Oakwood Maths
Basic Skills Logs

Platinum Award

ACHIEVER

Name: _____ Class: _____

This is the **Platinum Basic Skills Maths Award**, where you will be building on the skills you have learned so far. You will be combining different skills, knowledge and operations to solve complex problems.

When you are ready for your final test, you **must** make sure you are still confident with your skills from the Bronze, Silver and Gold logs too, as you will be tested on those again as part of being tested on Platinum skills.

ACHIEVER

I can divide any number by 4 and 8 using halving as a strategy

eg. **¼ of 356 - halve and halve again**
½ of 356 = 150 + 25 + 3 = 178
½ of 178 = 50 + 35 + 4 = **89**
Tip! Partition the number and halve each bit (as above!)

eg. **580 ÷ 8 - halve, halve and halve again**
½ of 580 = 250 + 40 = 290
½ of 290 = 100 + 45 = 145
½ of 145 = 50 + 20 + 2.5 = **72.5**

1 whole															
$\frac{1}{2}$								$\frac{1}{2}$							
$\frac{1}{4}$				$\frac{1}{4}$				$\frac{1}{4}$				$\frac{1}{4}$			
$\frac{1}{8}$		$\frac{1}{8}$		$\frac{1}{8}$		$\frac{1}{8}$		$\frac{1}{8}$		$\frac{1}{8}$		$\frac{1}{8}$		$\frac{1}{8}$	
$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{16}$

Date achieved:

_____

I can recall all prime numbers to 20 and find all prime numbers up to 100

PRIME NUMBERS

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

I CAN TELL YOU WHAT A PRIME NUMBER IS...
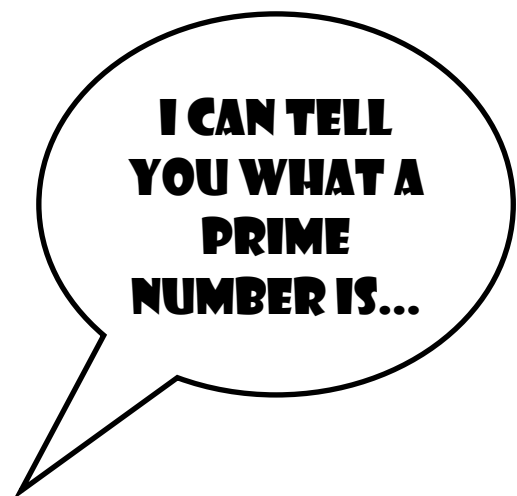
Date achieved:

_____
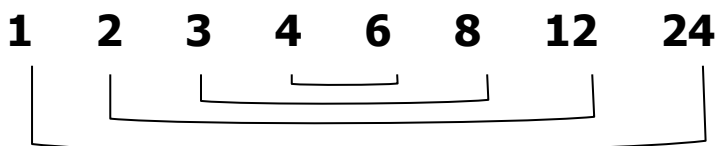
I can use knowledge about factors from the Bronze Tables log to factorise any number (including larger numbers with the help of a calculator)

eg.   I can **factorise** 24 and show **factor pairs**
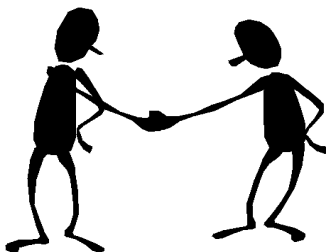
Tip! Start with one and the number itself and work inwards

1   2   3   4   6   8   12   24

eg.   I can **factorise** a bigger number like **96** and show **factor pairs**

1   2   3   4   6   8   12   16   24   32   48   96

Tip! Start with one and the number itself and work inwards - you can use a calculator if you need to...

1 x 96   2 x 48   3 x 32   4 x 24

6 x 16   8 x 12

Date achieved:

I know common fraction, decimal and percentage equivalents and use them in calculations.

You will also be tested on the fraction, decimal and percentage equivalent section in the Silver Log.

Date achieved:

Fraction	Decimal	Percentage	Operation
$^2/_5$	0.4	40%	÷5 x 2
$^3/_5$	0.6	60%	÷5 x 3
$^4/_5$	0.8	80%	÷5 x 4
$^1/_3$	≈ 0.33	≈ 33%	÷3
$^2/_3$	≈ 0.66	≈ 66%	÷3 x 2
$^1/_8$	0.125	12.5%	÷8
$^1/_{20}$	0.05	5%	÷20

I can solve a calculation involving multiplication, division, fractions or percentages, solve the calculation (with jottings) and explain which strategies I used and how that strategy was efficient…

For example:

What is 21 x 17?

There are lots of ways to do this

You could use **partition** as a strategy…

10 x 17 = 170

10 x 17 = 170

1 x 17 = 17

So 21 x 17 = 357

You could use **near multiples of ten** as a strategy…

20 x 17 is the same as

2 x 17 x 10 = 340

and

1 x 17 = 17

So 21 x 17 = 357

Date achieved:

What's 27% of £35.00

You could use **known equivalents** as a strategy…

27% ≈ 25% ≈ ¼
So halve (£17.50), halve again (**£8.75**)
and then add 2%

1% of £35.00 = 35p, so 2% of £35.00 = **70p**
£8.75 + 70p = **£9.45**

You could find **common percentages** as a strategy…

10% of £35.00 = £3.50
So 5% of £35.00 = £1.75
And 1% of £35.00 = 35p

We need 10% + 10% + 5% + 1% + 1%
£3.50 + £3.50 + £1.75 + 35p + 35p
= £9.45

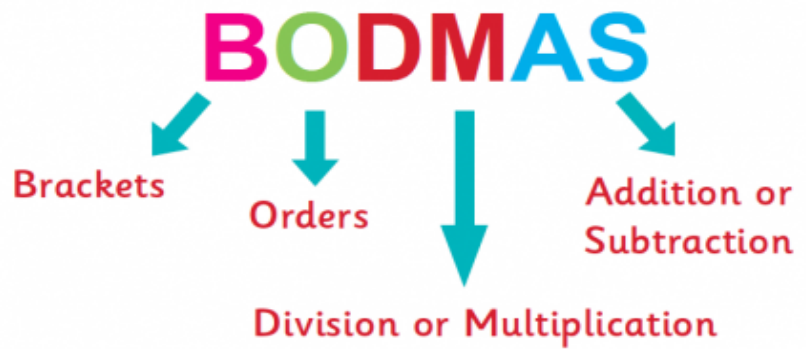# What is $\frac{2}{3}$ of 456ml?

Divide by the bottom

456 ÷ 3 = **152**

Times by the top

152 x 2 = 304

304ml

Date achieved:

I can solve a calculation using brackets involving addition, subtraction multiplication and division.

BODMAS

Brackets

Orders

Division or Multiplication

Addition or Subtraction

Order of Operations

B	Brackets	$10 \times (4 + 2) = 10 \times 6 = 60$
O	Order	$5 + 2^2 = 5 + 4 = 9$
D	Division	$10 + 6 \div 2 = 10 + 3 = 13$
M	Multiplication	$10 - 4 \times 2 = 10 - 8 = 2$
A	Addition	$10 \times 4 + 7 = 40 + 7 = 47$
S	Subtraction	$10 \div 2 - 3 = 5 - 3 = 2$

$(45 - 23) + (5 \times 8) =$

$38 - (5 \times 7) =$

$(100 - 45) + (7 \times 7) =$

$45 - (9 \times 4) =$

Date achieved:

_____

I can add and subtract fractions (including mixed numbers) with different denominators.

$$\frac{2^{\times 4}}{3_{\times 4}} + \frac{3^{\times 3}}{4_{\times 3}}$$

$$= \frac{8}{12} + \frac{9}{12}$$

$$2\frac{1}{6} + 4\frac{2}{3}$$

$$\frac{2}{3} + \frac{3}{4}$$

3 : 3, 6, 9, ⑫

4 : 4, 8, ⑫, 16

Date achieved:

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Congratulations, you have completed the Platinum Award.

School Signature

Date

_____   _____

Oakwood Maths
Basic Skills Logs

At Oakwood Primary School, we have a Basic Skills Log system, which leads to awards.

Rockets, Stars and Planets
These three logs are worked through in Years R, 1 and 2. They help embed basic knowledge of the number system and number bonds.

Children should aim for all three awards by the end of Year 2.

The Bronze Award
This is knowing all your tables up to 12 x 12 and all the division facts which go with them.

Children should aim for this by the end of Year 4.

The Silver Award
This is using your multiplication and division facts to multiply and divide by multiples of 10, knowing square numbers, doubling and halving and knowing common fraction equivalents.

Children should aim for this by the end of Year 5.

The Gold Award
This is using your multiplication and division facts to work with money, decimals and having a range of mental maths strategies for all occasions!

Children should aim for this by the end of Year 6.

When children have achieved the **Gold Award**, they can move on to the **Platinum** and **Platinum Plus Awards**.