# FELSTED PRIMARY SCHOOL

MATHS CURRICULUM AND ASSESSMENT – 2025





Nurturing today's minds for tomorrow's challenges

- Be Respectful
- Be Kind
- Be Safe

#### **OUR INTENT**

At FPS we apply a mastery approach to the teaching of Mathematics. Mastery in the teaching of mathematics is the belief that all children have the potential to succeed. They should have access to the same curriculum content and, rather than being extended with new learning, they should deepen their conceptual understanding by tackling challenging and varied problems. Similarly, with calculation strategies, children must not simply rote learn procedures but demonstrate their understanding of these procedures through the use of concrete materials and pictorial representations.

Through the provisions in our curriculum we intend to:

- Promote enjoyment and enthusiasm for learning through practical activity, exploration and discussion
- Promote confidence and competence with numbers and the number system
- Develop procedural fluency and conceptual understanding in all areas of maths
- Develop the ability to solve problems through decision-making and reasoning in a range of context
- Develop the skills of reasoning, enquiring and justifying
- Develop a practical understanding of the ways in which information is gathered and presented
- Explore features of shape and space, and develop measuring skills in a range of contexts
- Understand the importance of mathematics in everyday life
- For all pupils to 'master' maths

#### **IMPLEMENT**

The curriculum is based on the White Rose Maths Scheme: https://whiterosemaths.com/ Maths is taught daily for one hour and includes fluency, reasoning, and extension activities which are available for all students.

# WHITE ROSE YEARLY OVERVIEWS

# Year R

Autumn term	Week 1 Week 2  Getting to know you	Match and compa	are	Talk al measu and patter	ıre	It's me 1, 2, 3		Circles and triangles  Meek 9	Week 10	Week 11 4, 5	Week 12 Shapes with 4 sides Alexander Alexande
Spring term	Alive in 5	Mass and capacity	Growii 6, 7, 8		Lengt heigh time		Buildi	ng 9 and	10 VIEW	Explo 3-D s	re hapes <sub>VIEW</sub>
Summer term	To 20 and beyond	Many now?	Manip compo and decom	ose	Sharir group	ng and bing VIEW	Visual and m	ise, build ap	VIEW	Make connections	Consolidation

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number Place value (within 10)				Addition and subtraction (within 10)					Consolidation		
Spring	Number Place (withi	value in 20)			ion and action in 20)		Number Place (withi	value in 50)	Measure Lengt and heigh	:h	Measure Mass and volun	
Summer		plicatio ivision	n	Number <b>Fracti</b>	ions	Geometry Position and direction		value in 100)	Measurement Money	Measure <b>Time</b>	ment	Consolidation

Year 2

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10 Week 11 Week 12		
Autumn	Number Place value			Number Addition and subtraction				Geometry Shape				
Spring	Measu <b>Mo</b> n	rement	Numbe <b>Mul</b> t		olication and division			Measurement  Length  and  height			rement s, icity ar peratui	
Summer	Numbe Frac	er tions			Measurement Time			istics	and	tion	Conso	lidation

Year 3

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	
Autumn	Number Place value				Number Addition and subtraction					Number  Multiplication  and division A			
Spring	Number  Multiplication and division B							Number Fractions A			ement c <b>apacit</b> (	y	
Summer	Number Measurement Fractions B Money		Measurement Time			Geometi Shap		Statis	stics	Consolidation			

Year 4

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number <b>Place</b>	value				ion and	d	Measurement		plicatio livision		Consolidation
Spring		iplicatio livision		Measure Lengt and perin	th	Number <b>Fract</b>				Number <b>Decir</b>	nals A	
Summer	Number <b>Decir</b>	nals B	Measure <b>Mon</b> e		Measure <b>Time</b>		Consolidation	Geomet Shap		Statistics	Geomet Posit and direc	ion

Year 5

	Week 1 Week 2 Week 3	Week 4 Week 5	Week 6 Week 7 Week 8	Week 9 Week 10 Wee	ek 11 Week 12
Autumn	Number Place value	Number Addition and subtraction	Number  Multiplication  and division A	Number Fractions A	
Spring	Number Multiplication and division B	Number Fractions B	Number  Decimals and  percentages	Measurement Perimeter St and area	tatistics
Summer	Geometry Shape	Geometry Position and direction	Number  Decimals	Negative numbers  Convertin  units	

Year 6

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number Place	value	Number Addition, subtraction, multiplication and division				Number Fractions A Fractions				Measurement Converting units	
Spring	Ratio		Algeb	ra	Number <b>Decin</b>	nals	Number Fracti decim and perce	ons,	als perim and		Statis	tics
Summer	Geometr Shape			Geometry Position and direction	Them	ed proj	ects, co	onsolido	ation a	nd prob	olem so	lving

The yearly overview provides the sequence of units ensuring progression in each year group and between year groups. The order of the Small steps is followed to ensure suitable progression through a unit of teaching.

Use your professional judgement to plan and sequence lessons, making adjustments and adaptations where necessary. There is flexibility in how lessons are structured and delivered to respond to the individual needs of the class.

#### **IMPACT**

We aim for pupils to leave Felsted Primary School with a secure understanding of the academic content; with the understanding of how to be socially, morally, spiritually and culturally responsible and aware; how to make positive contributions to the local community and how to endeavour to be the best that they can be. We aim for all of our children to leave Felsted respectful, skilful, ambitious and with a thirst for life and all it has to offer.

By the end of their Primary career we intend for all our pupils to have:

- Enjoyment and enthusiasm for learning, demonstrating confidence to explore and discuss their maths
- Confidence and competence with numbers and the number system
- Procedural fluency and conceptual understanding in all areas of the taught maths curriculum.
- The ability to solve problems through decision-making and reasoning in a range of context
- The skills of reasoning, enquiring and justifying
- A practical understanding of the ways in which information is gathered and presented
- Explored features of shape and space, and developed measuring skills in a range of contexts
- An understanding of the importance of mathematics in everyday life
- Demonstrated a mastery of the maths primary curriculum

#### PROGRESS AND ASSESSMENT

# **SEND**

All children are taught together as a class with lessons adapted to suit the learning processes and needs of those with SEN.

# Mastery

The mastery approach aims for depth. Teachers do not accelerate a small group of pupils or leave out topics for struggling learners. Extension activities designed to embed and deepen understanding are available for all, as is support for those students who require it.

To ensure pupils are on track to achieve this we:

- Use short-term assessments to help adjust daily plans and / or provide immediate interventions so that the pupils do not develop gaps or fall behind the age expected standards. These short-term assessments are closely matched to the teaching objectives.
- Short-term assessments are recorded on Tapestry against the given assessment criteria.
- Use medium-term assessments to measure progress against the key objectives, and to help us plan the next unit of work. These are made on Tapestry and finalised at the end of every term. Put these assessments on the Assessment Overview on Teams for each class.
- The assessment criteria on Tapestry and our key assessment criteria are used to inform these judgements.

# **KEY ASSESSMENT CRITERIA BY YEAR GROUP:**

# Year 1

Autumn ON-TRACK STATEMENTS 10/ OBJECTIVES 7	Spring ON-TRACK STATEMENTS 21/OBJECTIVES 14	Summer ON-TRACK STATEMENTS 33/ OBJECTIVES 22
Number: Place Value  1. Count to ten, forwards and backwards, beginning with 0 or 1, or from any given number.  2. Count, read and write numbers to 10 in numerals and words.  3. Given a number, identify one more or one less.  4. Identify and represent numbers using objects and pictorial representations	Number: Addition and Subtraction  1. Represent and use number bonds and related subtraction facts within 20.  2. Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs.  3. Add and subtract one digit and two digit numbers to 20, including zero.  4. Solve one step problems that involve addition and subtraction, using	Number – Multiplication and division  1. Count in multiples of twos, fives and tens.  2. Solve one step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.  Number – Fractions
including the number line, and use the language of: equal to, more than, less than (fewer), most, least.  Number: Addition and Subtraction  5. Represent and use number bonds and related subtraction facts (within 10)  6. Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs.  7. Add and subtract one digit numbers to 10, including zero.  8. Solve one step problems that involve addition and subtraction, using concrete objects and pictorial representations and missing number problems	concrete objects and pictorial representations and missing number problems e.g. 7=[]-9  Number: Place Value  5. Count to fifty, forwards and backwards, beginning with 0 or 1, or from any given number.  6. Count, read and write numbers to 50 in numerals and words.  7. Given a number, identify one more or one less.  8. Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less	3. Recognise, find and name a half as one of two equal parts of an object, shape or quantity.  4. Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.  5. Compare, describe and solve practical problems for:  a) lengths and heights [ double/half];  b) mass/weight [for example, heavy/light, heavier than, lighter than];  c) capacity and volume [for example, full/empty, more than, less than, half, half full, quarter];
Geometry: Shape  9. Recognise and name common 2D shapes, including for example rectangles (including squares), circles and triangles.  10. Recognise and name common 3D shapes, including for example, cuboids	than (fewer), most, least.  9. Count in multiples of <b>two's</b> , <b>five's</b> and tens  Measurement: Length and height	Geometry – Position and direction 6. Describe position, direction and movement, including whole, half, quarter and three quarter turns.  Number – Place Value
(including cubes), pyramids and spheres  Number: Place Value  11. Count to twenty, forwards and backwards, beginning with 0 or 1, from any given number.  12. Count, read and write numbers to 20 in numerals and words.  13. Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less	10. Measure and begin to record lengths and heights 11. Compare, describe and solve practical problems for: lengths and heights (for example long/short, longer/shorter, tall/short, double/half)  Measurement: Weight and volume 12. Measure and begin to record mass/ weight, capacity and volume. 13. Compare, describe and solve practical problems for mass/weight (for example: heavy/light, heavier than/lighter than), capacity and volume(for example full/empty, more than/less than, half, half full, quarter	7. Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number.  8. Count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens.  9. Given a number, identify one more and one less. Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least
than (fewer), most, least.		Measurement – Money 10. Recognise and know the value of different denominations of coins and notes.  Measurement - Time 11. Sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening].  12. Recognise and use language relating to dates, including days of the week, weeks, months and years.  13. Tell the time to the hour and half past the hour and draw the hands on a
		clock face to show these times.  14. Compare, describe and solve practical problems for: time [for example, quicker, slower, earlier, later]  15. Measure and begin to record the following: time (hours, minutes, seconds)
Total <b>Statements</b> = 13  80% rule OF 13  WA = 10  GD = 11-13	Aut + Spr 13 + 13 = 26 statements 80% rule of 26 WA= 21	Aut + Spr + Sum  13 + 13 + 15 = 41 statements  80% rule of 41  WA = 33  GD = 34-41

Autumn ON-TRACK TARGET 13	Spring ON-TRACK TARGET 24	Summer ON-TRACK TARGET 35
1. Read and write numbers to at least 100 in numerals and words 2. Recognise the place value of each digit in a two digit number (tens, ones) 3. Identify, represent and estimate numbers to 100 using different representations including the number line. 4. Compare and order numbers from 0 up to 100; use <, > and = signs. 5. Use place value and number facts to solve problems 6. Count in steps of 2, 3 and 5 from 0 and in tens from any number, forward and backward.  Number – addition and subtraction 7. Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100. 8. Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two digit number and ones; a two digit number and tens; two 2- digit numbers; adding three one digit numbers. 9. Show that the addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot. 10. Solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures; applying their increasing knowledge of mental and written methods.  11. Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.  Measurement: Money 12. Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value. 13. Find different combinations of coins that equal the same amounts of money. 14. Solve simple problems in a practical context involving addition and subtraction and Division 15. Recall and use multiplication and division facts for the 2, 5 and 10 times tables, including recognising odd and even numbers. 16. Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication and division (÷) and equals (=) sign. 17. Solve problems involving multiplication and division and invision facts, including problems	Multiplication and Division  1. Recall and use multiplication and division facts for the 2, 5 and 10 times tables, including recognising odd and even numbers.  2. Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (x), division (÷) and equals (=) signs.  3. Solve problems involving multiplication and division using materials, arrays, repeated addition, mental methods and multiplication and division facts, including problems in context.  4. Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another is not.  Statistics  5. Interpret and construct simple pictograms, tally charts, block diagrams and simple tables.  6. Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity.  7. Ask and answer questions about totalling and comparing categorical data.  Geometry: Properties of Shape  8. Identify and describe the properties of 2D shapes, including the number of sides and line symmetry in a vertical line.  9. Identify and describe the properties of 3D shapes, including the number of edges, vertices and faces.  10. Identify 2D shapes on the surface of 3D shapes, [for example, a circle on a cylinder and a triangle on a pyramid].  11. Compare and sort common 2D and 3D shapes and everyday objects.  Number: Fractions  12. Recognise, find, name and write fractions 1/3, ¼, 2/4 and ¾ of a length, shape, set of objects or quantity.  13. Write simple fractions for example, ½ of 6 = 3 and recognise the equivalence of 2/4 and ½.  Measurement: Length and height  14. Choose and use appropriate standard units to estimate and measure length, height in any direction (m,cm)using rulers  15. Compare and order lengths and record the results using >, < and =.	Geometry – Position and direction  1. Use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three quarter turns (clockwise and anti-clockwise).  2. Order and arrange combinations of mathematical objects in patterns and sequences.  Problem Solving and Efficient Methods  Measurement – Time  3. Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times.  4. Know the number of minutes in an hour and number of hours in a day.  5. Compare and sequence intervals of time.  Measurement – Mass, Capacity and Temperature  6. Choose and use appropriate standard units to estimate and measure to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels:  a) length/height in any direction (m/cm); b) mass (kg/g); c) temperature (*C); d) Capacity (litres/ml).  7. Compare and order a) lengths, b) mass, c) volume/capacityand record the results using >, < and =.
Total <b>Statements</b> = 18  80% rule  WA = 14	Aut + Spr 18 + 15 = 33 statements 80% rule of 33 WA = 26	Aut + Spr + Sum  18 + 15 + 12 = 45 statements  80% rule of 45  WA = 36

Autumn ON-TRACK TARGET 12	Spring ON-TRACK TARGET 22	Summer ON-TRACK TARGET 35
Number – place value  1. Identify, represent and estimate numbers using different representations.  2. Find 10 or 100 more or less than a given number;  3. Recognise the place value of each digit in a three digit number (hundreds, tens, ones).  4. Compare and order numbers up to 1000  5. Read and write numbers up to 1000 in numerals and in words.  6. Solve number problems and practical problems involving these ideas.  7. Count from 0 in multiples of [4, 8,] 50 and 100  Number – addition and subtraction  8. Add and subtract numbers mentally, including: a three-digit number and ones; a three-digit number and tens; a three digit number and hundreds.  9. Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction.  10. Estimate the answer to a calculation and use inverse operations to check answers.  11. Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.  Number – multiplication and division  12. Count from 0 in multiplication and division facts for the 3, 4 and 8 multiplication tables.  14. Write and calculate mathematical statements for multiplication and division using the multiplication tables they know using the multiplication (x), division (÷) and equals (=) signs.  15. 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.	Number: Multiplication and Division  1. Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.  2. Write and calculate mathematical statements for multiplication and division using the multiplication tables they know, including for two-digit numbers times one-digit numbers, using mental methods and progressing to formal written methods.  3. Solve problems including missing number problems involving multiplication and division, positive integer scaling problems and correspondence problems in which n objects are connected to m objectives.  Measurement – Money  4. Add and subtract amounts of money to give change, using both £ and p in practical contexts.  Statistics  5. Interpret and present data using bar charts, pictograms and tables.  6. Solve one step and two step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables.  Measurement – Length and Perimeter  7. Measure, compare, add and subtract lengths (m/cm/mm);  8. Measure the perimeter of simple 2 D shapes.  Number - Fractions  9. Count up and down in tenths.  10. Recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10  11. Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators.  12. Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators.  13. Solve problems that involve all of the above.	Fractions  1. Recognise and show, using diagrams, equivalent fractions with small denominators.  2. Compare and order unit fractions, and fractions with the same denominators.  3. Add and subtract fractions with the same denominator within one whole [for example, \$/7 + 1/7 = 6/7].  4. Solve problems that involve all of the above.  Measurement – Time  5. Tell and write the time from:  a) an analogue clock and 12 hour and 24 hour clocks;  b) an analogue clock, including using Roman numerals from I to XII.  6. Estimate and read time with increasing accuracy to the nearest minute.  7. Record and compare time in terms of seconds, minutes and hours  8. Use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight.  9. Know the number of seconds in a minute and the number of days in each month, year and leap year  10. Compare durations of events [for example to calculate the time taken by particular events or tasks].  Geometry – Properties of shape  11. Recognise angles as a property of shape or a description of a turn.  12. 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.  13. Identify horizontal and vertical lines and pairs of perpendicular and parallel lines.  14. Draw 2 D shapes and make 3 D shapes using modelling materials.  15. Recognise 3 D shapes in different orientations and describe them.  Measurement – Mass and Capacity  16. Measure, compare, add and subtract mass (kg/g);  17. Measure, compare, add and subtract volume/capacity (I/mI).
Total <b>Statements</b> = 15  80% rule  WA = 12  GD = 13-15	15 + 13 = 28 statements 80% rule of 28	15 + 13 + 17 = 45 statements 80% rule of 45

# Year 4

Autumn ON-TRACK TARGET 13	Spring ON-TRACK TARGET 24	Summer ON-TRACK TARGET 37
Number – place value  1. Count in multiples of [6, 7, 9,] 25 and 1000.  2. Recognise the place value of each digit in a four digit number (thousands, hundreds, tens and ones)  3. Order and compare numbers beyond 1000.  4. Identify, represent and estimate numbers using different representations.  5. Round any number to the nearest 10, 100 or 1000.  6. Solve number and practical problems that involve all of the above and with increasingly large positive numbers.  7. Count backwards through zero to include negative numbers.  8. Read Roman numerals to 100 (1 to C) and know that over time, the numeral system changed to include the concept of zero and place value.  Number- addition and subtraction  9. Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate.  10. Estimate and use inverse operations to check answers to a calculation.  11. Solve addition and subtraction two step problems in contexts, deciding which operations and methods to use and why.  Measurement- Length and Perimeter  12. Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres  13. convert between different units of measure [for example, kilometre to metre]  Number – multiplication and division  14. Recall and use multiplication and division facts for multiplication tables up to 12 x 12.  15. Count in multiples of 6, 7, 9, [25 and 1000]  16. 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.  17. 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.	Number – Multiplication and Division  1. Recall multiplication and division facts for multiplication tables up to 12 x 12.  2. Use place value, known and derived facts to multiply and divide mentally, including:  a) multiplying by 0 and 1; b) dividing by 1; c) Multiplying together three numbers.  3. Recognise and use factor pairs and commutativity in mental calculations.  4. Multiply two digit and three digit numbers by a one digit number using formal written layout.  5. 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.  Measurement – Area  6. Find the area of rectilinear shapes by counting squares.  Fractions  7. Recognise and show, using diagrams, families of common equivalent fractions.  8. Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.  9. 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.  10. Add and subtract fractions with the same denominator.  Decimals  11. Recognise and write decimal equivalents of any number of tenths or hundredths.  12. 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.  13. Solve simple measure and money problems involving fractions and decimals to two decimal places.  14. Convert between different units of measure [for example, kilometre to metre]	Decimals  1. Compare numbers with the same number of decimal places up to two decimal places.  2. Round decimals with one decimal place to the nearest whole number.  3. Recognise and write decimal equivalents to 1/4, 1/2, 3/4.  4. 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.  Measurement – Money  5. Estimate, compare and calculate different measures, including money in pounds and pence.  6. Solve simple measure and money problems involving fractions and decimals to two decimal places.  Time  7. Convert between different units of measure [for example, hour to minute].  8. Read, write and convert time between analogue and digital 12- and 24-hour clocks.  9. Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.  Statistics  10. Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.  11. Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.  Geometry – Properties of shape  12. Identify acute and obtuse angles and compare and order angles up to two right angles by size.  13. Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes.  14. Identify lines of symmetry in 2 D shapes presented in different orientations.  15. Complete a simple symmetric figure with respect to a specific line of symmetry  Geometry – Position and direction  16. Describe positions on a 2 D grid as coordinates in the first quadrant.  17. Plot specified points and draw sides to complete a given polygon.  18. Describe movements between positions as translations of a given unit to the left/right and up/down.
Total <b>Statements</b> = 17  80% rule  WA = 14	Aut + Spr 17 + 14 = 31 statements 80% rule of 31 WA = 25	Aut + Spr + Sum 17 + 14 + 18 = 49 statements 80% rule of 49 WA = 39

#### **Autumn ON-TRACK TARGET 13 Summer ON-TRACK TARGET 41 Spring ON-TRACK TARGET 28** Number - place value Number - Multiplication and Division Number - Decimals 1. Read, write, order and compare numbers to at least 1000000 and 1. Multiply and divide numbers mentally drawing upon known facts. 1. Solve problems involving number up to three decimal places. determine the value of each digit. 2. Multiply numbers up to 4 digits by a one- or two digit number using a 2. Multiply and divide whole numbers and those involving decimals by 10, 100 2. Count forwards or backwards in steps of powers of 10 for any given number formal written method, including long multiplication for two digit numbers. up to 1000000. 3. Divide numbers up to 4 digits by a one digit number using the formal 3. Use all four operations to solve problems involving measure [for example, 3. Interpret negative numbers in context, count forwards and backwards with written method of short division and interpret remainders appropriately for length, mass, volume, money] using decimal notation, including scaling. positive and negative whole numbers including through zero. the context. Geometry – Properties of Shape and Angles 4. Solve number problems and practical problems that involve all of the above. 4. Solve problems involving addition, subtraction, multiplication and division 4. Identify 3 D shapes, including cubes and other cuboids, from 2 D 5. Read Roman numerals to 1000 (M) and recognise years written in Roman and a combination of these, including understanding the meaning of the representations. numerals. equals sign. 5. Use the properties of rectangles to deduce related facts and find missing Number- addition and subtraction Number - Fractions lengths and angles 6. Add and subtract numbers mentally with increasingly large numbers. 5. Compare and order fractions whose denominators are all multiples of the 6. Distinguish between regular and irregular polygons based on reasoning 7. Add and subtract whole numbers with more than 4 digits, including using about equal sides and angles. formal written methods (columnar addition and subtraction). 6. Identify, name and write equivalent fractions of a given fraction, 7. Know angles are measured in degrees: estimate and compare acute, obtuse 8. Use rounding to check answers to calculations and determine, in the context represented visually, including tenths and hundredths. and reflex angles. of a problem, levels of accuracy. 7. Recognise mixed numbers and improper fractions and convert from one 8. Draw given angles, and measure them in degrees (°). 9. Solve addition and subtraction multistep problems in contexts deciding form to the other and write mathematical statements > 1 as a mixed number Identify: which operations and methods to use and why. [for example, 2/5 + 4/5 = 6/5 = 11/5]. angles at a point and one whole turn (total 360°); 8. Add and subtract fractions with the same denominator and denominators b) angles at a point on a straight line and 1/2 a turn (total 180°); Statistics that are multiples of the same number. c) Other multiples of 90°. 10. Solve comparison, sum and difference problems using information 9. Multiply proper fractions and mixed numbers by whole numbers, Geometry - Position and direction presented in a line graph. supported by materials and diagrams. 9. Identify, describe and represent the position of a shape following a 11. Complete, read and interpret information in tables including timetables. 10. Read and write decimal numbers as fractions [for example, 0.71 = reflection or translation, using the appropriate language, and know that the shape has not changed. Number - multiplication and division 11. Solve problems involving multiplication and division, including scaling by Measurement - Converting Units 12. Multiply and divide numbers mentally drawing upon known facts. simple fractions and problems involving simple rates. 10. Convert between different units of metric measure (for example. 13. Multiply and divide whole numbers by 10, 100 and 1000. Number – Decimals and percentages 14. Identify multiples and factors, including finding all factor pairs of a kilometre and metre; centimetre and metre; centimetre and millimetre; gram 12. Read, write, order and compare numbers with up to three decimal number, and common factors of two numbers. and kilogram; litre and millilitre). 15. Recognise and use square numbers and cube numbers and the notation for 11. Understand and use approximate equivalences between metric units and 13. Recognise and use thousandths and relate them to tenths, hundredths common imperial units such as inches, pounds and pints. squared (2) and cubed (3) and decimal equivalents. 12. Solve problems involving converting between units of time. 16. Solve problems involving multiplication and division including using their 14. Round decimals with two decimal places to the nearest whole number knowledge of factors and multiples, squares and cubes. Measurement - Volume and to one decimal place. 17. Know and use the vocabulary of prime numbers, prime factors, and 13. Estimate volume [for example, using 1 cm3 blocks to build cuboids 15. Solve problems involving number up to three decimal places composite (non-prime) numbers. (including cubes)] and capacity [for example, using water]. 16. Recognise the per cent symbol (%) and understand that per cent relates to 18. Establish whether a number up to 100 is prime and recall prime numbers 14. Use all four operations to solve problems involving measure. 'number of parts per hundred', and write percentages as a fraction with up to 19 denominator 100, and as a decimal. 17. Solve problems which require knowing percentage and decimal equivalents of 1/2, 1/4, 1/5, 2/5, 4/5 and those fractions with a denominator of a multiple of 10 or 25. Aut + Spr Aut + Spr + Sum Total **Statements** = 18 18 + 17 = 35 statements 18 + 17 + 14 = 49 statements 80% rule 80% rule of 35 80% rule of 49 WA = 14 GD = 15-17 WA = 28GD = 29 - 35WA = 39 GD = 40-49

# Year 6

#### **Autumn ON-TRACK TARGET 16** Spring ON-TRACK TARGET 31 **Summer ON-TRACK TARGET 41** Number: place value Number - Decimals Geometry - Properties of Shape 1. Read, write, order and compare numbers up to 10 000 000 and determine 1. Identify the value of each digit in numbers given to three decimal places 1. Draw 2 D shapes using given dimensions and angles. the value of each digit. and multiply and divide numbers by 10, 100 and 1000 giving answers up to 2. Compare and classify geometric shapes based on their properties and sizes 2. Round any whole number to a required degree of accuracy. three decimal places. and find unknown angles in any triangles, quadrilaterals, and regular 3. Use negative numbers in context, and calculate intervals across zero. 2. Multiply one digit numbers with up to two decimal places by whole polygons. 4. Solve number and practical problems that involve all of the above 3, Recognise angles where they meet at a point, are on a straight line, or are Number – addition, subtraction, multiplication and division 3. Use written division methods in cases where the answer has up to two vertically opposite, and find missing angles. 5. Solve addition and subtraction multi step problems in contexts, deciding decimal places. Problem Solving ... 4. Solve problems which require answers to be rounded to specified degrees which operations and methods to use and why. 6. Multiply multi-digit number up to 4 digits by a 2 digit number using the of accuracy. Statistics formal written method of long multiplication. Number - Percentages 4. Illustrate and name parts of circles, including radius, diameter and 7. Divide numbers up to 4 digits by a 2 digit whole number using the formal 5. Solve problems involving the calculation of percentages [for example, of circumference and know that the diameter is twice the radius. written method of long division, and interpret remainders as whole number measures, and such as 15% of 3601 and the use of percentages for 5. Interpret pie charts and line graphs and use these to solve problems. remainders, fractions or by rounding as appropriate for the context. comparison. 6. Construct pie charts and line graphs. 8. Divide numbers up to 4 digits by a 2 digit number using the formal written 6. Recall and use equivalences between simple fractions, decimals and 7. Calculate and interpret the mean as an average percentages, including in different contexts. method of short division, interpreting remainders according to context. 9. Perform mental calculations, including with mixed operations and large Algebra Investigations... numbers. 7. Use simple formulae. 10. Identify common factors, common multiples and prime numbers. 8. Generate and describe linear number sequences. 11. Use their knowledge of the order of operations to carry out calculations 9. Express missing number problems algebraically. involving the four operations. 10. Find pairs of numbers that satisfy an equation with two unknowns. 12. Solve problems involving addition, subtraction, multiplication and division. 11. Enumerate possibilities of combinations of two variables 13. Use estimation to check answers to calculations and determine in the Measurement - Converting Units context of a problem, an appropriate degree of accuracy. 12. Solve problems involving the calculation and conversion of units of Fractions measure, using decimal notation up to three decimal places where 14. Use common factors to simplify fractions; use common multiples to express fractions in the same denomination. 13. Use, read, write and convert between standard units, converting 15. Compare and order fractions, including fractions > 1 measurements of length, mass, volume and time from a smaller unit of 16. Generate and describe linear number sequences (with fractions) measure to a larger unit, and vice versa, using decimal notation to up to 17. Add and subtract fractions with different denominations and mixed three decimal places. numbers, using the concept of equivalent fractions. 14. Convert between miles and kilometres. 18. Multiply simple pairs of proper fractions, writing the answer in its Measurement – Perimeter, area and volume simplest form [for example \( \frac{1}{2} \) x \( \frac{1}{2} \) = 1/8 \( \frac{1}{2} \) 15. Recognise that shapes with the same areas can have different perimeters 19. Divide proper fractions by whole numbers [for example $1/3 \div 2 = 1/6$ ] and vice versa. 20. Associate a fraction with division and calculate decimal fraction 16. Recognise when it is possible to use formulae for area and volume of equivalents [ for example, 0.375] for a simple fraction [for example 3/8 ] shapes. 21. Recall and use equivalences between simple fractions, decimals and 17. Calculate the area of parallelograms and triangles. percentages, including in different contexts. 18. Calculate, estimate and compare volume of cubes and cuboids using Geometry – position and direction standard units, including cubic centimetres (cm3) and cubic metres (m3), and 22. Describe positions on the full coordinate grid (all four quadrants. extending to other units [for example, mm3 and km3]. 23. Draw and translate simple shapes on the coordinate plane, and reflect Number - Ratio them in the axes. 19. Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts. 20. Solve problems involving similar shapes where the scale factor is known or can be found. 21. Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples. Aut + Spr + Sum Total **Statements** = 23 Aut + Spr 23 + 21 + 7 = 51 statements 23 + 21 = 44 statements 80% rule 80% rule of 44 80% rule of 51 WA = 18GD = 19-23 GD = 42-51WA = 35GD = 36-44WA = 41

Use long-term assessments at the end of the school year. Use the assessment overviews, assessments from Tapestry and teacher judgements to ascertain the standard the child is working at by the end of the year. In year 6 we use national tests for children and the statutory assessment framework to make end of key stage judgements.

MONITORING

This is carried out termly by the subject leader who carries out book-looks, lesson observations, Tapestry posts, student and staff voice (through surveys).

### **ROLES AND RESPONSIBLITIES**

The monitoring of the standards of children's work and of the quality of teaching is the responsibility of the Maths subject leader. The work of the subject leader also involves supporting colleagues, being informed about current developments and competitions in the subject, as well as providing a strategic lead and direction for the subject in the school.

As well as making its own distinctive contribution to the school curriculum, meths contributes to the wider aims of primary education.

# **RESOURCES**

The curriculum at Felsted Primary School is based on the White Rose Maths Scheme: https://whiterosemaths.com/
NCETM teaching for Mastery materials (https://www.ncetm.org.uk/teaching-for-mastery/mastery-materials/) as well as Power Maths text books
and practice books are also used as an additional resource to support the implementation of the Maths curriculum.

## PROFESSIONAL DEVELOPMENT

This is achieved through Inset sessions where the Maths subject leader shares latest best practice taken from sessions with the local Maths Hub and DEEP partnership.

# **EQUAL OPPORTUNITIES**

Careful planning and awareness of individual children's needs and interests will ensure that every child will have equal access to the Maths Curriculum regardless of race, gender or class.

# **POLICY MONITORING**

The Maths leader is responsible for the monitoring of the implementation of this policy. The leader reports to the head teacher on the effectiveness of the policy.

The policy will be reviewed every year.

REVIEWED ON: 31st January 2025

By:

**NEXT REVIEW DATE: January 2026**