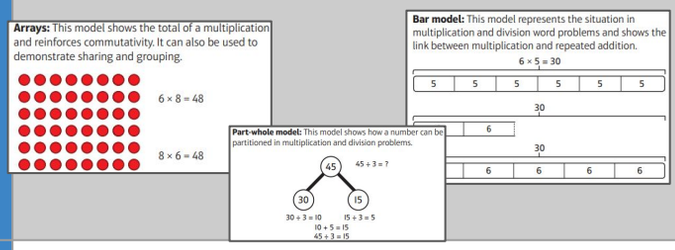
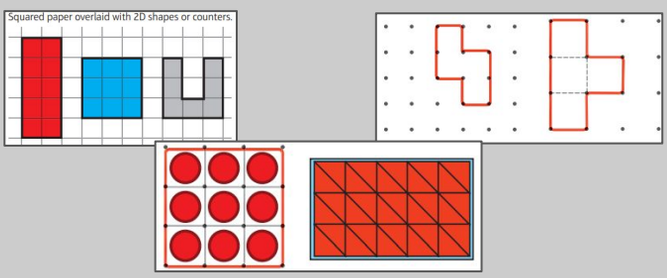
Maths - Year 4 Autumn 1: Scheme of Work

Autumn 2

Focus - Power Maths Lessons	Destinations (I will be able to ..)
Structures & Representations for Unit 3:  	**Key Vocabulary for Unit 3:** **KEY LANGUAGE** There is some key language that children will need to know as a part of the learning in this unit. → addition, subtraction → total → more than, less than → difference, exchange → column method → estimate, accurate, efficient, exact → strategy → diagram
Unit 3: Number - Addition and Subtraction • Subtract two 4-digit numbers - one exchange • Subtract two 4-digit numbers - more than one exchange • Exchange across two columns • Efficient methods	• Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate
Unit 3: Number - Addition and Subtraction • Equivalent difference • Estimate answers • Check strategies • Problem Solving - One step • Problem Solving - Comparison	• Estimate and use inverse operations to check answers to a calculation. • Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.
Unit 3: Number - Addition and Subtraction • Problem Solving - two steps • Problem solving - multi-step problems • Unit 3 Number Addition and Subtraction assessment & interventions Unit 4: Measure - Area **(NEW CONCEPT)** • What is area? • Measure area using squares	• Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why. • Find the area of rectilinear shapes by counting squares.
Structures & Representations for Unit 4:  	**Key Vocabulary for Unit 4:** **KEY LANGUAGE** There is some key language that children will need to know as part of the learning in this unit: → kilometres, metres, centimetres → convert, equivalent to → perimeter, distance, around → total → length, width → square, rectangle, rectilinear shape
Unit 4: Measure - Area **(NEW CONCEPT)** • Count squares • Make shapes • Compare area • Unit 4 Measure: Area assessment and intervention Unit 5: Number - Multiplication and Division (1) • Multiples of 3	• Find the area of rectilinear shapes by counting squares. • Estimate, compare and calculate different measures. • Recall multiplication and division facts for 3 times-table.
Structures & Representations for Unit 5:  	**Key Vocabulary for Unit 5:** **KEY LANGUAGE** There is some key language that children will need to know as part of the learning in this unit. → times-table, times, times by → multiply (×), multiple, multiply by → divide (÷), divide by → grouping, groups of, lots of, sets of, grouped, *x* groups of *y* → sharing, share, equal, equally → number facts, number sentences, multiplication facts/sentences, division facts/sentences, fact family → ones (1s), tens (10s), hundreds (100s), zero (0), how many, total, method, calculation, exchange, solve, less then (<), greater than (>), added, sort, sum, recall
Unit 5: Number - Multiplication and Division (1) • Multiply and divide by 6 • 6 times-table and division facts • The 3,6 and 9 times tables • Multiply and divide by 7 • 7 times-table and division facts	• Recall multiplication and division facts for multiplication tables up to 12 × 12.
Unit 5: Number - Multiplication and Division (1) • 11 and 12 times-tables and division facts • Multiply by 1 and 0 • Divide by 1 and itself • Multiply three numbers • Unit 5 Number: Multiplication and Division assessment and interventions	• Recall multiplication and division facts for multiplication tables up to 12 × 12. • Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers.

Maths - Year 4 Spring 1: Scheme of Work

Spring 1

Focus - Power Maths Lessons	Destinations (I will be able to ..)
Structures & Representations for Unit 6: 	**Key Vocabulary for Unit 6:** **KEY LANGUAGE** There is some key language that children will need to know as part of the learning in this unit. → multiplication (×), multiplication statement → grouping, groups, equal, total, repeated addition → correspondence, multiply, divide, combinations → divide (÷), division statement → times-tables → whole, left over, remainder → one-step, two-step, multi-step → array, bar model, part-whole model
Unit 6: Number- Multiplication and Division (2) • Factor pairs • Multiply and divide by 10 • Multiply and divide by 100 • Related facts - multiplication • Related facts - division	• Recognise and use factor pairs and commutativity in mental calculations. • Recall multiplication and division facts for multiplication tables up to 12 × 12. (previously covered Unit 5) • Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers. (previously covered Unit 5)
Unit 6: Number- Multiplication and Division (2) • Multiply and add • Informal written methods • Multiply 2 digits by 1 digit • Multiply 3 digits by 1 digit • Solve multiplication problems	• Solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one-digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects. • Multiply two-digit and three-digit numbers by a one-digit number using formal written layout.
Unit 6: Number- Multiplication and Division (2) • Basic division • Division and remainders • Divide 2-digit numbers • Divide 3-digit numbers • Correspondence problems	• Solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one-digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.
Unit 6: Number- Multiplication and Division (2) • Efficient multiplication • Unit 6: Number Multiplication and Division Assessment and interventions Unit 7: Measure - Length and perimeter (NEW CONCEPT) • Measure in km and m • Perimeter on a grid	• Solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one-digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects. • Convert between different units of measure [for example, kilometre to metre].
Structures & Representations for Unit 7: 	**Key Vocabulary for Unit 7:** **KEY LANGUAGE** There is some key language that children will need to know as part of the learning in this unit: → area, space, inside, units, rows → length, width, measure → shape, triangle, square, rectangle, trapezium, rectilinear shape, 2D shapes → larger, more area, smaller, less area, least area, greatest area → right angle → counting, subtraction → reflection, rotation → compare, order, size
Unit 7: Measure - Length and perimeter (NEW CONCEPT) • Perimeter of a rectangle • Perimeter of rectilinear shapes • Find missing lengths in rectilinear shapes • Perimeter of polygons • Unit 7: Measure - Length and perimeter assessment and interventions.	• Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres.
(PiXL Assessments will take two lessons in February)	Interventions and extending learning

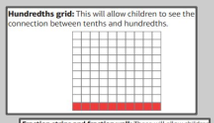
Maths - Year 4 Spring 2: Scheme of Work

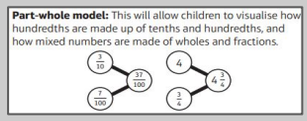
Spring 2

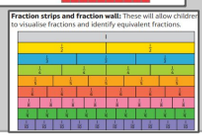
Focus - Power Maths Lessons

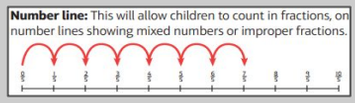
Destinations
(I will be able to ..)

Structures & Representations for Unit 8:









Key Vocabulary for Unit 8:

KEY LANGUAGE

There is some key language that children will need to know as part of the learning in this unit:

- tenth, hundredth
- equivalent fraction
- improper fraction, mixed number
- simplify, simplest fraction

Unit 8 - Number: Fractions (1)

- Count beyond 1
- Partition a mixed number
- Number lines with mixed numbers
- Compare and order mixed numbers
- Convert mixed number to improper fractions

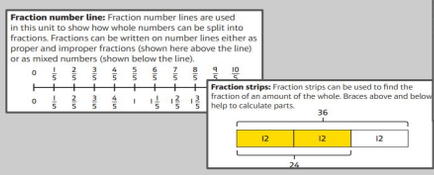
- Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators. **(Destination covered in Y3 Unit 8)**
- Add and subtract fractions with the same denominator within one whole [for example, 5/7+ 1/7 = 6/7] **(Destination covered in Y3 Unit 8)**
- Recognise and show, using diagrams, equivalent fractions with small denominators. **(Destination covered in Y3 Unit 8)**

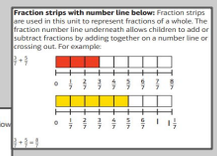
Unit 8 - Number: Fractions (1)

- Convert improper fractions to mixed numbers
- Equivalent fractions
- Equivalent fraction families
- Simplify fractions
- Unit 8- Number: Fractions (1) Assessment and interventions

- Recognise and show, using diagrams, families of common equivalent fractions.

Structures & Representations for Unit 9:





Key Vocabulary for Unit 9:

KEY LANGUAGE

There is some key language that children will need to know as a part of the learning in this unit:

- numerator, denominator
- fraction, whole number, mixed number, proper fraction, improper fraction
- add (+), subtract (–), multiply (×), divide (÷), sign, greater than (>), less than (<)
- whole, part, find … of …
- fraction strip, represent, number line, diagram, problem solving

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Unit 9 - Number: Fractions (2)

- Add and subtract two or more fractions
- Add fractions and mixed numbers
- Subtract from mixed numbers
- Subtract from whole amounts
- Problem solving - add and subtract fractions (1)

- Add and subtract fractions with the same denominator.
- Solve simple measure and money problems involving fractions and decimals to two decimal places.

Unit 9 - Number: Fractions (2)

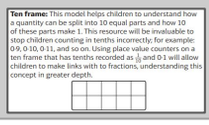
- Problem solving - add and subtract fractions (2)
- Fraction of an amount
- Problem solving - fraction of an amount
- Unit 9 - Number: Fractions (2) Assessment and interventions

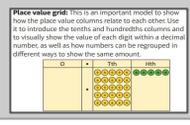
Unit 10 - Number: Decimals (1)

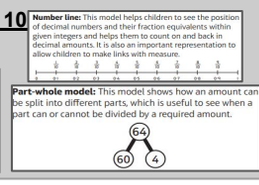
- Tenths as fractions

- Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number.
- Count up and down in tenths; recognised that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10. **Destination covered in Y3 Unit 8)**

Structures & Representations for Unit 10







Key Vocabulary for Unit 10:

KEY LANGUAGE

There is some key language that children will need to know as a part of the learning in this unit.

- decimal point, whole, tenths, hundredths, integer, tenths column, hundredths column
- one more, one less, greater than, less than, increase, decrease
- divide, regroup, equivalent, partition

Unit 10 - Number: Decimals (1)

- Tenths as decimals
- Tenths on a place value grid
- Tenths on a number line (1)
- Tenths on a number line (2)
- Divide 1 digit by 10

- Recognise and write decimal equivalents of any number of tenths or hundredths.
- Find the effect of dividing a one-digit number by 10, identifying the value of the digits in the answer as ones, tenths and hundredths.

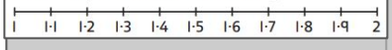
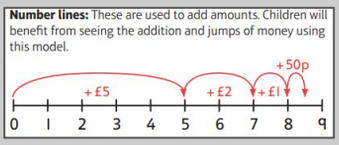
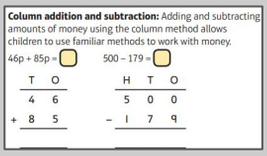
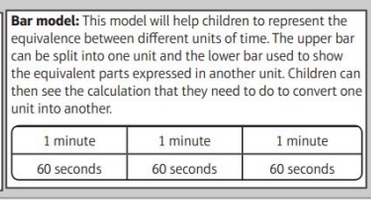
Unit 10 - Number: Decimals (1)

- Divide 2 digits by 10
- Hundredths as fractions
- Hundredths as decimals
- HUndredths on a place value grid
- Divide 1 or 2 digits by 100

- Recognise and write decimal equivalents of any number of tenths or hundredths.
- Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.
- Find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths.

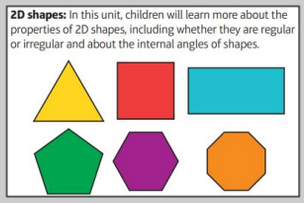
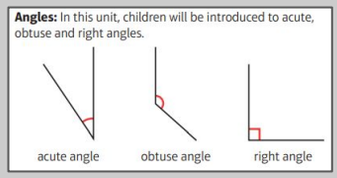
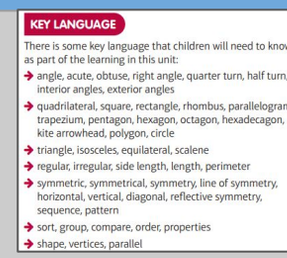
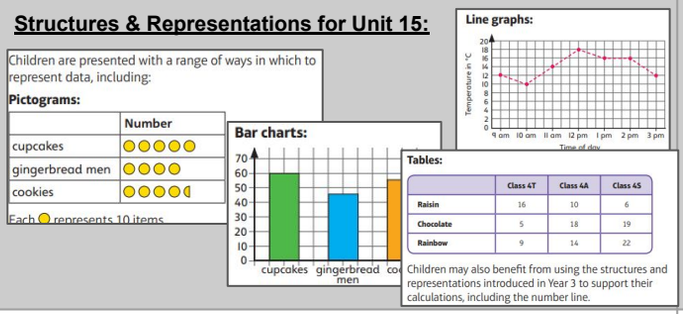
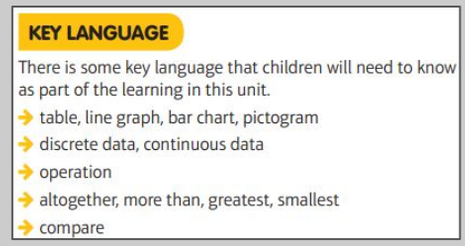
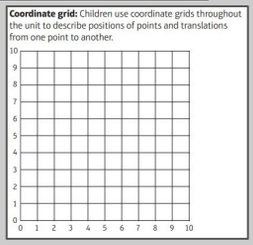
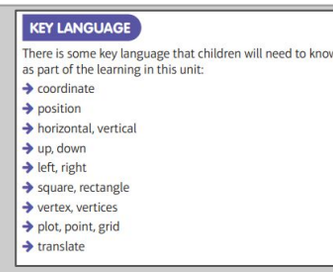
Maths - Year 4 Summer 1: Scheme of Work

Summer 1

Focus - Power Maths Lessons	Destinations (I will be able to ..)
Unit 10 - Number: Decimals (1) • Recap last terms learning on Decimals • Divide by 10 and 100 • Unit 10 - Number: Decimals (1) Assessment and Interventions • Unit 11 - Number: Decimals (2) • Making a whole • Writing decimals	• Find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths. • Recognise and write decimal equivalents of any number of tenths or hundredths. (previously covered Unit 10)
Structures & Representations for Unit 11: **Hundredths grid:** This is an important representation when children are learning to identify hundredths. Children can use a hundredths grid to work out the missing number.  **Number line:** It is important for children to learn to position a number with one decimal place on a number line. They will learn that, to round a number to the nearest whole number, they need to look at the tenths digit. 	**Key Vocabulary for Unit 11:** **KEY LANGUAGE** There is some key language that children will need to know as part of the learning in this unit. → tens (10s), ones (1s), tenths, hundredths, fraction → decimal point, decimal place, 0·1, 0·01 → equivalent, number bond, equivalent fraction → whole number, digit → rounding, round up, round down, multiply (×), divide (÷) → greater than (>), less than (<), equal to (=), smallest, lightest, greatest, heaviest, capacity → order, compare, statement, ascending, convert → part-whole, place value, bar model
Unit 11 - Number: Decimals (2) • Comparing decimals • Ordering decimals • Rounding decimals • Halves and quarters • Problem Solving decimals	• Compare numbers with the same number of decimal places up to two decimal places. • Round decimals with one decimal place to the nearest whole number. • Recognise and write decimal equivalents to ¼, ½, ¾
Structures & Representations for Unit 12: **Number lines:** These are used to add amounts. Children will benefit from seeing the addition and jumps of money using this model.  **Column addition and subtraction:** Adding and subtracting amounts of money using the column method allows children to use familiar methods to work with money. 	**Key Vocabulary for Unit 12:** **KEY LANGUAGE** There is some key language that children will need to know as part of the learning in this unit. → notes → coins → pounds (£) → pence (p) → add (+) → subtract (−) → change → round to the nearest → order → greater than (>) → less than (<) → cheaper → more expensive → estimate → over estimate → under estimate → total
Unit 11 - Number: Decimals (2) • Unit 11 - Number: Decimals (2) Assessment and Interventions Unit 12 - Money • Write money using decimals • Convert between pounds and pence • Compare amounts of money • Estimate with money	• Estimate, compare and calculate different measures, including money in pounds and pence.
Unit 12 - Money • Calculate with money • Solve problems with money • Unit 12 - Money assessment and interventions	• Estimate, compare and calculate different measures, including money in pounds and pence. • Solve simple measure and money problems involving fractions and decimals to two decimal places. (previously covered Unit 9)
Structures & Representations for Unit 13: **Analogue clock and digital clock:** Pictures of clock faces (both analogue and digital) are used regularly to represent times. They are used to demonstrate times as well as forming the basis of problems to solve. Children will be encouraged to use these representations themselves, completing them to represent different times.  **Bar model:** This model will help children to represent the equivalence between different units of time. The upper bar can be split into one unit and the lower bar used to show the equivalent parts expressed in another unit. Children can then see the calculation that they need to do to convert one unit into another. 	**Key Vocabulary for Unit 13:** **KEY LANGUAGE** There is some key language that children will need to know as part of the learning in this unit. → seconds, minutes, hours → days, weeks, months, years → units of time → convert, equal to (=), compare → 12-hour, 24-hour, am, pm → analogue, digital → bar model
Unit 13 - Measure: Time • Years, months, weeks and days • Hours, minutes and seconds • Convert between analogue and digital times	• Convert between different units of measure [for example, hour to minute].
Unit 13 - Measure: Time • Convert to the 24-hour clock • Problem Solving - convert units of time • Unit 13 - Measure: Time Assessment and interventions	• Read, write and convert time between analogue and digital 12- and 24-hour clocks. • Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.

Maths - Year 4 Summer 2: Scheme of Work

Summer 2

Focus - Power Maths Lessons	Destinations (I will be able to ..)
Structures & Representations for Unit 14:  	**Key Vocabulary for Unit 14:** 
Unit 14 - Geometry: Angles and 2D shapes (NEW CONCEPT) • Identifying angles • Comparing and ordering angles • Triangles • Quadrilaterals • Polygons	• Identify acute and obtuse angles and compare and order angles up to two right angles by size. • Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes.
Unit 14 - Geometry: Angles and 2D shapes (NEW CONCEPT) • Reason about polygons • Lines of symmetry • Complete a symmetric figure	• Identify lines of symmetry in 2-D shapes presented in different orientations. • Complete a simple symmetric figure with respect to a specific line of symmetry.
Unit 14 - Geometry: Angles and 2D shapes (NEW CONCEPT) • Unit 14 - Geometry: Angles and 2D shape Assessment and interventions. (PiXL Assessments will take two lessons in June)	
Structures & Representations for Unit 15: 	**Key Vocabulary for Unit 15:** 
Unit 15 - Statistics • Interpret charts • Solve problems with charts (1) • Solve problems with charts (2) • Interpret line graphs (1) • Interpret line graphs (2)	• Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs. • Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.
Structures & Representations for Unit 16: 	**Key Vocabulary for Unit 16:** 
Unit 15 - Statistics • Draw line graphs • Unit 15 - Statistics Assessment and interventions Unit 16 - Geometry: Position and Direction • Describing position • Describing position using coordinates • Plot coordinates	• Describe positions on a 2-D grid as coordinates in the first quadrant. • Plot specified points and draw sides to complete a given polygon.
Unit 16 - Geometry: Position and Direction • Draw 2D shapes on a grid • Translate on a grid • Describe translation on a grid • Unit 16 - Geometry: Position and Direction Assessment and interventions.	• Plot specified points and draw sides to complete a given polygon. • Describe movements between positions as translations of a given unit to the left/right and up/down

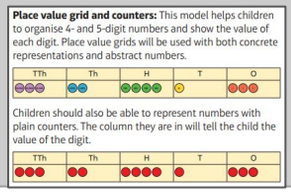
Maths - Year 5 Autumn 1: Scheme of Work

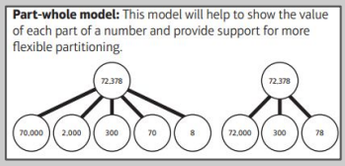
Autumn 1

Focus - Power Maths Lessons

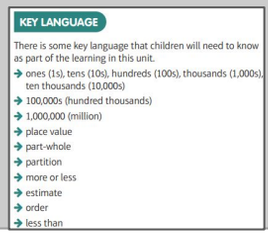
Destinations
(I will be able to ..)

Structures & Representations for Unit 1:





Key Vocabulary for Unit 1:



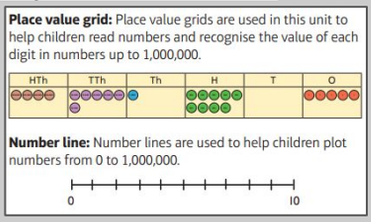
Unit 1: Number - Place value within 1,000,000 (1)
- Roman numerals
- Numbers to 10,000
- Numbers to 100,000
- Numbers to 1,000,000

- Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value.
- Read Roman numerals to 1,000 (M) and recognise years written in Roman numerals.
- Read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit.

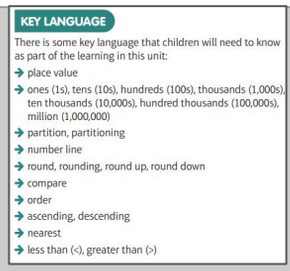
Unit 1: Number - Place value within 1,000,000 (1)
- Read and write 5- and 6-digit numbers
- Powers of 10
- 10/100/1,000/100,000 more or less
- Partition numbers to 1,000,000
- Unit 1 Place value within 1,000,000 (1) assessment and interventions.

- Read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit.
- Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000.
- Solve number problems and practical problems that involve all of the above.

Structures & Representations for Unit 2:



Key Vocabulary for Unit 2:



Unit 2: Number - Place value within 1,000,000 (2)
- Number line to 1,000,000
- Compare and order numbers to 100,000
- Compare and order numbers to 1,000,000
- Round numbers to the nearest 100,000

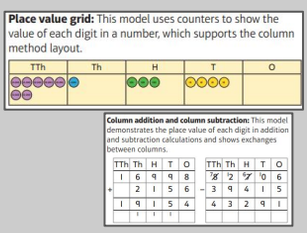
- Read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit.
- Solve number problems and practical problems that involve all of the above.

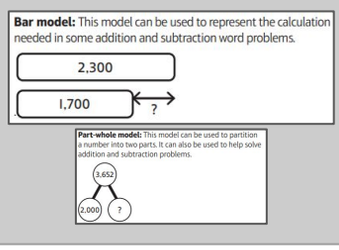
(previously covered Unit 1)

Unit 2: Number - Place value within 1,000,000 (2)
- Round numbers to the nearest 10,000
- Round number to the nearest 10,100 and 1,000
- Unit 2 Place value within 1,000,000 (2) assessment and interventions.

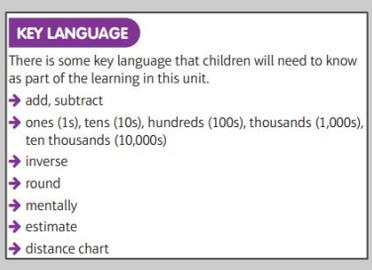
- Round any number up to 1,000,000 to the nearest 10, 100, 1,000, 10,000 and 100,000.

Structures & Representations for Unit 3:





Key Vocabulary for Unit 3:



(PiXL Assessments will take three lessons in October)

Unit 3: Number - Addition and subtraction
- Mental strategies (addition)
- Mental strategies (subtraction)

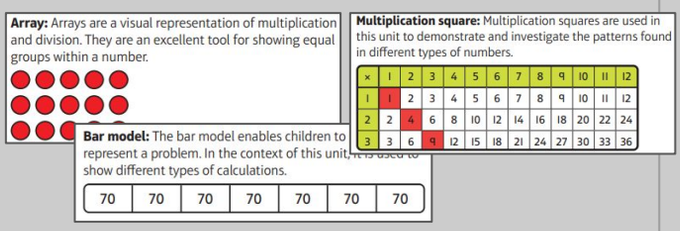
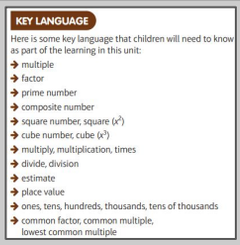
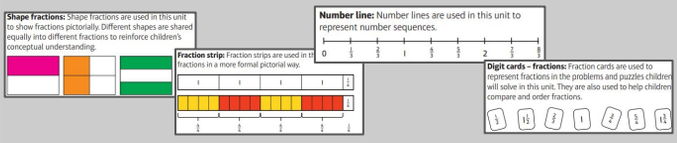
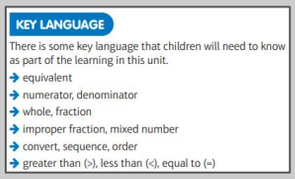
- Add and subtract numbers mentally with increasingly large numbers.

Unit 3: Number - Addition and subtraction
- Add whole numbers with more than 4 digits (1)
- Add whole numbers with more than 4 digits (2)
- Subtract whole numbers with more than 4 digits (1)
- Subtract whole numbers with more than 4 digits (2)
- Round to check answers

- Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction).
- Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy.

Maths - Year 5 Autumn 2: Scheme of Work

Autumn 2

Focus - Power Maths Lessons	Destinations (I will be able to ..)
Unit 3: Number - Addition and subtraction • Inverse operations (addition and subtraction) • Multi-step addition and subtraction problems (1) • Multi-step addition and subtraction problems (2) • Solve missing number problems	• Estimate and use inverse operations to check answers to a calculation. **(Destination covered in Y4 Unit 3)** • Solve addition and subtraction multi step problems in contexts, deciding which operations and methods to use and why.
Unit 3: Number - Addition and subtraction • Solve comparison problems • Unit 3 Addition and Subtraction assessment and interventions Unit 4: Number - Multiplication and Division (1) • Multiples • Common multiples • Factors	• Solve addition and subtraction multi step problems in contexts, deciding which operations and methods to use and why. • Solve problems involving addition and subtraction,and a combination of these, including understanding the meaning of the equals sign. • Identify multiples and factors, including finding all factor pairs of a number.
Structures & Representations for Unit 4 	**Key Vocabulary for Unit 4:** 
Unit 4: Number - Multiplication and Division (1) • Common factors • Prime numbers • Square numbers • Cube numbers • Multiply by 10, 100 and 1,000	• Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers • Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers. • Establish whether a number up to 100 is prime and recall prime numbers up to 19. • Recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3).
Unit 4: Number - Multiplication and Division (1) • Divide by 10, 100 and 1,000 • Multiples of 10, 100 and 1,000 • Unit 4 Multiplication and Division (1) assessments and interventions. Unit 5: Number - Fractions (1) • Equivalent fractions • Equivalent fractions - unit and non-unit fractions	• Multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000. • Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes. • Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths.
Structures & Representations for Unit 5: 	**Key Vocabulary for Unit 5:** 
Unit 5: Number - Fractions (1) • Equivalent fractions - families of equivalent fractions • Improper fractions to mixed numbers • Mixed numbers to improper fractions • Compare fractions less than 1 • Order fractions less than 1	• Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths. • Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number [for example, ⅖ + ⅘ = 6/5 = 1 ⅕]
Unit 5: Number - Fractions (1) • Compare and order fractions greater than 1 • Unit 5 Fractions (1) assessment and interventions Unit 6: Number - Fractions (2) • Add and subtract fractions • Add fractions within 1 • Add fractions with a total greater than 1	• Compare and order fractions whose denominators are all multiples of the same number. • Add and subtract fractions with the same denominator and denominators that are multiples of the same number.

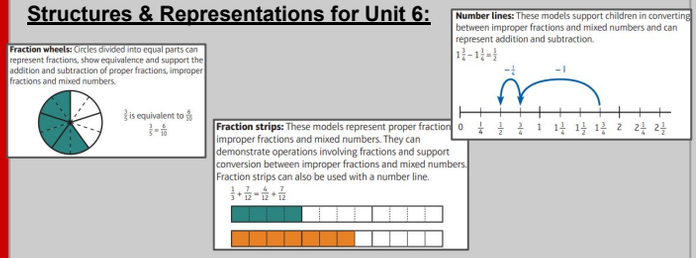
Maths - Year 5 Spring 1: Scheme of Work

Spring 1

Focus - Power Maths Lessons

Destinations
(I will be able to ..)

Structures & Representations for Unit 6:



Key Vocabulary for Unit 6:

KEY LANGUAGE

There is some key language that children will need to know as part of the learning in this unit:

- fraction, whole, part, equal parts, equivalent
- add, sum, total, subtract, difference
- divide, multiply, multiple
- numerator, denominator, common denominator
- simplify, convert
- proper fraction, improper fraction, mixed number, equivalent fraction
- method, multi-step, efficient

Unit 6: Number - Fractions (2)

- Add to a mixed number
- Add two mixed numbers
- Subtract fractions within 1
- Subtract from a mixed number
- Subtract from a mixed number - breaking the whole

- Add and subtract fractions with the same denominator and denominators that are multiples of the same number.
- Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number [for example, ⅖ + ⅘ = 6/5 = 1 ⅕)

Unit 6: Number - Fractions (2)

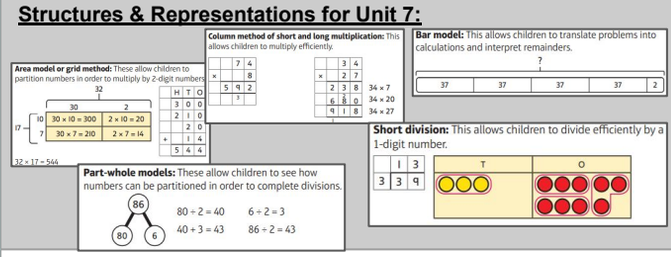
- Subtract two mixed numbers
- Solve fraction problems
- Solve multi-step fraction problems
- Unit 6 Fractions (2) Assessment and interventions

Unit 7: Number - Multiplication and Division (2)

- Multiply a number up to 4 digits by a 1-digit number

- Add and subtract fractions with the same denominator and denominators that are multiples of the same number.
- Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number [for example, ⅖ + ⅘ = 6/5 = 1 ⅕) (previously covered Unit 5)

Structures & Representations for Unit 7:



Key Vocabulary for Unit 7:

KEY LANGUAGE

There is some key language that children will need to know as part of the learning in this unit:

- total, sum, remainder, equal
- place value, partition
- multiply, divide, add, subtract
- factor, multiple

Unit 7: Number - Multiplication and Division (2)

- Multiply 2-digit numbers (area model)
- Multiply 2-digit numbers
- Multiply a 3-digit number by a 2-digit number
- Multiply a 4-digit number by a 2-digit number
- Divide a number up to 4 digits by a 1-digit number (1)

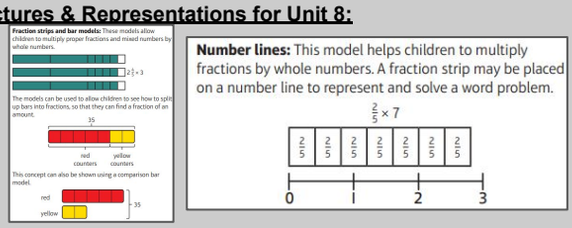
- Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers.
- Multiply and divide numbers mentally drawing upon known facts.

Unit 7: Number - Multiplication and Division (2)

- Divide a number up to 4 digits by a 1-digit number (2)
- Divide with remainders
- Efficient division
- Solve problems with multiplication and division
- Unit 6 Multiplication and Division (2) assessment and interventions

- Divide numbers up to 4 digits by a one digit number using the formal written method of short division and interpret remainders appropriately for the context.
- Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign (previously covered Unit 3)

Structures & Representations for Unit 8:



Key Vocabulary for Unit 8:

KEY LANGUAGE

There is some key language that children will need to know as part of the learning in this unit.

- operator, add, subtract, multiply, divide
- proper fraction, improper fraction, mixed number, fraction of an amount
- denominator, numerator
- convert, simplify, equivalent
- whole(s), equal parts
- factor, multiple

Unit 8: Number - Fractions (3)

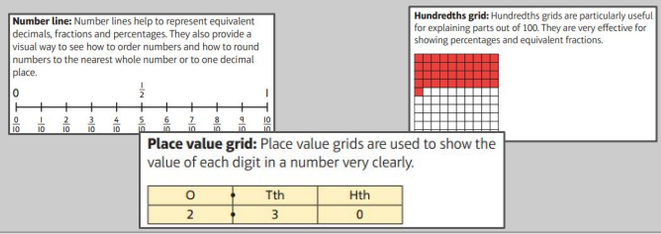
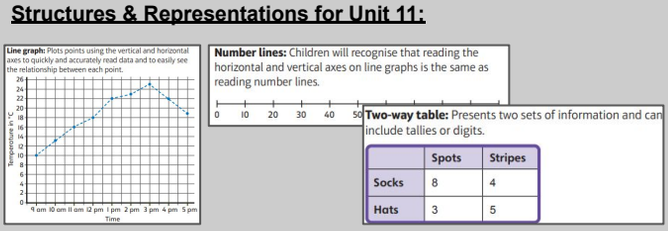
- Multiply unit fractions by an integer
- Multiply non-unit fractions by an integer
- Multiply mixed numbers by integers (1)
- Multiply mixed numbers by integers (2)
- Fraction of an amount

- Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.
- Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number [for example, ⅖ + ⅘ = 6/5 = 1 ⅕) (previously covered Unit 5 & 6)

PiXL Assessments will take three lessons in February)

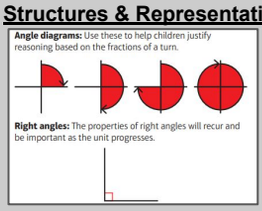
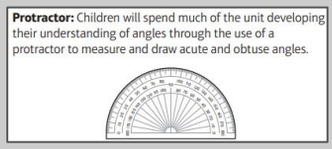
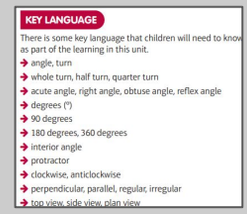
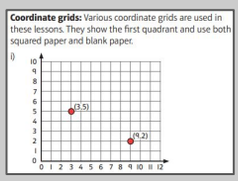
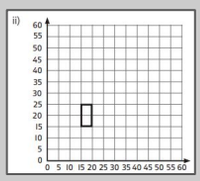
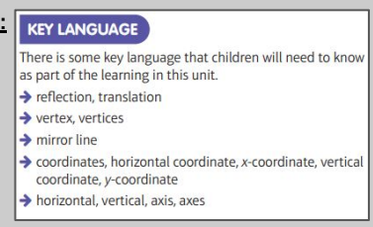
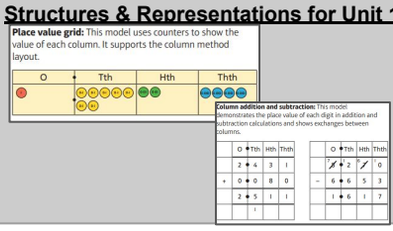
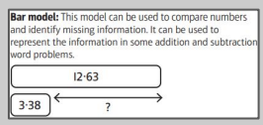
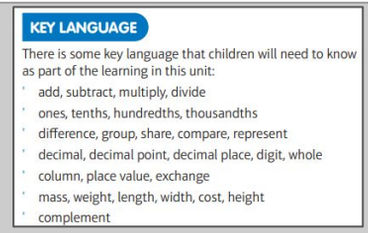
Maths - Year 5 Spring 2: Scheme of Work

Spring 2

Focus - Power Maths Lessons	Destinations (I will be able to ..)
Unit 8: Number - Fractions (3) • Finding the whole • Using fractions as operators • Unit 8 Fractions (3) assessment and interventions. Unit 9: Number - Decimals and Percentages (NEW CONCEPT) • Write decimals up to 2 decimal places - less than 1 • Write decimals up to 2 decimal places - greater than 1	• Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates. • Read, write, order and compare numbers with up to three decimal places.
Structures & Representations for Unit 9: 	**Key Vocabulary for Unit 9:** **KEY LANGUAGE** There is some key language that children will need to know as part of the learning in this unit. → decimal, decimal place → tenths, hundredths, thousandths → decimal point → place value → digits → fractions, equivalent fractions → per cent (%), percentage → rounding → improper fractions, mixed numbers → convert → exchange → order, compare
Unit 9: Number - Decimals and Percentages (NEW CONCEPT) • Equivalent fractions and decimals - tenths • Equivalent fractions and decimals - hundredths • Equivalent fractions and decimals • Thousandths as fractions • Thousandths as decimals	• Read and write decimal numbers as fractions [for example, 0.71 = 71/100]. • Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents.
Unit 9: Number - Decimals and Percentages (NEW CONCEPT) • Thousandths on a place value grid • Compare and order decimals - same number of decimal places • Compare and order any decimals with up to 3 decimal places • Round to the nearest whole number • Round to one decimal place	• Read, write, order and compare numbers with up to three decimal places. • Round decimals with two decimal places to the nearest whole number and to one decimal place.
Unit 9: Number - Decimals and Percentages (NEW CONCEPT) • Understand percentages • Percentages as fractions and decimals • Equivalent fractions, decimals and percentages • Unit 9 Decimals and Percentages assessment and interventions. Unit 10: Measure - Perimeter and area • Perimeter of rectangles	• Recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal. • Solve problems which require knowing percentage and decimal equivalents of ½, ¼, ⅕, ⅖, ⅘ and those fractions with a denominator of a multiple of 10 or 25.
Structures & Representations for Unit 10: 	**Key Vocabulary for Unit 10:** **KEY LANGUAGE** There is some key language that children will need to know as part of the learning in this unit: → perimeter, distance, area, space → scale, actual area/actual size, convert → centimetres (cm), metres (m), square centimetres (cm^2), square metres (m^2) → 2D shape, rectangle, square, rectilinear shape, polygon, sides, length, width → measure, combine, brackets, total, double, estimate, array, formula, compare
Unit 10: Measure - Perimeter and area • Perimeter of rectilinear shapes (1) • Perimeter of rectilinear shapes (2) • Perimeter of polygons • Area of rectangles (1) • Area of rectangles (2)	• Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres.
Unit 10: Measure - Perimeter and area • Area of compound shapes • Estimate area • Unit 10 Perimeter and Area assessment and interventions Unit 11: Statistics - Graphs and Tables • Draw line graphs • Read and interpret line graphs (1)	• Calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm2) and square metres (m2) and estimate the area of irregular shapes. • Solve comparison, sum and difference problems using information presented in a line graph.
Structures & Representations for Unit 11: 	**Key Vocabulary for Unit 11:** **KEY LANGUAGE** Here is some key language that children will need to know as part of the learning in this unit: → graph, line graph, dual line graph → horizontal, vertical, horizontal axis, vertical axis, axis/axes, scale, plot/plotted → data, information, kilometres (km), kilograms (kg) → read, interpret, complete → table, two-way table, tally/tallies, timetable

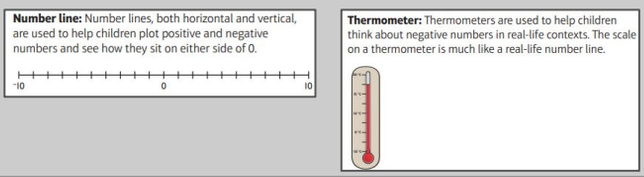
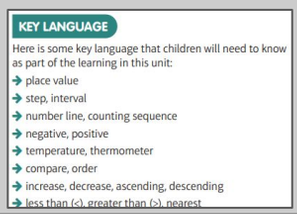
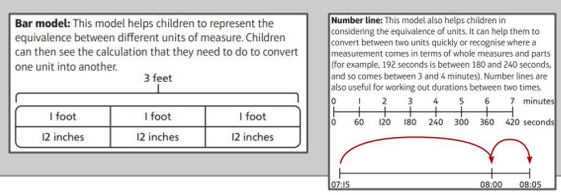
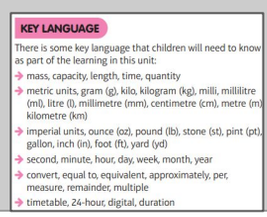
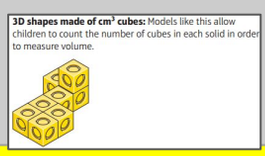
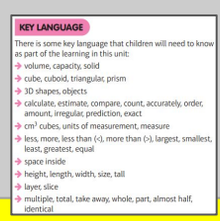
Maths - Year 5 Summer 1: Scheme of Work

Summer 1

Focus - Power Maths Lessons	Destinations (I will be able to ..)
Unit 11: Statistics - Graphs and Tables • Read and interpret line graphs (2) • Read and interpret tables • Two-way tables • Timetables • Unit 11 Graphs and Tables Assessment and Interventions	• Solve comparison, sum and difference problems using information presented in a line graph. • Complete, read and interpret information in tables, including timetables.
Structures & Representations for Unit 12:  	**Key Vocabulary for Unit 12:** 
Unit 12: Geometry - Properties of Shape • Understand and use degrees • Measure acute angles • Measure angles up to 180 • Draw lines and angles accurately • Calculate angles around a point	• Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles. • Draw given angles, and measure them in degrees (°).
Unit 12: Geometry - Properties of Shape • Calculate angles on a straight line • Lengths and angles in shape • Regular and irregular polygons • Parallel lines • Perpendicular lines	• Identify: - angles at a point and one whole turn (total 360°) - angles at a point on a straight line and ½ a turn (total 180°) - other multiples of 90°. • Use the properties of rectangles to deduce related facts and find missing lengths and angles. • Distinguish between regular and irregular polygons based on reasoning about equal sides and angles. • Identify horizontal and vertical lines and pairs of perpendicular and parallel lines. **(Destination covered in Y3 Unit 14)**
Unit 12: Geometry - Properties of Shape • Investigate lines • 3D shapes • Unit 12 Properties of Shape assessment and interventions Unit 13: Geometry - Position and direction • Read and plot coordinates • Problem solving with coordinates	• Identify 3-D shapes, including cubes and other cuboids, from 2-D representations. • Describe positions on a 2-D grid as coordinates in the first quadrant. **(Destination covered in Y4 Unit 16)** • Plot specified points and draw sides to complete a given polygon. **(Destination covered in Y4 Unit 16)**
Structures & Representations for Unit 13:  	**Key Vocabulary for Unit 13:** 
Unit 13: Geometry - Position and direction • Translate shapes • Translate points • Reflection • Reflection in horizontal and vertical lines • Unit 13 Position and direction assessment and interventions.	• Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed.
Structures & Representations for Unit 14:  	**Key Vocabulary for Unit 14:** 
Unit 14: Numbers - Decimals • Add and subtract decimals within 1 (1) • Add and subtract decimals within 1 (2) • Complements to 1 • Add and subtract decimals across 1 • Add decimals with the same number of decimal places	• Solve problems involving number up to three decimal places.

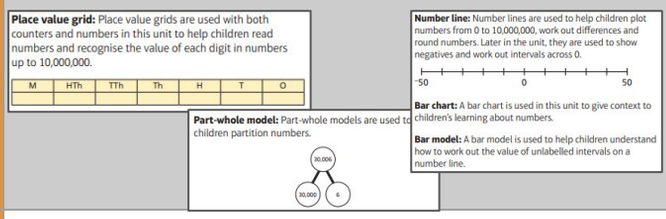
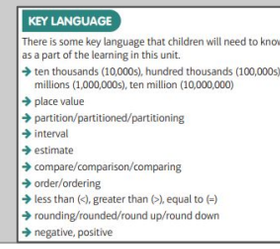
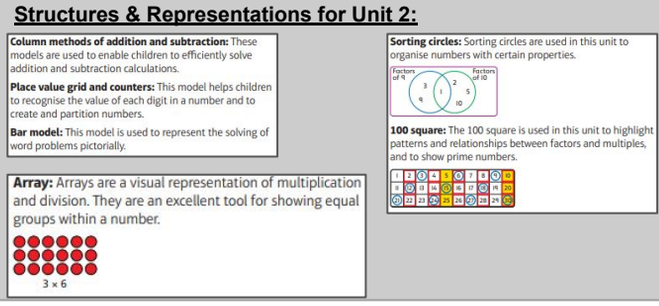
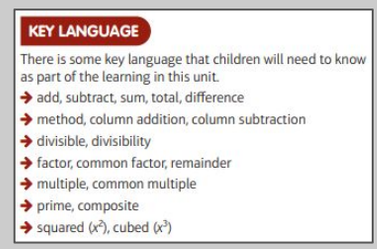
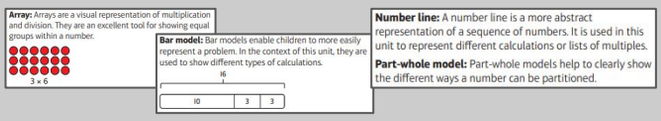
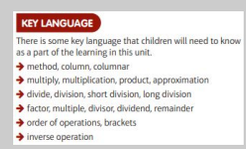
Maths - Year 5 Summer 2: Scheme of Work

Summer 2

Focus - Power Maths Lessons	Destinations (I will be able to ..)
Unit 14: Number - Decimals • Subtract decimals with the same number of decimal places • Add decimals with a different number of decimal places • Subtract decimals with a different number of decimals places • Problem solving with decimals (1) • Problem solving with decimals (2)	• Solve problems involving number up to three decimal places. • Read, write, order and compare numbers with up to three decimal places. (previously covered Unit 9)
Unit 14: Number - Decimals • Decimal sequences • Multiply by 10 • Multiply by 10, 100 and 1,000 • Divide by 10 • Divide by 10, 100 and 1,000 • Unit 14 Decimals assessment and interventions. (Use additional reasoning timetabled)	• Read, write, order and compare numbers with up to three decimal places. • Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents. (previously covered Unit 9)
Structures & Representations for Unit 15: 	**Key Vocabulary for Unit 15:** 
Unit 15: Number - Negative Numbers • Understand negative numbers • Count through zero • Compare and order negative numbers (PiXL Assessments will take three lessons in June)	• Count backwards through zero to include negative numbers. • Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero.
Unit 15: Number - Negative Numbers • Find the difference • Unit 15 Negative numbers assessment and interventions. Unit 16: Measure - Converting Units • Kilograms and kilometres • Millimetres and millilitres • Convert units of length	• Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero. • Convert between different units of metric measure [for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre].
Structures & Representations for Unit 16: 	**Key Vocabulary for Unit 16:** 
Unit 16: Measure - Converting Units • Imperial units of length • Imperial units of mass • Imperial units of capacity • Convert units of time • Timetables - Calculating	• Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints. • Solve problems involving converting between units of time.
Unit 16: Measure - Converting Units • Problem solving - units of measure (1) & (2) • Unit 16 Converting units assessment and interventions Unit 17: Measure - Volume • Cubic centimetres • Compare volumes • Estimate volume • Unit 17 Volume assessment and interventions (Use additional reasoning timetabled)	• Use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling. • Estimate volume [for example, using 1 cm3 blocks to build cuboids (including cubes)] and capacity [for example, using water].
Structures & Representations for Unit 16 & 17: 	**Key Vocabulary for Unit 16 & 17:** 

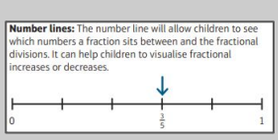
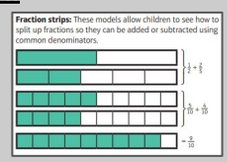
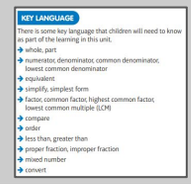
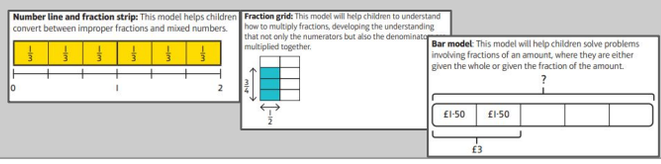
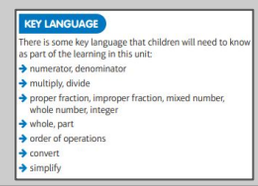
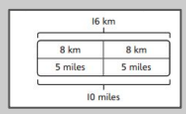
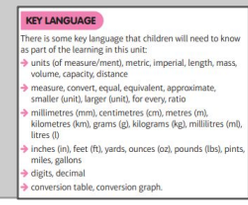
Maths - Year 6 Autumn 1: Scheme of Work

Autumn 1

Focus - Power Maths Lessons	Destinations (I will be able to ..)
Structures & Representations for Unit 1: 	**Key Vocabulary for Unit 1:** 
Unit 1: Number - Place value within 10,000,000 • Numbers to 1,000,000 • Numbers to 10,000,000 • Partition numbers to 10,000,000 • Powers of 10 • Number line to 10,000,000	• Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit. • Solve number and practical problems that involve the above.
Unit 1: Number - Place value within 10,000,000 • Compare and order any number • Round any number • Negative numbers • Unit 1 Place value within 10,000,000 assessment and interventions Unit 2: Number - Four operations (1) • Add integers	• Round any whole number to a required degree of accuracy. • Use negative numbers in context, and calculate intervals across zero. • Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.
Structures & Representations for Unit 2: 	**Key Vocabulary for Unit 2:** 
Unit 2: Number - Four operations (1) • Subtract integers • Problem solving - addition and subtraction • Common factors • Common multiples • Rules of divisibility	• Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why. • Identify common factors, common multiples and prime numbers. • Use their knowledge of the order of operations to carry out calculations involving the four operations.
Unit 2: Number - Four operations (1) • Primes to 100 • Squares and cubes • Unit 2 Four Operations (1) assessment and interventions Unit 3: Number - Four operations (2) • Multiply by a 1-digit number • Multiply up to a 4-digit number by a 2-digit number	• Identify common factors, common multiples and prime numbers. • Recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3). **(Destination covered in Y5 Unit 4)** • Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication.
Structures & Representations for Unit 3: 	**Key Vocabulary for Unit 3:** 
(PiXL Assessments will take three lessons in October) Unit 3: Number - Four operations (2) • Short division • Division using factors	• Divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context.
Unit 3: Number - Four operations (2) • Divide a 3-digit number by a 2-digit number (long division) • Divide a 4-digit number by a 2-digit number (long division) • Long division with remainders • Order of operations • Brackets	• Divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context. • Use their knowledge of the order of operations to carry out calculations involving the four operations. (previously covered Unit 2)

Maths - Year 6 Autumn 2: Scheme of Work

Autumn 2

Focus - Power Maths Lessons	Destinations (I will be able to ..)
Unit 3: Number - Four operations (2) • Mental calculations (1) • Mental calculations (2) • Reason from known facts • Unit 3 Four Operations (2) assessment and interventions Unit 4: Number - Fractions (1) • Equivalent fractions and simplifying	• Perform mental calculations, including with mixed operations and large numbers. • Solve problems involving addition, subtraction, multiplication and division. • Use common factors to simplify fractions; use common multiples to express fractions in the same denomination.
Structures & Representations for Unit 4:  	**Key Vocabulary for Unit 4** : 
Unit 4: Number - Fractions (1) • Equivalent fractions on a number line • Compare and order fractions • Add and subtract simple fractions • Add and subtract any two fractions • Add mixed numbers	• Compare and order fractions, including fractions > 1. • Use common factors to simplify fractions; use common multiples to express fractions in the same denomination. • Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.
Unit 4: Number - Fractions (1) • Subtract mixed numbers • Multi-step problems • Problem solving - add and subtract fractions • Unit 4 Fractions (1) assessment and interventions Unit 5: Number - Fractions (2) • Multiply fractions by integers	• Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions. • Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams. **(Destination covered in Y5 Unit 8)**
Structures & Representations for Unit 5: 	**Key Vocabulary for Unit 5:** 
Unit 5: Number - Fractions (2) • Multiply fractions by fractions (1) • Multiply fractions by fractions (2) • Divide a fraction by an integer (1) • Divide a fraction by an integer (2) • Divide a fraction by an integer (3)	• Multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, ¼ x ½ = ⅛]. • Divide proper fractions by whole numbers [for example, ⅓ ÷ 2 = ⅙].
Unit 5: Number - Fractions (2) • Mixed questions with fractions • Fraction of an amount • Fraction of an amount - find the whole • Unit 5 Fractions (2) Assessment and interventions Unit 6: Measure - Imperial and metric measures • Metric measures	• Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions. (previously covered Unit 4) • Use written division methods in cases where the answer has up to two decimal places.
Structures & Representations for Unit 6: **Bar model:** This model provides a useful way of visualising the equivalence between two units of measure as they are converted (where each individual bar representing a value in one unit is shown as equal to a bar representing the equivalent value in another unit). 	**Key Vocabulary for Unit 6:** 
Unit 6: Measure - Imperial and metric measures • Convert metric measures • Calculate with metric measures • Miles and kilometres • Imperial measures • Unit 6 Imperial and Metric measures assessment and interventions.	• Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places. • Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate. • Convert between miles and kilometres.

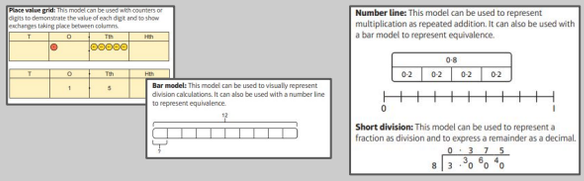
Maths - Year 6 Spring 1: Scheme of Work

Spring 1

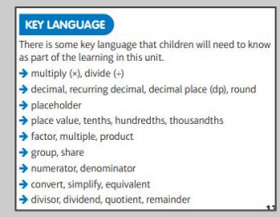
Focus - Power Maths Lessons

Destinations
(I will be able to ..)

Structures & Representations for Unit 9:



Key Vocabulary for Unit 9:



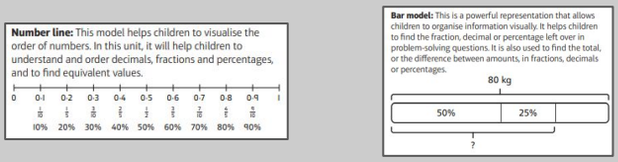
Unit 9: Number - Decimals
- Place value to 3 decimal places
- Round decimals
- Add and subtract decimals
- Multiply by 10, 100 and 1,000
- Divide by 10, 100 and 1,000

- Identify the value of each digit in numbers given to three decimal places.
- Solve problems which require answers to be rounded to specified degrees of accuracy.
- Identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1,000 giving answers up to three decimal places.

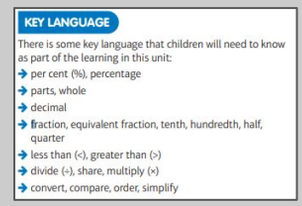
Unit 9: Number - Decimals
- Multiply decimals by integers
- Divide decimals by integers
- Fractions to decimals
- Fractions as division
- Unit 9 Decimals Assessment and interventions

- Multiply one-digit numbers with up to two decimal places by whole numbers.
- Use written division methods in cases where the answer has up to two decimal places. (previously covered Unit 5)
- Associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, ⅜].

Structures & Representations for Unit 10:



Key Vocabulary for Unit 10:



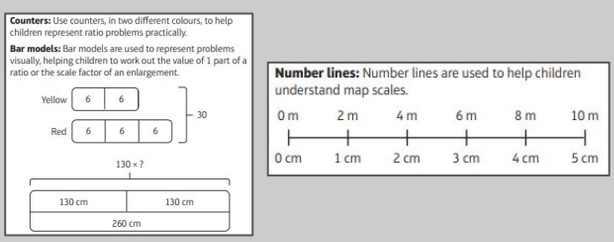
Unit 10: Number - Percentages
- Understand percentages
- Fractions to percentages
- Equivalent fractions, decimals and percentages
- Order fractions, decimals and percentages
- Simple percentage of an amount

- Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.
- Compare and order fractions, including fractions >1 (previously covered Unit 4)
- Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.

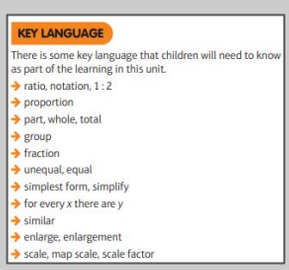
Unit 10: Number - Percentages
- Percentage of an amount - 1%
- Percentages of an amount
- Percentages (missing values)
- Unit 10 Percentages assessment and interventions

- Solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison.
- Multiply one-digit numbers with up to two decimal places by whole numbers. (previously covered Unit 9)

Structures & Representations for Unit 7:



Key Vocabulary for Unit 7:



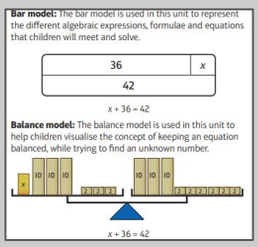
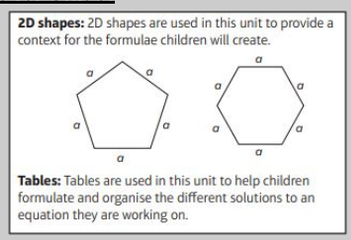
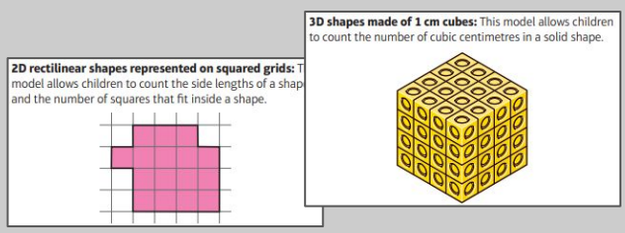
Unit 7: Number - Ratio and proportion **NEW CONCEPT**
- Use ratio language
- Introduce the ratio symbol
- Use ratio
- Scale drawing
- Scale factors

- Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.
- Solve problems involving similar shapes where the scale factor is known or can be found.

(PiXL Assessments will take two lessons in February)

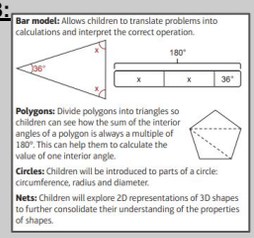
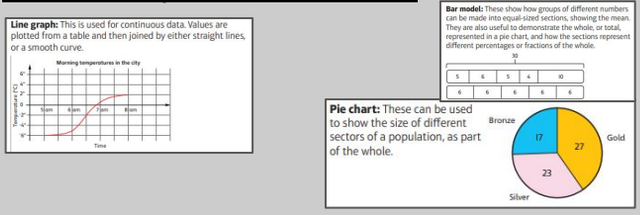
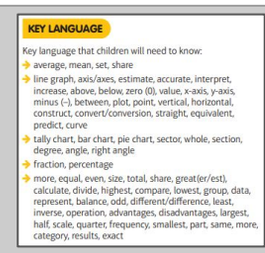
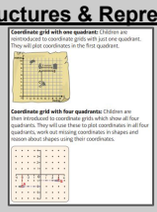
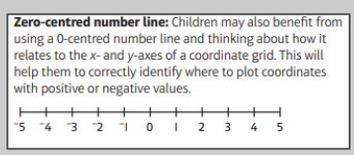
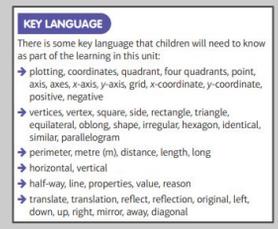
Maths - Year 6 Spring 2: Scheme of Work

Spring 2

Focus - Power Maths Lessons	Destinations (I will be able to ..)
Unit 7: Number - Ratio and proportion **NEW CONCEPT** • Similar shapes • Ratio problems • Problem solving - Ratio and proportion (1) • Problem solving - Ratio and proportion (2) • Unit 7 Ratio and proportion assessment and interventions	• Solve problems involving similar shapes where the scale factor is known or can be found. • Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples. • Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts.
Structures & Representations for Unit 8:  	**Key Vocabulary for Unit 8:** **KEY LANGUAGE** There is some key language that children will need to know as part of the learning in this unit. → pattern, growing pattern → sequence → rule → term → algebra, algebraic → expression → formula, formulae → substitute → generalise → operation → calculation, calculate → equation → inverse → solution → represent → value
Unit 8: Number - Algebra **NEW CONCEPT** • Find a rule - one step • Find a rule - two steps • Form expressions • Substitution (1) • Substitution (2)	• Generate and describe linear number sequences.
Unit 8: Number - Algebra **NEW CONCEPT** • Formulae • Form and solve equations • Solve one-step equations • Solve two-step equations • Find pairs of values	• Use simple formulae. • Express missing number problems algebraically. • Find pairs of numbers that satisfy an equation with two unknowns.
Unit 8: Number - Algebra **NEW CONCEPT** • Solve problems with two unknowns • Unit 8 Algebra Assessment and interventions Unit 11: Measure - Perimeter, area and volume • Shapes - Same area • Area and perimeter • Area and perimeter - missing lengths	• Find pairs of numbers that satisfy an equation with two unknowns. • Enumerate possibilities of combinations of two variables. • Recognise that shapes with the same areas can have different perimeters and vice versa.
Structures & Representations for Unit 11: 	**Key Vocabulary for Unit 11:** **KEY LANGUAGE** There is some key language that children will need to know as part of the learning in this unit: → perimeter, distance, area, space, volume → centimetres (cm), metres (m), square centimetres (cm^2), square metres (m^2), cubic centimetres (cm^3), cubic metres (m^3), dimensions → rectangle, square, triangle, rectilinear shape, compound shapes, sides, base, length, height, width, perpendicular, parallelogram, cube, cuboid → measure, combine, total, double, estimate, formula
Unit 11: Measure - Perimeter, area and volume • Area of a triangle - counting squares • Area of right-angled triangle • Area of any triangle • Area of a parallelogram • Problem solving - area	• Calculate the area of triangles. • Calculate the area of parallelograms and triangles. • Recognise that shapes with the same areas can have different perimeters and vice versa.
Unit 11: Measure - Perimeter, area and volume • Problem solving - perimeter • Volume - count cubes • Volume of a cuboid • Unit 11 Perimeter, area and volume assessment and interventions	• Recognise when it is possible to use formulae for area and volume of shapes. • Calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm3) and cubic metres (m3), and extending to other units [for example, mm3 and km3].

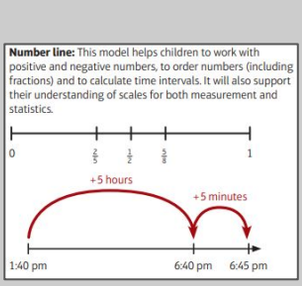
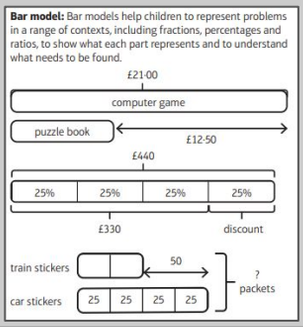
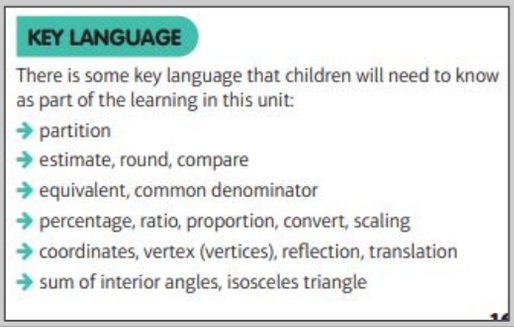
Maths - Year 6 Summer 1: Scheme of Work

Summer 1

Focus - Power Maths Lessons	Destinations (I will be able to ..)
Structures & Representations for Unit 13: 	**Key Vocabulary for Unit 13:** 
Unit 13: Geometry - Properties of Shapes • Measure and classify angles • Vertically opposite angles • Angles in a triangle • Angles in a triangle - missing angles • Angles in a triangle - special cases	• Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles. • Draw 2-D shapes using given dimensions and angles.
Unit 13: Geometry - Properties of Shapes • Angles in quadrilaterals • Angles in polygon • Circles • Parts of a circle • Draw shapes accurately	• Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons. • Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius. • Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius. • Draw 2-D shapes using given dimensions and angles.
Unit 13: Geometry - Properties of Shapes • Nets of 3D shapes (1) • Nets of 3D shapes (2) • Unit 13 Properties of shapes assessment and interventions Unit 12: Statistics • Interpret line graphs • Draw line graphs	• Recognise, describe and build simple 3-D shapes, including making nets. • Interpret and construct pie charts and line graphs and use these to solve problems. • Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.
Structures & Representations for Unit 12: 	**Key Vocabulary for Unit 12:** 
Unit 12: Statistics • Advanced bar charts • Understand and complete pie charts • Read and interpret pie charts • Pie charts and fractions (1) • Pie charts and fractions (2)	• Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why (previously covered Unit 2) • Interpret and construct pie charts and line graphs and use these to solve problems.
Unit 12: Statistics • Pie charts and percentages • Introduction to the mean • Calculate the mean • Problem solving - mean • Unit 12 Statistics Assessment and interventions	• Calculate and interpret the mean as an average.
Structures & Representations for Unit 14:  	**Key Vocabulary for Unit 14:** 
Unit 14: Geometry - Position and direction • The first quadrant • Read and plot points in four quadrants • Translations	• Describe positions on the full coordinate grid (all four quadrants). • Draw and translate simple shapes on the coordinate plane, and reflect them in the axes.

Maths - Year 6 Summer 2: Scheme of Work

Summer 2

Focus - Power Maths Lessons	Destinations (I will be able to ..)
Unit 14: Geometry - Position and direction • Reflections • Solve problems with coordinates • Unit 14 Position and direction assessment and intervention	• Describe positions on the full coordinate grid (all four quadrants). • Draw and translate simple shapes on the coordinate plane, and reflect them in the axes.
Structures & Representations for Unit 15:  	**Key Vocabulary for Unit 15:** 
Unit 15: Problem solving • Problem solving - place value • Problem solving - negative numbers • Problem solving - addition and subtraction • Problem solving - four operations (1) • Problem solving - four operations (2)	• Solve number and practical problems that involve destinations from Unit 1: Place value within 10,000,000 (previously covered Unit 21 • Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why. (previously covered Unit 2 & 12) • Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy. (previously covered Unit 12) • Use their knowledge of the order of operations to carry out calculations involving the four operations. (previously covered Unit 2 & 3) • Solve problems involving addition, subtraction, multiplication and division. (previously covered Unit 3)
Unit 15: Problem solving • Problem solving - fractions • Problem solving - decimals • Problem solving - percentages • Problem solving - ratio and proportion • Problem solving - time (1)	• Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts. (previously covered Unit 10) • Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts. (previously covered Unit 7) • Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples. (previously covered Unit 7)
Unit 15: Problem solving • Problem solving - time (2) • Problem solving - position and direction • Problem solving - properties of shape (1) • Problem solving - properties of shape (2) • Unit 15 Problem Solving assessment and interventions	• Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places.(previously covered Unit 6) • Describe positions on the full coordinate grid (all four quadrants). (previously covered Unit 14) • Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons. (previously covered Unit 13) • Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles. (previously covered Unit 13)
Transition Lessons and interventions	