## Maths Leader Impact Presentation

Presentation to staff and Governors 2022

Maths

Katherine Redman







Mathematics

"Enabling life in all its fullness"

"I came that you may have life, life in all its fullness" (John10:10)

Our **Core Christian values** for our school are: *Perseverance, Creativity, Trust and Friendship*.



The most important thing about **Maths** is to gain a deep, encompassing sense of number

We make connections

We reason our thinking

We solve problems

And we recognise that Maths equips us with a powerful set of tools to help us understand and navigate the world

But most important thing about **Maths** is to gain a deep, encompassing sense of number





Information for parents: 2021 multiplication tables check







#### Ashton Keynes C of E Primary School

Calculation policy September 2020

		Steps
Band 1 - Maths An		
iber and Place Value	Multiplication and Division	Measurement
to and across 106, forwards and lackwards, ing with 8 or 1, or from any given number. I count is early peel 106, forwards and declevants ting from any number.	Solve site step politiens insolving multiplication by calculating the answer camp occurrence objects, pottmal representations and arrays with the support of the backwork. A can aresee multiplication genetices using objects, potteres and other documents.	Company, describe and solve practical problems for lengths and heights ag, longitudor, longer/shows, tablishes, doublished. From solve problems for length and height yould write which objects are longer or shortentially ar shorten.
nd read numbers to 198 in numerals. count and read numbers to 198 in numerals. nd write numbers to 198 in numerals.	Solve are-step problems involving, division by calculating the ansater using committe objects, political representations and	Compare, describe and asive practical problems for massivelying a g, heavylight, heavier than, lighter than, I can solve problems for mean and weight by billing
count and arite numbers to 100 in numerals.	arrays with the wapport of the leadest 7 can arrayer division questions using objects, pictures and other apupment	which adjusts are beauter or lighter.
multiples of twos, fives and term. count in jumps of 2, 8 and 18.	Fractions	Compare, describe and solve practical probleme for reparity and volume e.g. fulliengig, more than, less than, tait, half full, quarter.
one more and one less of a given number. identify one more and one less, given a starting let	Recognition, find and name a half as one of two-equal parts of an object, shaps or quantify I can find and name 12 that? of an object, shape or	Loss solve problems for capacity and rolanse by solling if a container is empty, half full or full and if there is more in one container than another.
nd represent numbers using objects and potonal satistic instanting the number line, and use the in equal loc more than, trees than (ferrer), must, bead, that and above numbers using signals and potons for our other numbers of satisfies the potons ferrer), most thead.	amount Recognise, find and name a quarter as one of floor equal jurits of an object, single-or quartity, Ji can find and rener 14 Quarter as one of four equal parts	Compare, describe and solve practical problems for time ing, quicker, stores, sortier, tells. I can solve problems if non-ran-bill Faceworking is quicker or alower i can bill if something happened and/or or later.
(herer), most, least di antie numbers from 1 to 20 in numerato, read and ante numbers from 1 to 20 in numbers	of an object, shape or amount	Measure and begin to record manufactight. Licen measure weight or mass and write Pleas measurement down.
d write numbers from 1 to 30 in words. waar and write numbers from 1 to 30 in words.	Properties of Shape Record and some common 2.0 shapes sig rectangles feecheding sequenci, circles and shapes suit as A an incorpora and name common 2.0 shapes suit as record prices.	Measure and leager to record capacity and votures. I can measure capacity or voture and write measurements down.
ition and Subtraction	rectangles, squares, circles and biangles. Recognise and name common 3.0 shapes e.g. cuboids	Recognise and know the value of different denominations of spins and noise.
Consequent mathematical statements involving addition soliton (-) and expanis (*) spins. mail and understand number statements using +, +, +,	(including cubee), pyramide and sphanes. I can recognize and name common 3.0 shapes such as cubolyb, cubee, pyramide and spheres.	T can be have much offerent cans or notes are excell. Sequence events in chronological order cans tenging e.g. before and after next, this, today yesterbay temoros, morring aftersoon and searchs.
dhematical statements involving addition (+), on (-) and equels (+) signs the number statements using +, - and +	Position and Direction	Licent bill when things happened by using these works before after, next, find, tooley yestenday tumorese, moning afternoor, evening
rt and use number bonds within 28. use number bonds up to 26.	Describe position, direction and movement, including whole, half, quarter and three-quarter terms. I can tell about whole, half, quarter and three quarter turns.	Recognise and use language relating to dates, including days of the week, weeks, months, and years. I can be about date using the days of the week, weeks,
nt and use subtraction facts within 28. use automaction facts up to 20.	I can then use this to explain movement, direction and assettion.	months and years. Tell the time to the hour and half peak the hour and draw
rigit and two-digit numbers to 20, including serio xXV one digit and two digit numbers to 20		the hands on a clock face to show these lines. I can be what the time is in hours and half past the hour I can dear these on a clock face.
one-digit and two-digit numbers to 20, including sero, autified one digit and two digit humbers to 20.		Mossure and begin to record length/height. I can measure and begin to record length/height.
e ship problems that involve addition, subfraction and sumbers using concerne objects and publication bittoms wisered public that use addition and subfraction, may meaning number problems, using objects and the		
		Target Tracker

### **AK Website**

- Policy updated and on website: Yes
- Website updated: in progress (with Sarah)

(intent poem, updated policy, photos, progression documents, parent links, multiplication guidance, photos and work samples – all sent to website in Feb)

To add: pupil voice (it is in this presentation)

## Implementation - How?

• Year group annual overviews with Ready to Progress Criteria

	Wk1 1.9.20	Wk2 7.9.20	Wk3 14.9.20	Wk4 21.9.20	Wk5 28.9.20	Wk6 5.10.20	Wk7 12.10.20	Wk8 19.10.2 0	Wk9 2.11.20	Wk10 9.11.20	Wk11 16.11.20	Wk12 23.11.20	Wk13 30.11.20	Wk14 7.12.20	Wk15 14.12.20	
Aut umn	compose ar	nd decompos	Place lace value of e two-digit nu				practice.	-	addition and	on and Subt	raction	, through con	tinued	Мо	ney	
	number sys	ason about th tem, includin	ne location of g identifying t	the previous a	nd next multi	iple of 10.	2AS-2 Reco form, "How 2AS-3 Add facts: add a 2AS-4 Add facts: add a	many more. and subtract nd subtract o and subtract nd subtract a	otraction struc ?". within 100 by only ones or of within 100 by ony 2 two-digit	applying reland applying tens to/fro applying rela	rence' and an ated one-digit om a two-digi ated one-digit	addition and t number. addition and	subtraction			
	Wk1 4.1.21	Wk2 11.1.21	Wk3 18.1.21	Wk4 25.1.21	Wk5 1.2.21	Wk6 8.2.21	Wk7 22.2.21	Wk8 1.3.21	Wk9 8.3.21	Wk10 15.3.21	Wk11 22.3.21	Wk12 29.3.21		Notes:		
Spri ng	multiplicati	ognise repea on equations	Multiplicatic ted addition c and calculatir	ontexts, repr	esenting then				Fractions	1	•	Time				
		ate grouping ation equatio	problems whe													
	Wk1 19.4.21	Wk2 26.4.21	Wk3 3.5.21	Wk4 10.5.21	Wk5 17.5.21	Wk6 24.5.21	Wk7 7.6.21	Wk8 14.6.21	Wk9 28.6.21	Wk10 5.7.21	Wk11 12.7.21	Wk12 19.7.21				
Sum mer	Time	Stati	istics		o describe ries of 2D pes, and hapes by bout and in	Measu	7.6.2114.6.2128.6.215.7.2112.7.2119.7.21urement & HeightGeometry Position & DirectionMeasurement Mass, Capacity & Temperature									



ASHTON KEYNES Church of England VC Primary School

#### SHINE BRIGHT \* REACH FOR THE STA

#### Small steps overview



#### **Calculation Policy guidance**

#### Year | Addition

quantities

whole

e.g. 16 + 4 =

16

#### Statutory Requirements

Pupils should be taught to

- · read, write and interpret mathematical statements involving addition (+) and equals (+) signs
- represent and use number bonds within 20 ٠
- add one-digit and two-digit numbers to 20, including zero ٠
- solve one-step problems that involve addition, using concrete objects and pictorial representations. and missing number problems such as 7 = 1 + 2.

#### Concrete Objects Pictures/Marks Finding the total of a group of items e.g. counters, Using simple drawings to record and calculate the teddies, dinosaurs etc. total. Using Numicon to notice patterns when adding two 00000 e.g. Lisa has 5 lollies and Tim has 2 lollies How many lollies do they have altogether? Number Lines 100 Squares Using prepared number lines to record "jumps' and Finding a starting point on the hundred square and drawing own number lines to solve calculations. moving to the right to count on in ones or moving down to add tens. $\dots$ . . . . . . . . . . . . . . . Bar Modelling As at Year R, for larger numbers. Individual cells are removed to show the numbers as a part of the

4

### Year group progression

Ruse

#### Primary Progression - Place Value

Q

						Mothe
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Place Value : PV and Compare	<ul> <li>given a number, identify one more and one less</li> </ul>	<ul> <li>recognise the place value of each digit in a two-digit number (tens, ones)</li> <li>compare and order numbers from 0 up to 100; use &lt;&gt; and + signs</li> </ul>	recognise the place value of each digit in a three digit number (bundleds, ters, ones) compare and order numbers up to 1000	find 1000 more or less than a given number     recognise the place value of each digit in a four-digit number (thousands, hundreds, terrs, and ones)     order and compare numbers bayond 1000	<ul> <li>(read, write) order and compare numbers to at least 1000 000 and determine the value of each digit</li> </ul>	<ul> <li>(read, write), order and compare numbers up to 10 000 000 and determine the value of each digit</li> </ul>
Use	Autumn 1 Autumn 4 Spring 2 Summer 4	Autumn 1	Autumn 1	Autumn 1	Autumn 1	Autumn 1
Place Value: Problems& Rounding		<ul> <li>use place value and number facts to solve problems.</li> </ul>	<ul> <li>solve number problems and practical problems involving these ideas</li> </ul>	<ul> <li>round any number to the nearest 10, 100 or 1000</li> <li>solve number and practical problems that involve all of the above and with increasingly large positive numbers</li> </ul>	Interpret negative numbers in context round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000 solve number problems and practical problems that involve all of the above	<ul> <li>round any whole number to a required degree of accuracy</li> <li>use negative numbers in context, and calculate intervels across zero</li> <li>solve number and practical problems that involve all of the above</li> </ul>
æ		Autumn 1	Autumn 1	Autumn 1	Autumn 1	Autumn 1



## **Implementation - How?**



SHINE BRIGHT ★ REACH FOR THE STARS

- Designed to develop Maths Mastery for all children
- Fully aligned with the National Curriculum
  - The schemes of learning are structured to ensure children grasp the fundamental concepts of mathematics before building their understanding and moving on to more advanced concepts.
- WRH curriculum encourages the CPA approach (Concrete, Pictorial, Abstract), teaching children a deeper understanding of Maths problems
- Strong emphasis on number skills





## Implementation – Why WRH?

### Provision

#### Hot and cold assessments to closely monitor pupil progress



	mber lue Y1 test		mber ue Y2 test	Score change		mber subtract		mber subtract	Score change		nber tions		nber tions	Score change	Geo	metry
%	Score	%	Score	Score + or	%	Score	%	Score	Score + or	%	Score	%	Score	Score + or	%	Score
80%	24	80%	24	NA	50%	15	53%	16	1	60%	18	83%	25	7	100%	24
87%	26	57%	17	NA	43%	13	60%	18	5	40%	12	70%	21	9	100%	24
83%	25	73%	22	NA	20%	6	73%	22	16	47%	14	73%	22	8	92%	22
57%	17	30%	9	NA			40%	12	12	60%	18	43%	13	-5	92%	22
80%	24	57%	17	NA	17%	5	77%	23	18	73%	22	70%	21	-1	92%	22
33%	10	43%	13	3	7%	2	47%	14	12	33%	10	50%	15	5	58%	14
93%	28	73%	22	NA	27%	8	0%			63%	19	70%	21	2	96%	23
60%	18	43%		-5		2	47%	14	12	47%	14	57%	17	3	79%	19
57%	17	80%	24	7		7	37%	11	4	0%		47%	14	14	71%	17
83%	25	73%	22	NA		6	83%	25	19	73%	22	73%	22	0	96%	23
70%	21	67%	20	NA		10	73%	22	12	33%	10	57%	17	7	100%	24
83%	25	47%	14	NA	13%	4	63%	19	15	60%	18	73%	22	4	100%	24
93%	28	53%	16	NA	33%	10	50%	15	5	47%	14	83%	25	11	96%	23
60%	18	80%	24	6	57%	17	70%	21	4	53%	16	77%	23	7	100%	24
90%	27	60%	18	NA	37%	11	80%	24	13	53%	16	43%	13	-3	92%	22
	0	80%	24	NA	53%	16	80%	24	8	53%	16	67%	20	4	92%	22
90%	27	70%	21	NA	40%	12	63%	19	7	67%	20	83%	25	5	92%	22
87%	26	100%	30	4	67%	20	87%	26	6	87%	26	97%	29	3	96%	23
80%	24	67%	20	NA		7	77%	23	16	67%	20	87%	26	6	100%	24
63%	19	87%	26	7		11	90%	27	16	53%	16	67%	20	4	92%	22
67%	20	93%	28	8	40%	12	80%	24	12	53%	16	77%	23	7	100%	24
63%	19	100%	30	11	80%	24	100%	30	6	100%	30	100%	30	0	100%	24
77%	23	53%	16	NA		6	47%	14	8	53%	16	37%	11	-5	100%	24
67%	20	67%	20	NA	23%	7	67%	20	13	27%	8	83%	25	17	100%	24
87%	26	53%	16	NA		15	87%	26	11	33%	10	40%	12	2	96%	23
0%	0	53%	16	NA	17%	5	33%	10	5	53%	16	40%	12	-4	71%	17
73%	22	57%	17	NA	27%	8	77%	23	15		10	67%	20	10	96%	23
0%	0	60%	18	NA	60%	18	77%	23	5	50%	15	87%	26	11	88%	21
67%	20	43%	13	NA		9	57%	17	8	60%	18	60%	18	0	83%	20
90%	27	73%	22	NA	40%	12	87%	26	14	40%	12	63%	19	7	100%	24
		23%	7		83%	25	23%	7		40%	12	23%	7		0%	0
		57%	17		13%	4	47%	14		53%	16	50%			10%	3
		20%	6		3%	1	30%	9		7%	2	27%	8		90%	27

Completed by Years 1-6 and monitored closely to ensure appropriate progress is made.

This is used alongside question analysis to see if there are common gaps in understanding which require further work in class to help children become secure.

### Impact

- Analysis of grids identifies any gaps in understanding so these can be addressed
- Areas that need further revision (pink) are identified and included as extra lessons, interventions or morning work
- Pupils make good progress

	_													111	11	1.7				-	-	-	0	-	~	~)		1			- I			1 1	2	Pe
<ol> <li>add and subtract mentally a two-digit number and a one-digit number (as 1)</li> </ol>	l	2	1	2			2	1	22	22	22	2 2	. 2	. 2	- 2	2	T	1	2	1	2	2	2	2	1	T	2	7	2	•			-	$\square$		
<ol> <li>add and subtract mentally a two/three-digit number and a two-digit number (as 1)</li> </ol>	1	2	1	2	1		01	21	2	12	- 2	- 1	2	- 1	2	2	1		2	0	1	1	1	2	(	1	1	1	2		+	+	+	$\square$		
3. add and subtract mentally a three-digit number and ones (as 1)	1	1	1	-2	0			2	21		2	20	- 2	21	L	1	0	7	2	1	2	2	-	2	2	2	2		2		+	+	+	$\square$		
4. add and subtract mentally a three-digit number and tens (as 1)	1	2	ι	2	2			27	- 2	- 1	1	1	2	- 2	-2	1	2		2	1	2	1	2	1	0	2	2		1		+	+		$\square$		
5. add and subtract mentally a three-digit number and hundreds (as 1)	2	- 2	1	2	2	(	2		1	1	1	20	2	2	-2	2	T	,	2	2	2	2	2	1	1	2	1		2		+	+	+	$\left  \right $		
6. use a formal written method of columnar addition (as 2)	2	1	2	2	1	(	2	2	1	2 2	1				2	2	1	,	2	0	1	2	2	1	2	2	1		1		+	+	+	$\square$		
7. use a formal written method of columnar subtraction (as 2)	1	0	V	0	1	1	2	1		1	1	2			1	1	0		1	0	2	2	1	1	0	2	2	-	0		+	+	+	$\square$		
<ol> <li>use a formal written method of columnar addition with 3 numbers (as 2)</li> </ol>	1	0	2	0	9		(	11	1	C	2	-	2	2 ]	2	2	2		2	0	2	0	2	2	0	1	0		2		+	+		$\square$		_
9. use estimation to find the answer to a calculation (as 3)	0	2	0	0	0	1	2	20	2	20	0	2	2	2-2	2	0	2		2	2	2	6	0	0	0	2	2		2		+	+	+	$\square$		
10. use inverse operation to check the answer to a calculation (as 3)	2	0	2	1	N	1	2 7	20	7	2 2	. 0	2		12	-2	2	0	•	2	0	2	0	2	0	0	1	2		2		+	-	+	$\square$		-
11. solve a missing number problem (as 4)	2	2	1	2	2	1		22	- 7	20	12	- 2	2	2	2	2	0		2	1	2	2	2	2.	2	2	2		2		+	-	+	$\square$		
12. Explain how to solve a problem involving related number facts (as 4)	2	. 0	12	2	0	1	2	22	- 2	2	1	00	C	2	0	2	2		2	0	2	6	0	0	6	6	2		0		+	+	+	$\square$		
13. solve a missing number problem involving place value (as 4)	2	0	0	0	0	C	2	22	- 0	2	. 2	. 2	- 2	2	2	2	2		2	0	6	-	0	2	2	0	0		6		+		+			
14. solve a two-step problem involving addition and subtraction (as 4)	2	2	0	0	9	ş	0	0 0	C	0	0	1	2	6	2	0	0		2	0	2	2	0	0	Q	0	0		2			+	+			
15. solve a problem involving more complex addition and subtraction (as 4)	0	0	6	0	0	(	0	00	) 0				0	0	2	0	2		2	0	0	2	0	0	6	0	0		0		+	+	+		+	
Children's Scores	20	16	16	17	12	1	02	211	61	8 lk	51	119	23	3	26	21	16	25	29	8	24	19	17	16	11	8	19	19	20					$\square$	+	-
Percentages	6	53	53	57	40	<b>B</b> A 3	31	B 5	_	053	5	163	-	170	6	10	53	83	_	_	80	_		-	-	60	636	3	67	-	+					-
	Enlar	rge to	A3 fo	or add	led cla	rity								77																0.0	murio	ht Haa	dCtout	Primary		_

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### Evidence

### Headstart assessment data & Pupil tracking

Y4 Multipli	cation &	Division r	esults af	fter further	revision		-
		Cold		Hot			Revisit
< ARE	17	57%	12	40%		5	17%
AT ARE	12	40%	14	47%		14	48%
> ARE	1	3%	4	13%		10	34%
AT ARE & ABOVE	13	43%	18	50%		24	82%

After revisiting the multiplication and division unit through morning work questions, additional lessons and interventions the number of children achieving ARE or above was 82% and the number of pupils working at greater depth had improved from 13% to 34%

			Num	nber					
Nu	umb	er	Multi	ply &	Score	Nu	ımber	Score	
Multipl	y &	Divide	divi	de	change	Multiply	& divide C	change	
						Score +			Score +
-	-	%	Score	%		or -	%		or -
-		10%	3	40%	12	9	80%	24	12
			-	534	45		6004	4.0	
-	ŀ	17% 50%	5 15	53% 50%	16 15	11	60% 73%	18 22	2
-	ŀ	0%	15			<u> </u>			
-	H	70%	21	87% 77%	26 23	26 2	87% 90%	26 27	4
-	H	40%	12	57%	17	5	77%	23	6
ł	ŀ	40%	12	3770	1/		7770	25	
		20%	6	20%	6	0	20%	6	0
sit		53%	16	60%	18	2	87%	26	8
-		30%	9	53%	16	7	63%	19	3
.7%	%		9	20%	6	-3	60%	18	12
004			18	53%	16	-2	80%	24	8
8%	8%		2	3%	1	-1	13%	4	3
10/		50%	15	63%	19	4	63%	19	0
4%				0%		0	30%	9	9
		70%	21	97%	29	8	97%	29	0
		43%	13	57%	17	4	53%	16	-1
82%		7%	2	10%	3	1	7%	2	-1
		7%	2	23%	7	5	53%	16	9
_		23%	7	43%	13	6	77%	23	10
-		33%	10	43%	13	3	57%	17	4
-		50%	15	37%	11	-4	77%	23	12
-		47%	14	40%	12	-2	83%	25	13
-	-	0%		10%	3	3	17%	5	2
-		0%		50%	15	15	67%	20	5
-	-	67%	20	80%	24	4	90%	27	3
-	-	60%	18	67%	20	2	70%	21	1
-	-	50%	15	87%	26	11	97%	29	3
-	-	80%	24	67%	20	-4	90%	27	7
		33%	10	57%	17	7	60%	18	1
< ARE		17	57%	12	40%		5	17%	
AT ARE		12	40%	14	47%		14	48%	
> ARE		1	3%	4	13%		10	34%	
AT ARE	&								
	-		43%	18	50%		24		

## Evidence:

Maths whole school progression 2021 Challenge Partners Review 2022 Book looks

Whole School Progression 2021	2020	%	2021	%
BARE	35	16.1%	32	14.6%
ARE (Inc. + and -)	119	54.6%	140	63.9%
ARE and above	183	83.9%	187	85.4%
ARE+ & GD	72	33.0%	81	37.0%
GD	64	29.4%	47	21.5%

### This shows the number and percentage of pupils working at BARE, ARE and GD across the school

Note: GD looks like a drop but is due to an exceptionally high number of Y6 pupils achieving GD in 2020 56.3%. Thus was 37.5% in 2021

#### **Challenge Partners Review 2022**

"Leaders have an accurate and forensic understanding of the performance of each pupil in the school. For example, the mathematics leader has created a comprehensive and very thorough tracking process which provides a detailed assessment on each pupil's progress in the subject."

### Evidence KS1 & KS2 SAT tests 2022

KS2 Maths SAT
97% pupils met the expected standard compared to 71% nationally (a drop from 79%)
34% children achieved Greater Depth (National results are not released yet but in 2019 this was 24% nationally)

### **KS1 Maths SAT**



**33% assessed as Greater Depth** (15% nationally FFT KS1 Early Results Service 2022 / 22% nationally in 2019)

#### **Times Tables Curriculum Expectations**

Year	Tables
1	Use of concrete objects, pictorial representations & arrays
	Summer Term Cracking Times Tables is introduced
2	Recall and use multiplication and division facts for the 2, 5 and 10 multiplication
	tables
3	recall and use multiplication and division facts for the 3, 4 and 8 multiplication
	tables
4	recall multiplication and division facts for multiplication tables up to 12 × 12
5	Deepening understanding of multiplication and division facts including <b>factors</b> ,
	prime & square numbers
6	Deepening understanding of multiplication and division facts including <b>factors</b> ,
	prime & square numbers

A weekly 3 minute times table test for all children in Years 2, 3 & 4 to promote fluency in times tables.

Times Tables Rock Stars for revision at home and class battles!

#### **Cracking Times Tables Levels**



[	<b>v</b>	
Level	Times Tables Tested	Number of questions
1	2	10
2	2, 10,	15
3	2, 10, 5,	20
4	2, 10, 5, 4	25
5	2, 10, 5, 4, 8	30
6	2, 10, 5, 4, 8, 3	35
7	2, 10, 5, 4, 8, 3, 6	40
8	2, 10, 5, 4, 8, 3, 6, 9	45
9	2, 10, 5, 4, 8, 6, 9, 7	50
10	2, 10, 5, 4, 8, 6, 9, 7	100
11-20	Up to <b>20 x 20</b>	Varies but less than 100
	Multiplication & division	questions due to complexity
	facts, square roots & square	
	numbers	

### Impact:

The vast majority of pupils meeting national expectations for times tables or exceeding Times tables knowledge is applied to daily Maths work

	achieved														
6	28.6.22	21	24	23	24	25	28	Х	27	23	24	20	L5	29	
4	18.3.22	х	L2	16	19	15	L3	Х	19	17	Х	10	18	12	L1
7	3.3.22	24	27	L5	L6	30	25	31	34	30	31	30	36	35	L2
9	28.6.22	35	29	Х	L7	21	28	32	31	36	35	24	L8	42	L3
5	1.5.22	18	Х	19	14	21	17	15	22	20	21	18	21	22	L4
5	7.7.22	17	L3	20	20	20	20	20	23	19	21	19	23	L4	L5
5	17.6.22	18	20	15	20	19	22	Х	22	21	24	L4	15	17	L6
4	3.3.22	17	Х	17	L3	17	16	19	19	20	23	20	21	19	L7
6	7.7.22	L4	11	23	22	23	25	Х	19	25	25	27	28	L5	L8
4	2.12.21	16	14	16	18	16	18	18	11	20	18	20	18	21	L9
5	18.3.22	20	20	18	21	21	L4	17	16	22	17	21	15	21	L10
7	18.3.22	25	26	Х	27	L5	L6	22	33	29	26	27	26	28	
7	20.1.22	29	30	L6	23	29	Х	29	35	30	29	29	31	27	
4	13.1.22	19	18	18	14	20	19	20	17	15	20	16	15	20	
7	28.6.22	23	24	20	25	23	24	Х	22	L5	23	29	L6	22	
5	25.11.21	20	23	22	22	21	19	17	Х	19	19	Х	19	21	
5	17.6.22	20	18	18	20	20	21	21	20	19	22	L4	19	21	
7	31.3.22	20	22	23	28	25	L5	29	L6	L6!!	19	30	36	33	
5	20.1.22	25	24	24	Х	23	23	25	25	19	13	14	Х	25	
5	18.3.22	13	17	Х	19	21	L4	19	19	19	18	18	20	18	
8	10.6.22	26	Х	27	L5	L6	23	23		34	L7	26	38	23	
5	10.2.22	24	L4	19	22	19	19	19	22	22	12	23	21	13	
4	2.2.22	19	12	19	16	20	19	Х	16	14	17	13	19	14	
10	27.1.31	73	75	81	68	78	79	Х	86	88	81	80ish	86	86	
6	17.6.22	13	21	22	Х	25	25	18	28	24	27	L5	29	17	
6	7.7.22	14	14	L3	22	L4	22	21	21	22	27	22	29	L5	
6	17.2.22	23	25	L5	25	25	24	22	24	27	27	30	30	Х	
3	10.2.22	5	L2	Х	8	4	13	7	9	11	16	13	9	14	
5	27.1.22	23	22	21	24	23	26	Х	23	24	25	23	20	21	
7	11.3.22	29	31	31	30	L6	30	19	28	25	28	32	24	32	

This shows the recent weekly Cracking Times Tables results in Class 2

### **Evidence:**

### **Cracking Times Tables data**

	achieved														
6	28.6.22	21	24	23	24	25	28	Х	27	23	24	20	L5	29	
4	18.3.22	х	L2	16	19	15	L3	Х	19	17	Х	10	18	12	L1
7	3.3.22	24	27	L5	L6	30	25	31	34	30	31	30	36	35	L2
9	28.6.22	35	29	Х	L7	21	28	32	31	36	35	24	L8	42	L3
5	1.5.22	18	Х	19	14	21	17	15	22	20	21	18	21	22	L4
5	7.7.22	17	L3	20	20	20	20	20	23	19	21	19	23	L4	L5
5	17.6.22	18	20	15	20	19	22	Х	22	21	24	L4	15	17	L6
4	3.3.22	17	Х	17	L3	17	16	19	19	20	23	20	21	19	L7
6	7.7.22	L4	11	23	22	23	25	Х	19	25	25	27	28	L5	L8
4	2.12.21	16	14	16	18	16	18	18	11	20	18	20	18	21	L9
5	18.3.22	20	20	18	21	21	L4	17	16	22	17	21	15	21	L10
7	18.3.22	25	26	Х	27	L5	L6	22	33	29	26	27	26	28	
7	20.1.22	29	30	L6	23	29	Х	29	35	30	29	29	31	27	
4	13.1.22	19	18	18	14	20	19	20	17	15	20	16	15	20	
7	28.6.22	23	24	20	25	23	24	Х	22	L5	23	29	L6	22	
5	25.11.21	20	23	22	22	21	19	17	Х	19	19	Х	19	21	
5	17.6.22	20	18	18	20	20	21	21	20	19	22	L4	19	21	
7	31.3.22	20	22	23	28	25	L5	29	L6	L6!!	19	30	36	33	
5	20.1.22	25	24	24	Х	23	23	25	25	19	13	14	Х	25	
5	18.3.22	13	17	Х	19	21	L4	19	19	19	18	18	20	18	
8	10.6.22	26	Х	27	L5	L6	23	23		34	L7	26	38	23	
5	10.2.22	24	L4	19	22	19	19	19	22	22	12	23	21	13	
4	2.2.22	19	12	19	16	20	19	Х	16	14	17	13	19	14	
10	27.1.31	73	75	81	68	78	79	Х	86	88	81	80ish	86	86	
6	17.6.22	13	21	22	Х	25	25	18	28	24	27	L5	29	17	
6	7.7.22	14	14	L3	22	L4	22	21	21	22	27	22	29	L5	
6	17.2.22	23	25	L5	25	25	24	22	24	27	27	30	30	Х	
3	10.2.22	5	L2	Х	8	4	13	7	9	11	16	13	9	14	
5	27.1.22	23	22	21	24	23	26	Х	23	24	25	23	20	21	
7	11.3.22	29	31	31	30	L6	30	19	28	25	28	32	24	32	

The national expectation by the end of Y2 is for pupils to be able to recall and use multiplication and division facts for the **2,10 and 5** times tables. This is achieved once a child passes Level 3 Cracking Times Tables

# **97%** of pupils entering KS2 & Y3 with times tables recall **above the national expectation**

**30%** of pupils entering KS2 & Y3 with times tables recall above the national expectation for the end of Y3 (fluent recall of 2, 5, 10, 3, 4, 8 / Level 7 CTT & above)

## **Evidence:**

**Multiplication Tables Check Y4** 

- 79% achieved 100% / 84% in 2021
- 100% achieved 20 >
- PPG = 100%
- SEND pupils made excellent progress.

22/09/2021	16/03/2022	30/03/2022	09/05/2022	MTC TEST
13	18	20	21	25
7	13	14	16	25
22	18	25	25	25
16	22	24	25	25
14	24	25	24	25
16	24	23	22	25
3	11	14	16	23
24	25	25	25	25
13	14	16	22	24
16	22	24	15	25
15	23	25	24	25
3	6	11	13	24
19	15	19	22	25
0	16	10	15	25
19	25	25	25	25
25	25	25	25	25
5	18	10	12	21
11	15	6	7	20
11	16	14	16	25
16	17	20	18	25
13	22	24	25	25
16	18	22	22	25
9	19	12	14	25
13	24	23	23	25
20	24	25	24	25
24	24	24	25	25
12	23	25	21	25
16	23	22	22	25
16	16	17	18	24

### What is the MTC?

This is a 25 question test which gives pupils 6 seconds to answer each question. The test generates random questions involving multiplication up to 12 x 12

The table on the left shows progress of Y4 pupils from various check in points.

### What else have I been doing?



CPD - NCETM Mastering Number, Preparing for a Deep Dive in Maths, Maths Subject Leader termly meetings and updating staff with information .

Maths Policy

Communicating to parents: Online free Maths course Maths Story Writing competition

Maths book scrutiny - WWW & EBIs shared with staff team

Maths Week November 2021 Primary Maths Challenge Y5 & Y6 November 2021 First Maths Challenge Y2 & Y3 July 2022



Throughout the week, Class 5 took part in lots of different maths problem solving activies including: Million Pound Drop Maths style, Outdoor Maths investigations and the Primary Maths Challenge! They were challenging but we had lots of fun!



































## What do AK children say about Maths?



What do you most enjoy? I most enjoy problem solving (Y2-4) different star challenges, TTRS (Y2)

How do you know how well you are doing? Ticks in book, feedback from teach, LO stamp, lots of positive feedback, with a star stamp to show I've done super work (Y2) I get to share things (Y1)

What helps in lessons? Adults, talk partners, times tables mats, counters, number lines, seeing examples.

What helps you improve? Checking your work, answering reasoning and problems solving questions, extra times tables groups (Y4) Doing harder questions (Y3) Check your work and do editing (Y2) Use apparatus (Y1-5)

What happens if you get work wrong? Go through with an adult (Y4), make corrections using pink pen (Y3)

What happens if you find work easy? Push yourself to a harder level (Y3) Move onto the next star challenge (Y4, Y3 & Y2) I try a challenge card (Y1)

What do you do if you get stuck? Look on the working wall (Y2) Move onto the next question (Y2) Ask a partner to help you (Y2) Ask a learning buddy (Y5)

## Final reflection - next steps



Times tables program of learning for Y3 & Y4 to be fully MTC ready in 2023

All BARE pupils to have their 3 most important next steps identified and passed onto to their new class teachers so interventions can be as impactful as possible

10 minute number and place value sessions for BARE pupils at the end of daily Maths lesson to help close the gap.

Participation in Wiltshire Maths Innovation Project

(focus on further development of problem solving & reasoning)