

Years 1 & 2



Maths parent information meeting

Lizzie Clarke – Assistant Headteacher for KS1

Year 1 team

Laura Cooke

Sheryl Burton

Juliet Kirk

Year 2 team

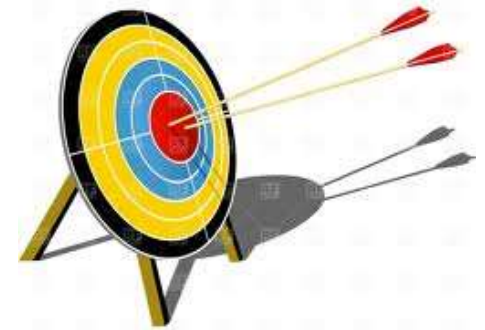
Lizzie Clarke / Chantel Gallagher

Kamala Dodd

Jessica White

Aims

- **Outline Main Changes in New Curriculum**
- **Discuss Progression in Calculation**
- **Demonstrate Taught Strategies in KS1**
- **Tools – how to use them**
- **Supporting Children at Home**
- **National Curriculum Levels**



Maths at Bessemer – KS1

- Streaming – fluid groups
- Practical approach – counters, beads, toys
- Social stories
- Home learning
 - Mathematics
 - NEW rocket cards
- Addition, subtraction, doubling & halving/sharing, basic word problems, shape, patterns, money (coins to £1), basic fractions, counting in 2s or 10s, number facts
- Written methods introduced when ready
- Maths Vocabulary – greater emphasis
 - e.g. inverse, quadrilateral, equivalent



Maths National Curriculum

Foundation

- Read, Write and Order Numbers to 20
- Double & Halve Numbers
- Add & Subtract 2 single digit numbers (6 + 2, 9 – 3 etc...)

Year 1

- Read, Write and Order Numbers to 100
- Recognise the fractions $\frac{1}{2}$, $\frac{1}{4}$ and $\frac{3}{4}$
- Add & Subtract 2-digit and 1-digit numbers
- Solve problems using 4 operations (+, -, x and ÷) using objects

Year 2

- Recognise fractions $\frac{1}{3}$ and $\frac{2}{3}$
- Add and Subtract 2 numbers up to 2-digits use number line and column addition method
- Count in steps of 2, 3, 5 and 10
- Know **Number bonds to 20, Doubles & Halves, Add & Subtract mentally, 2, 3, 5 and 10 times table**

Progression in Calculation

Addition

$$4 + 2$$

Objects/Counters

Addition

$$7 + 4$$

Number-line

Addition

$$11 + 8$$

$$26 + 12$$

100 Square

Dienes

Subtraction

$$5 - 3$$

Objects/Counters

Subtraction

$$17 - 4$$

Number-line

Subtraction

$$23 - 6$$

$$35 - 12$$

100 Square

Dienes

Multiplication

&

Division

**Sharing &
Doubling**

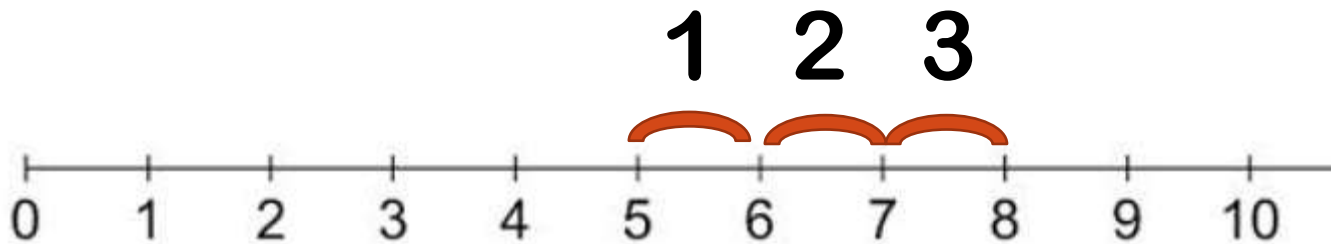
X 2 or ÷ 2

**Repeated
Addition/
Subtraction**

2, 5, 10, 3 x table

Number line

- How we use it



$$5 + 3 = 8$$

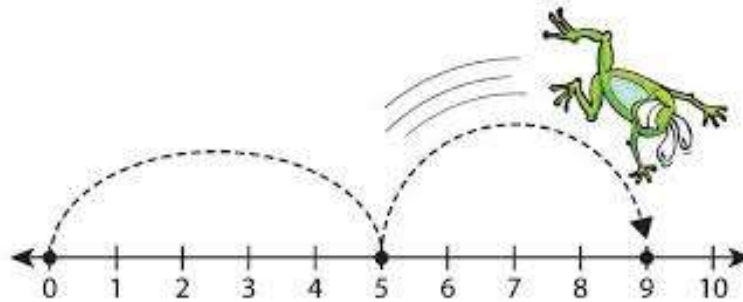
Taught Strategies



- Some of the strategies taught at school are.....



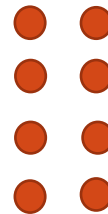
head and fingers



counting on and back



Read **U**nderstand **C**hoose
Solve **A**nswer **C**heck



arrays

$$\begin{array}{r} 22 + \\ 12 = \\ \hline 34 \end{array}$$

column
addition

Tools

- Tools that will be used in the classroom toolboxes are....



1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

100 square



bead string



number line

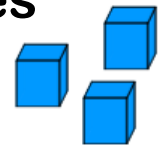


cubes/dienes



counters/objects
for counting

dienes



100 Square

- How we use it

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100



$$12 + 4 =$$

$$15 + 11 =$$



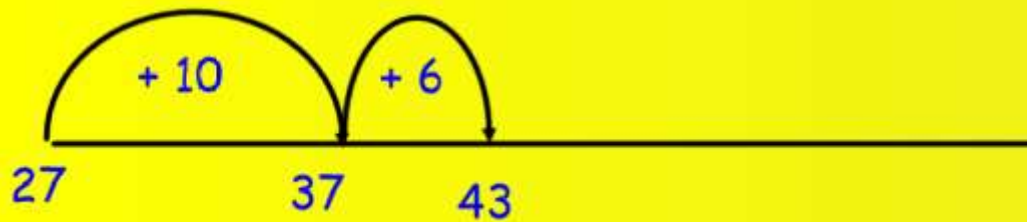
$$15 - 3 =$$

$$23 - 12 =$$

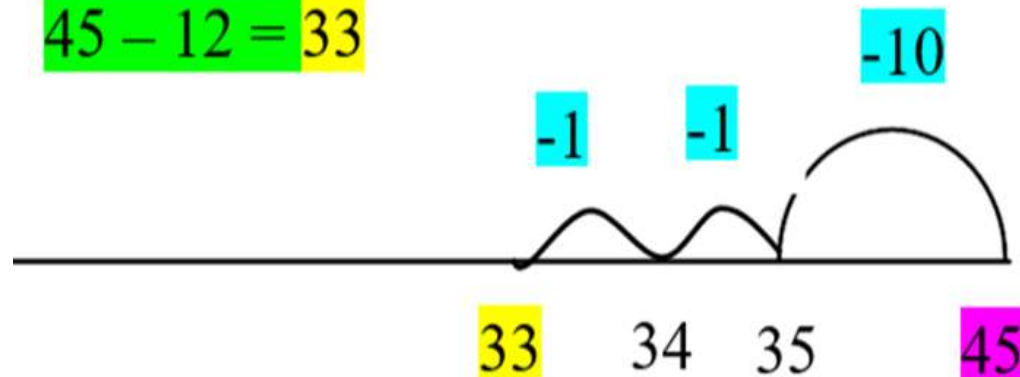
Number line

- How we use it

$$27 + 16 = 43$$



$$45 - 12 = 33$$



National Curriculum Level

Year 1



National End of Year
Expected Level

Year 2



National End of Year
Expected Level

What Can a 1ME Child Do?

- Count to 50 confidently and attempt to 100
- Write numbers correctly (3,5,9)
- Use a number line to 30 confidently
- Start to use a 100 square
- Know 2D & some 3D shapes – triangle, oblong, cube, sphere
- Count in 2s, 10s and start to count in 5s
- Know Number Facts – doubles, halves to 10, number pairs to 10/15
- Solve simple word problems - Jack has 18 apples. He eats 4. How many left?
- Add and Subtract numbers
 - 1 digit to 1 digit – $5 + 4 / 7 + 5 =$
 - Low 2 digit to 1 digit – $14 + 4 = / 18 + 5 =$
 - 1 digit from low 2 digit – $16 - 3 = / 22 - 6 =$

What Can a 2ME Child Do?

- Count beyond 100 confidently
- Write numbers correctly
- Use a 100 square and empty number line
- Able to use 100 square
- Know 2D & 3D shapes – triangle, oblong, cube, sphere, pyramid, prism
- Count in 2s, 5s, 10s and 3s
- Know Number Facts – doubles, halves to 20, number pairs to 100, understand and use the inverse – $7 \times 5 = 35$ so $35 \div 5 = 7$
- Solve word problems for all 4 symbols of operation - Jack has 11 apples. Jane has twice as many. How many apples does Jane have? What is $\frac{1}{3}$ of 6?
- Fractions of shapes and groups of objects

Supporting Maths at Home



- **Door Numbers** – Odd & even numbers, place value
- **Rocket card** – Key number facts
- **Playing Board Games** – Place value and ordering
- **Baking** – Weighing, capacity, understanding scales
- **Clocks & Time** – Encourage children to wear a watch & tell the time
- **Shopping & Working Out 'Change'** - Word problems, +, -, x, ÷
- **Food for Counting & Fractions** – Pasta shapes, pizza/cake fractions
- **Purses & Wallets** – Emptying your purse for children to count coins
- **Rubik's Cubes, Puzzles & Toys** – Get presents that challenge children
- **Internet Activities** - www.ictgames.com , www.kenttrustweb.org.uk,
www.woodlands-junior.kent.sch.uk , www.kidsmathgamesonline.com , www.bbc.co.uk
- **100 square patterns / games... (PTO!)**

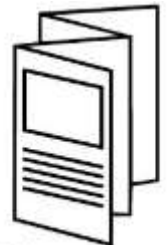
100 Square – Finding Patterns

Find patterns on the number square.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
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- **What do odd and even numbers always have?**
- **What's a quick way of adding 10 to any number?**
- **Taking away 10 from any number?**
- **Can you find numbers that have the number '3' unit in them?**
What do you notice?
- **What is a quick way of adding 9?**
If you start on 36 jump down to add 10 and jump back to take away 1.

How about adding 11?



100 Square Games



- **Total of 10:** Find pairs of numbers on the hundred square that total 10. How many different pairs can you find? How could you organise your answers so that you know you have found all the possible ways? Extend to totals to 20, 50 and 100.
- **Favourite numbers:** Choose your favourite number from the hundred square. Make up 3 statements about it e.g. it is greater than 30, it is less than 70, it is not in the 10s but it is in the 5s. Can someone else guess your number correctly? If not, let them ask a question to help them.
- **Find the number:** Say a number to your child. Ask them to find it on the hundred square and cover it with a counter or their finger. Ask them how they found it. Play to improve. Can you find it quicker next time? How did you do it? Keep playing to improve strategy and explain.
- **Odds and Evens:** Game for 2 players, one person chooses to be 'evens' and one 'odds.' Each player rolls a dice and if the 'odd' player lands on an odd number they cross out an odd number on the square, if not they pass. Next the 'even' player rolls a dice and if they land on an even number they cross out even number, if not they pass. Winner is first to have all numbers crossed out.

Resource Pack



__ o'clock



__ o'clock



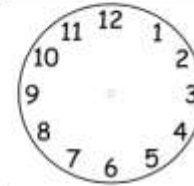
__ o'clock



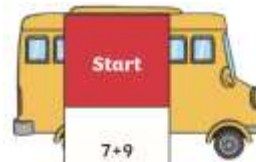
1 o'clock



4 o'clock



8 o'clock



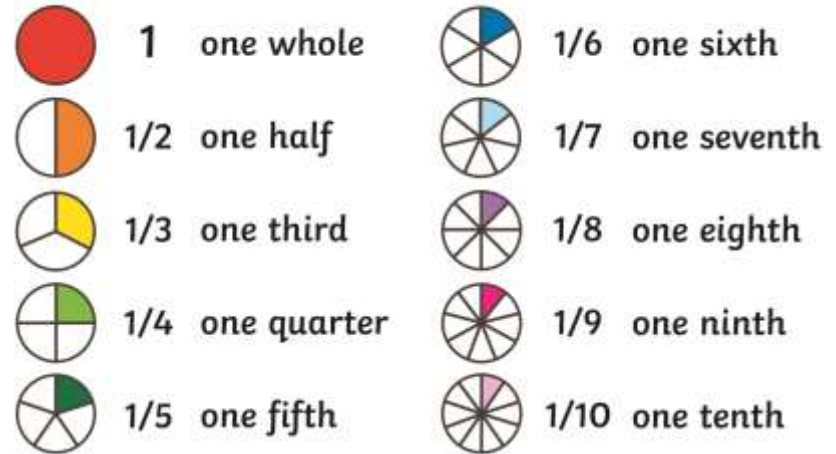
Start	$2+12$	$3+7$	$19+1$	$5+13$	$5+10$	$8+4$
	$7+9$	$17+2$	Addition to 20 School Bus Ride			$10+1$
$9+2$	$8+9$	$2+5$				
$5+14$	$1+11$	$14+2$	$15+5$	$18+1$	$6+14$	
$6+7$				$13+1$	$1+4$	
$12+3$				$16+1$	$18+2$	
$8+9$	$1+13$	$14+4$	$12+2$	$13+3$	$7+8$	

Twelve and Twenty Four Hour Time


















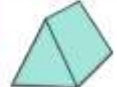














Resource Pack

Fractions Mat



2D and 3D Shapes

 circle	 triangle	 square	 rectangle
 pentagon	 hexagon	 octagon	 oval
 rhombus	 semicircle	 parallelogram	 trapezium
 square-based pyramid	 cylinder	 hexagonal prism	 cube
 cone	 triangular prism	 sphere	 cuboid

Name	Comers/Vertices	Faces	Edges	Image
cube	8	6	12	
cuboid	8	6	12	
square-based pyramid	5	5	8	
sphere	0	1	0	
cylinder	0	3	2	
cone	1	2	1	
tetrahedron	4	4	6	
pentagonal prism	10	7	15	
hexagonal prism	12	8	18	
octagonal prism	16	10	24	

Resource Pack



100 Square

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
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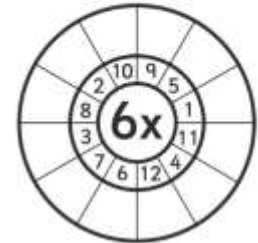
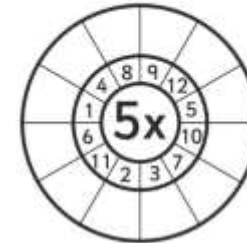
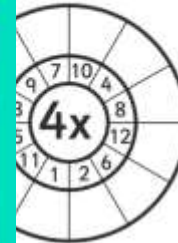
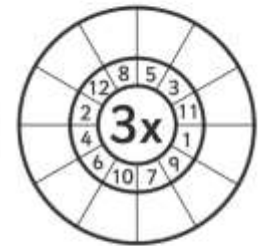
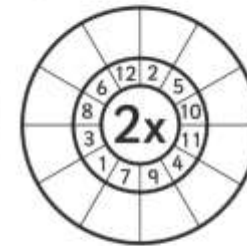
Multiplication Square

X	1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	3	4	5	6	7	8	9	10	11	12
2	2	4	6	8	10	12	14	16	18	20	22	24
3	3	6	9	12	15	18	21	24	27	30	33	36
4	4	8	12	16	20	24	28	32	36	40	44	48
5	5	10	15	20	25	30	35	40	45	50	55	60
6	6	12	18	24	30	36	42	48	54	60	66	72
7	7	14	21	28	35	42	49	56	63	70	77	84
8	8	16	24	32	40	48	56	64	72	80	88	96
9	9	18	27	36	45	54	63	72	81	90	99	108
10	10	20	30	40	50	60	70	80	90	100	110	120
11	11	22	33	44	55	66	77	88	99	110	121	132
12	12	24	36	48	60	72	84	96	108	120	132	144

Multiplication Wheels

Name: Date:

Multiply the numbers by the middle number.



Questions?

- **School Website**
- **Parents' Evenings**
- **Online Resources**
- **Songs & Games e.g. high fives**

