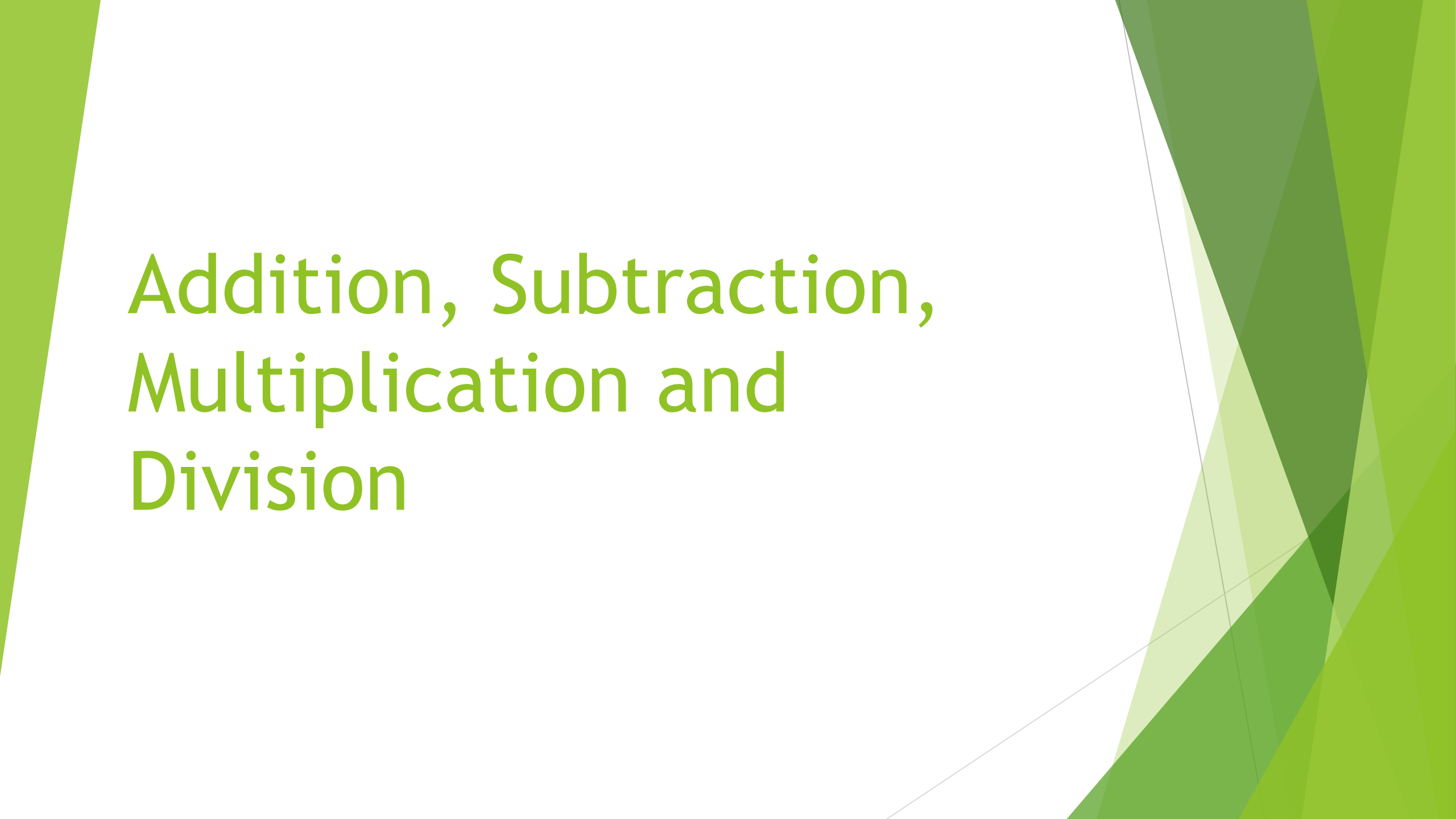


Roseberry Academy
Key Stage 2 Calculations
January 2019

The background features abstract, overlapping geometric shapes in various shades of green, ranging from light lime to dark forest green. The shapes are primarily triangles and polygons, creating a dynamic, layered effect. The text is centered on the left side of the image.

Addition, Subtraction, Multiplication and Division

Y3

Ma3/2.2 Addition & Subtraction

Ma3/2.2a add and subtract numbers mentally, including:

- i. a three-digit number and 1s
- ii. a three-digit number and 10s
- iii. a three-digit number and 100s

Ma3/2.2b add and subtract numbers with up to 3 digits, using formal written methods of columnar addition and subtraction

Ma3/2.2c estimate the answer to a calculation and use inverse operations to check answers

Ma3/2.2e solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.

Ma3/2.3 Multiplication & Division

Ma3/2.3a recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables

Ma3/2.3b write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods

Ma3/2.3c 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.

Y4

Ma4/2.2 Addition & Subtraction

Ma4/2.2a add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate

Ma4/2.2b estimate and use inverse operations to check answers to a calculation

Ma4/2.2c solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.

Ma4/2.3 Multiplication & Division

Ma4/2.3a recall multiplication and division facts for multiplication tables up to 12×12

Ma4/2.3b use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together 3 numbers

Ma4/2.3c recognise and use factor pairs and commutativity in mental calculations

Ma4/2.3d multiply two-digit and three-digit numbers by a one-digit number using formal written layout

Ma4/2.3e solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by 1 digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.

Y5

Ma5/2.2 Addition & Subtraction

Ma5/2.2a add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)

Ma5/2.2b add and subtract numbers mentally with increasingly large numbers

Ma5/2.2c use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy

Ma5/2.2d solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.

Ma5/2.3 Multiplication & Division

Ma5/2.3a identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers.

Ma5/2.3b know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers

Ma5/2.3c establish whether a number up to 100 is prime and recall prime numbers up to 19

Ma5/2.3d multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers

Ma5/2.3e multiply and divide numbers mentally drawing upon known facts

Ma5/2.3f divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context

Ma5/2.3g multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000

Ma5/2.3h recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3)

Ma5/2.3i solve problems involving multiplication and division, including using their knowledge of factors and multiples, squares and cubes

Ma5/2.3j solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign

Ma5/2.3k solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.

Y6

Ma6/2.2 Addition, Subtraction, Multiplication & Division

Ma6/2.2a multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication

Ma6/2.2b divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context

Ma6/2.2c divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context

Ma6/2.2d perform mental calculations, including with mixed operations and large numbers.

Ma6/2.2e identify common factors, common multiples and prime numbers

Ma6/2.2f use their knowledge of the order of operations to carry out calculations involving the 4 operations

Ma6/2.2g solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why

Ma6/2.2h solve problems involving addition, subtraction, multiplication and division

Ma6/2.2i use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.

$$Y3. \quad 582 \pm 100 =$$

$$Y4. \quad 901 \pm 100 =$$

$$Y5. \quad 381 - 100 =$$

$$Y6. \quad 1005 - 100 =$$

Y3. 73 + 50 715 - 30

Y4. 198 + 30 707 - 600

Y5. 288 + 80

Y6. 5.7 - 0.1

Y3. 183 + 638

Y4. 4722 + 3589

Y5. 7126 + 1767

Y6. 6673 + 794

Y3. 701 - 456

Y4. 9211 - 722

Y5. 4527 - 919

Y6. 2.6 - 0.04

Y3. 4 x 8

Y4. 8 x 9

Y5. 8 x 7

Y6. 16 x 6

Learning times tables

Colour in a 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
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

Learning times tables

Play times tables games

Rock, Paper, Scissors

Slap it

Learning times tables

Speed grids

Name: _____

What is the quickest time you can complete this table? Keep a record on the back and watch yourself get quicker the more you practice over the summer holidays.

Speed Tables

Can you beat your previous score?

X	1	2	3	4	5	6	7	8	9	10	11	12
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												

This time I got _____ correct. 😊

Learning times tables

Single out the tricky one

eg. $7 \times 8 = 56$

Learning times tables

9 x table

$1 \times 9 = 9$

$2 \times 9 = 18$

$3 \times 9 = 27$

$4 \times 9 = 36$

$5 \times 9 = 45$

$6 \times 9 = 54$

$7 \times 9 = 63$

$8 \times 9 = 72$

$9 \times 9 = 81$

$10 \times 9 = 90$

$11 \times 9 = 99$

$12 \times 9 = 108$

Learning times tables

8 x table

Take away 2 from the units digit this time, and the digits repeat themselves after $5 \times 8 = 40$.

$1 \times 8 = 8$

$6 \times 8 = 48$

$11 \times 8 = 88$

$2 \times 8 = 16$

$7 \times 8 = 56$

$12 \times 8 = 96$

$3 \times 8 = 24$

$8 \times 8 = 64$

$4 \times 8 = 32$

$9 \times 8 = 72$

$5 \times 8 = 40$

$10 \times 8 = 80$

Learning times tables

6 x table

The 6 times table is a little trickier than the other even-numbered tables. Once again, the final numbers repeat themselves after 5x, so approach the table in two halves if this seems easier.

$1 \times 6 = 6$

$2 \times 6 = 12$

$3 \times 6 = 18$

$4 \times 6 = 24$

$5 \times 6 = 30$

$6 \times 6 = 36$

$7 \times 6 = 42$

$8 \times 6 = 48$

$9 \times 6 = 54$

$10 \times 6 = 60$

$11 \times 6 = 66$

$12 \times 6 = 72$

Y3. 88 x 5

Y4. 755 x 3

Y5. 279 x 8 3382 x 65

Y6. 49 x 32 3091 x 45

$$Y3. \quad 84 \div 4$$

$$Y4. \quad 93 \div 3$$

$$Y5. \quad 693 \div 7$$

$$Y6. \quad 3993 \div 6$$

$$Y3. \quad 96 \div 8$$

$$Y4. \quad 96 \div 4$$

$$Y5. \quad 7443 \div 3$$

$$Y6. \quad 2924 \div 34$$

$x \div$ by 10, 100, 1000

Y3. n/a

Y4. $57 \div 100$, $82 \div 10$

Y5. $69 \div 100$, $417 \div 100$

Y6. $809.3 \div 100$, 7.01×1000

Next time.....

Fractions!

