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#### The Federation of Spixworth Schools

To achieve positive outcomes for the whole child, through the values, strengths and characteristics of both schools.

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Dear Families,

We are pleased to share with you a new resource that we have created to support you in understanding the Maths curriculum and working with your child to help them build their confidence in key Maths skills.

We have listed each key skill, for each year group. Your child will have the key skills for the year they have just completed - so you can check they are secure in each skill and know what to focus on if not, and the key skills for the year they will go into next year - so you can prepare for the learning to come.

These lists of key skills can be used in any way that suits you and your child. You could start from the top and work your way through, asking questions, setting challenges or simply finding a relevant You Tube clip or Espresso lesson. You could use the lists more randomly, picking an area your child enjoys most and raising their confidence further, or picking something they feel less confident with and spending 10 minutes a day on this area alone. You might hang the lists on the fridge, pop in the car for those longer journeys or share with grandparents for that overnight stay...

We hope that you will use this resource with your children over the Summer and into next year and that their skills and confidence in Maths grow as a result.

We have provided paper copies, but this resource is also available on our website.

If you have any feedback on this resource, please let us know.

Best wishes for a marvellous, mathematical Summer!



















### **Year 1 End of Year Expectations**



	I am learning to	✓		I am learning to	✓		
	Count forwards in 1s, 2s, 5s and 10s up to 100 starting at any number		<u>.i.</u>	Solve one-step times table and division problems up to 20 using objects, graphs, charts and arrays with my teacher's help			
	Count backwards in 1s, 2s, 5s and 10s up to 100 from any number		X and ÷	Understand the x and ÷ sign			
	Read and write numbers from 1 to 20 in digits and words			Tell you what halving and doubling are			
Value	Count in multiples of twos , fives and tens		ion	Tell you what happens if you add two equal halves of a shape together			
Place	Say a number which is one more than any given number up to 100		Fraction	Tell you what happens if you add four equal quarters of a shape together			
Number and Place Value	Say a number which is one less than any given number up to 100			Measure and compare lengths and heights and write my results in centimetres and metres			
NE	Make numbers using objects and number lines			Measure and compare mass and weights and write my results in grams and kilograms			
	Use the language of: equal to, more than, less than (fewer), most, least		Measurement and Geometry	Measure and compare capacity and volume and write my results in millilitres and litres			
	Count, read and write numbers to 100			Measure how long things take and write my results in minutes, seconds and hours			
	Understand the words add, total, sum and find the difference			Recognise the value of different coins and notes			
	Add 2 single digits up to 20			Sequence events in time order using correct language			
	Add a single digit number to a 2-digit number up to 20			Tell you the difference between days, months and version the date			
	Add 3 single digits up to 20			Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times			
	Subtract a single digit from a 2-digit number up to 20			Identify squares, rectangles, circles and triangles			
and -	Answer addition number bonds to 20			Identify cuboids, cubes, pyramids and spheres			
+ ar	Answer subtraction number bonds to 20			Describe things which are either top, bottom, middle, next to and directions			
	Solve one-step problems that involve addition up to 100 using apparatus			Describe things which have made half, quarter and three-quarter turns			
	Solve missing number problems that involve addition using apparatus		Useful websites:				
	Solve one-step problems that involve subtraction using apparatus		https://www.topmarks.co.uk/maths-games/5-7-years/counting				
	Solve missing number problems that involve subtraction using apparatus		https://www.bbc.co.uk/bitesize/subjects/zjxhfg8 https://mathsframe.co.uk/en/resources/category/22/most-popular				



## **Year 2 End of Year Expectations**



	I am learning to	✓		I am learning to	✓		
	Count in steps of 2,3 and 5 from 0, and in tens from any number, forward and backward			Estimate and measure length and height, mass, temperature and capacity to the nearest appropriate unit, using rulers, scales,			
ber	Identify, represent and estimate numbers in different representations, including the number line			Read scales to the nearest numbered unit			
Number	Compare and order numbers from 0 up to 100 using, < > and =		ement	Compare and order lengths, mass, volume/capacity and record the results using, < > and =			
	Partition numbers (tens, ones) and use this to solve number problems		Measurement	Tell and write the time to five minutes and draw the hands on a clock face to show these times			
	Read and write numbers to at least 100 in numerals and in words			Compare and sequence intervals of time			
	Mentally add and subtract two-digit numbers and ones			Add and subtract amounts up to £20 and work out the change from £5			
	Mentally add and subtract three single digit numbers			Make different amounts of money using the correct coins			
	Mentally add and subtract two-digit numbers and tens			Name and describe 2-D shapes, by the number of sides, right angles and symmetry			
and -	Add and subtract two two-digit numbers			Name and describe 3-D shapes, by the number of edges, corners, faces and right angles			
+	Check my answers to missing number problems by using the inverse		ح ا	Compare and sort common 2-D and 3-D shapes			
	Solve simple addition and subtraction word problems		Geometry	Identify 2-D shapes on the surface of 3-D shapes			
	Use addition and subtraction facts to 20 fluently and use related facts up to 100		9	Describe the amount of turn using right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise), and movement in a straight line			
	Write multiplication statements for x2, x5, and x10 using the multiplication and equals signs			Order and arrange objects in patterns and sequences			
X and ÷	Write division statements for x2, x5, and x10 using the division and equals signs			Make a block diagram and ask and answer questions about it			
×	Solve one-step multiplication problems using apparatus if required		Stats	Ask and answer questions about the information in a simple table			
	Solve one-step division problems using apparatus if required						
	Explain how two quarters is the same as one half		Useful websites:				
Fractions	Calculate one third and one quarter of numbers up to 100		https://www.topmarks.co.uk/maths-games/5-7-years/counting				
Fra	Count in quarters up to 10		https://www.bbc.co.uk/bitesize/subjects/zjxhfg8 https://mathsframe.co.uk/en/resources/category/22/most-popular				



### **Year 3 End of Year Expectations**



	I am learning to	✓		I am learning to	✓
Number	Read, and write numbers to at least 1000 in numerals and words			now using diagrams, equivalent fractions with small denominators	
	Recognise the place value of each digit in a three -digit number		Fractions	Add and subtract fractions with the same denominator up to one whole	
	Count from 0 in multiples of 4, 8, 50 and 100			Count up and down in tenths and recognise tenths arise from dividing an object into 10 equal parts	
	Identify and estimate numbers			Solve fraction problems using what I know so far about fractions	
	Compare and order numbers up to 1000 using =, > and <			Find non unit fractions with small denominators of a set of objects	
	Add numbers with up to 3-digits, using the column method with carrying and exchanging			Add and subtract amounts of money to give change	
	Subtract numbers with up to 3-digits, using the column method with carrying and exchanging		Measurement	Measure, compare, add and subtract: length, mass and volume/capacity	
÷	Estimate the answer to a calculation			Tell and write the 12-hour and 24-hour time using Roman numerals	
+ and	Use inverse operations to check answers			Read time to the nearest minute and use am/pm morning, afternoon, noon and midnight	
	Solve missing number addition and subtraction problems			Calculate how long events will take and know how many seconds in a minute and days in each month	
	Solve more complex addition and subtraction problems		Shape	Draw horizontal, vertical, perpendicular and parallel lines	
	Mentally add and subtract a 3-digit number and a hundreds number			Draw 2D shapes and make 3D shapes using different materials	
	Multiply a 2-digit number by a single digit using a simple grid			Identify right angles and workout if angles are greater or less than a right angle	
and ÷	Answer multiplication and division facts for the 2, 3, 4, 5, 8, 10, 11 times tables			Recognise two right angles make a half turn, three make three quarters of a turn and so on	
Xan	Solve problems, including missing number problems		Data	Solve one-step and two-step questions such as 'How many more?' and 'How many fewer?' using information presented in tables	

### Useful websites:

https://mathsframe.co.uk/

https://www.bbc.co.uk/bitesize/subjects/z826n39

https://school-learningzone.co.uk/key stage two/ks2 maths/ks2 maths.html

Don't forget your child has a Times Table Rockstar account too!



### **Year 4 End of Year Expectations**



	I am learning to	<b>√</b>		I am learning to	✓
	Read Roman numerals to 100			Count up and down in hundredths and write decimal equivalents of tenths and hundredths	
	Find 1000 more or less than a given number		_	Solve problems involving increasingly harder fractions	
Number and Place Value	Count backwards through zero and understand that -3 is greater than -5		Fractions	Round decimals with one decimal place to the nearest whole number	
	Order numbers up to 10,000 using =, > and <		Fra	Order numbers with the same number of decimal places up to one decimal place	
and Pl	Recognise the place value of each digit in a four-digit number			Calculate equivalent fractions of a given fraction including tenths and hundredths	
mber	Count in multiples of 6, 7, 9, 25 and 1000			Add and subtract fractions with the same denominator	
ž	Identify, represent and estimate numbers			Count up and down in hundredths and write decimal equivalents of tenths and hundredths	
	Round any numbers to the nearest 10, 100 or 1000		ıres	Solve problems involving increasingly harder fractions	
	Solve number problems involving all of the above		Measures	Solve simple measure and money problems involving fractions and decimals to two decimal places	
	Solve 2-step problems by deciding which operation to use and why			Read, write and convert time between analogue and digital	
+ and -	Add and subtract numbers with up to 4 digits using the column method			Compare 2-D shapes, including quadrilaterals and triangles, based on their properties and sizes	
+	Make a sensible estimate and check the answer using the inverse operation		be	Identify acute and obtuse angles and compare and order angles up to two right angles by size	
	Answer multiplication and division facts for multiplication tables up to 12x12 very quickly		Shape	Identify lines of symmetry in 2D shapes and complete simple symmetrical patterns	
-1-	Say all the square numbers			Describe positions on a 2D grid as coordinates and describe movements in units left/right and up/down	
X and	Work out the factor pairs and use them in mental calculations			Solve a problem by collecting data, presenting it in a bar chart and interpreting it	
	Multiply 2-digit and 3-digit numbers by a 1-digit number using formal written method		Data	Solve a problem by collecting data, presenting it in a line graph and interpreting it	
	Solve more complex problems			Don't forget your child	

**Useful websites:** 

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https://www.bbc.co.uk/bitesize/subjects/z826n39

https://school-learningzone.co.uk/key stage two/ks2 maths/ks2 maths.html

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# **Year 5 End of Year Expectations**



I am learning to	✓		I am learning to	✓		
Count forwards and backwards in steps of 1,000 and 100,000 from any number up to 1,000,000			Solve problems which require knowing percentage and decimal equivalents of 1/2, 1/4, 1/5, 2/5, 4/5 and those with a denominator of a multiple of 10 or 25			
Round any number up to 1,000,000 to the nearest 100,000 10,000, 1000, 100 and 10			Read, write, order, compare and round decimals			
Read Roman numerals to 1000(M) and recognise years written in Roman numerals		us	Compare and order fractions whose denominators are all multiples of the same number			
Solve number problems and practical problems that involve all these aspects		Fractio	Add and subtract fractions with the same denominator and related fractions; write mathematical statements >1 as a mixed number			
Read, write and compare numbers to at least 1,000,000			Multiply proper fractions and mixed numbers by whole numbers up to 10, supported by materials and diagrams			
Understand negative numbers in context and count backwards and forwards with positive and negative numbers			Recognise the percent symbol (%) and understand it relates to 'number of parts per hundred'			
Mentally add and subtract any 2 and 3-digit numbers			Convert metric to common imperial units and imperial to metric			
Add and subtract any 1000s number from any 5-digit number		ıres	Measure and calculate the perimeter of composite rectilinear shapes in cm and m			
Use rounding to check answers		Measu	Calculate and compare the areas of squares and rectangles using square centimetres and square metres and estimate the area of irregular shapes			
Solve addition and subtraction multi-step problems			Convert between different units of metric measure and estimate volume			
Identify multiples and be able to find all factor pairs			Draw given angles and compare and estimate different types of angles			
Recognise and use squared and cubed numbers and the correct notation			State and use the properties of a rectangle (including squares) to deduce related facts			
Work out if a number is prime up to 100 and recall prime numbers up to 19		аре	Distinguish between regular and irregular polygons based on reasoning about equal sides and angles			
Solve problems where larger numbers are used by decomposing them into their factors		Sh	Identify multiples of 90°; angles at a point on a straight line and ½ a turn (total 180°); angles at a point and one whole turn (total 360°); reflex angles and compare different angles			
Multiply numbers up to 4-digits by a 1-digit and 2-digit number using an efficient written method			Identify, describe and represent the position of a shape following a reflection or translation in all four quadrants and know that the shape has not changed			
Divide numbers up to 4-digits by a 1-digit number using short division written method		ta	Solve problems using information presented in line graphs			
Solve problems including scaling by simple fractions and problems involving simple rates		Da	Interpret information in tables and timetables  Don't forget your child  bas a Times Table	1		
Solve problems using all four operations		Useful websites:  Rockstar account too!				
Multiply and divide whole numbers and decimals by 10, 100 and 1000		https://mathsframe.co.uk/				
	Count forwards and backwards in steps of 1,000 and 100,000 from any number up to 1,000,000  Round any number up to 1,000,000 to the nearest 100,000 10,000, 1000, 100 and 10  Read Roman numerals to 1000(M) and recognise years written in Roman numerals  Solve number problems and practical problems that involve all these aspects  Read, write and compare numbers to at least 1,000,000  Understand negative numbers in context and count backwards and forwards with positive and negative numbers  Mentally add and subtract any 2 and 3-digit numbers  Add and subtract any 1000s number from any 5-digit number  Use rounding to check answers  Solve addition and subtraction multi-step problems  Identify multiples and be able to find all factor pairs  Recognise and use squared and cubed numbers and the correct notation  Work out if a number is prime up to 100 and recall prime numbers up to 19  Solve problems where larger numbers are used by decomposing them into their factors  Multiply numbers up to 4-digits by a 1-digit and 2-digit number using an efficient written method  Divide numbers up to 4-digits by a 1-digit number using short division written method  Solve problems including scaling by simple fractions and problems involving simple rates  Solve problems using all four operations	Count forwards and backwards in steps of 1,000 and 100,000 from any number up to 1,000,000  Round any number up to 1,000,000 to the nearest 100,000 10,000, 1000, 100 and 10  Read Roman numerals to 1000(M) and recognise years written in Roman numerals  Solve number problems and practical problems that involve all these aspects  Read, write and compare numbers to at least 1,000,000  Understand negative numbers in context and count backwards and forwards with positive and negative numbers  Mentally add and subtract any 2 and 3-digit numbers  Add and subtract any 1000s number from any 5-digit number  Use rounding to check answers  Solve addition and subtraction multi-step problems  Identify multiples and be able to find all factor pairs  Recognise and use squared and cubed numbers and the correct notation  Work out if a number is prime up to 100 and recall prime numbers up to 19  Solve problems where larger numbers are used by decomposing them into their factors  Multiply numbers up to 4-digits by a 1-digit and 2-digit number using an efficient written method  Divide numbers up to 4-digits by a 1-digit number using short division written method  Solve problems including scaling by simple fractions and problems involving simple rates  Solve problems using all four operations	Round any number up to 1,000,000 to the nearest 100,000 10,000, 1000, 100 and 10  Read Roman numerals to 1000(M) and recognise years written in Roman numerals  Solve number problems and practical problems that involve all these aspects  Read, write and compare numbers to at least 1,000,000  Understand negative numbers in context and count backwards and forwards with positive and negative numbers  Mentally add and subtract any 2 and 3-digit numbers  Add and subtract any 1000s number from any 5-digit number  Use rounding to check answers  Solve addition and subtraction multi-step problems  Identify multiples and be able to find all factor pairs  Recognise and use squared and cubed numbers and the correct notation  Work out if a number is prime up to 100 and recall prime numbers up to 19  Solve problems where larger numbers are used by decomposing them into their factors  Multiply numbers up to 4-digits by a 1-digit and 2-digit number using an efficient written method  Divide numbers up to 4-digits by a 1-digit number using short division written method  Solve problems including scaling by simple fractions and problems involving simple rates  Multiply and divide whole numbers and decimals by 10, 100 and 1000  Multiply and divide whole numbers and decimals by 10, 100 and 1000	Solve problems which require knowing percentage and decimal equivalents of 1/2, 1/4, 1/5, 2/5, 4/5 and those with a denominator of a multiple of 30 or 25  Read, write, order, compare and round decimals  Add and subtract fractions whose denominators are all multiples of the same number  Add and subtract fractions which is same denominator and related fractions, write mathematical statements > 2 as a mixed number  Multiply proper fractions and mixed numbers by whole numbers up to 10, supported by materials and diagrams  Recognise the percent symbol (%) and understand it relates to "number of parts per hundred"  Meantly did and subtract any 1000s number from any 5-digit numbers  Add and subtract any 1000s number from any 5-digit number  Use rounding to check answers  Solve problems where larger numbers and the correct notation  Work out if a number is prime up to 100 and recall prime numbers up to 19  Solve problems where larger numbers are used by decomposing them into their factors  Multiply numbers up to 4-digits by a 1-digit number using an efficient written method  Solve problems using all four operations  Useful websites:  Don't forget your child has a Times Table Rockstar account to tool  Solve problems using all four operations  Useful websites:		



# **Year 6 End of Year Expectations**



	I am learning to	✓		I am learning to	✓
Number	Read, write, order and compare numbers up to 10,000,000		S	Solve problems involving similar shapes where the scale factor is known or can be found	
	Round any whole number to a required degree of accuracy		Fractions	Solve simple ratio and proportion problems	
	Perform mental calculations, including with mixed operations and large numbers		Ē	Solve problems involving the calculation of percentages	
	Use negative numbers in context and calculate across zero			Use simple formulae	
	Solve problems that involve all of the above			Generate and describe linear number sequences	
	Multiply and divide numbers up to 4-digits by a 2-digit whole number up to 20 using the efficient written method and interpret remainders (when dividing) as whole number remainders, fractions or by rounding, as appropriate for the context		Algebra	Express missing number problems algebraically	
÷ × - +	Solve multi-step problems involving the 4 operations and use estimations to check answers to calculations			Find pairs of numbers that satisfy an equation with two unknowns	
	Use my knowledge of the order of operations to carry out calculations involving the 4 operations			Enumerate all possibilities of combinations of two variables	
	Perform mental calculations, including mixed operations and large numbers			Recognise that shapes with the same areas can have different perimeters and vice versa	
	Add and subtract fractions with different denominators and mixed numbers using the concept of equivalent fractions		Measurement	Calculate the area of parallelograms and triangles and be able to use the correct formulae	
	Multiply simple pairs of proper fractions writing the answer in its simplest form (eg $1/4 \times 1/2$ )			Calculate the volume of cubes and cuboids using centimetre cubed and cubic metres and extending to other units, such as mm cubed and km cubed	
<b>%</b>	Divide proper fractions by whole numbers (eg $1/3 \div 2 = 1/6$ )			Solve problems involving calculation and conversion of units	
Fractions %	Multiply 1-digit numbers with up to 2 decimal places by whole numbers			Use, read, write and convert between standard units	
Fraci	Use written division methods in cases where the answer has up to 2 decimal places			Classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals and regular polygons	
	Solve problems which require answers to be rounded to specified degrees of accuracy			Find unknown angles where they meet at a point and are on a straight line and are vertically opposite	
	Compare, order and simplify fractions		Shape	Draw 2D shapes using given dimensions and angles Recognise, describe and build simple 3D shapes, including making nets	
	Recall and use equivalences between fractions, decimals and percentages		S	recognise, describe and band simple 3D shapes, including making nees	
and	Solve problems involving the relative sizes of 2 quantities			Illustrate and name parts of a circle and know that the diameter is twice the radius	
Ratio and Proportion	Solve problems involving unequal sharing and grouping eg 3/5 of the class are boys etc			Describe positions on the full coordinate grid (all four quadrants)	
	Useful websites:			Draw and translate simple shapes on the co-ordinate plane, reflect them in the axes and rotate around a point	
https://mathsframe.co.uk/ https://www.bbc.co.uk/bitesize/subjects/z826n39			Data	Interpret and construct pie charts and use these to solve problems using my knowledge of angles, fractions and percentages	
iittps	https://school-learningzone.co.uk/key_stage_two/ks2_maths/ks2_maths.html			Calculate and interpret the mean as an average	