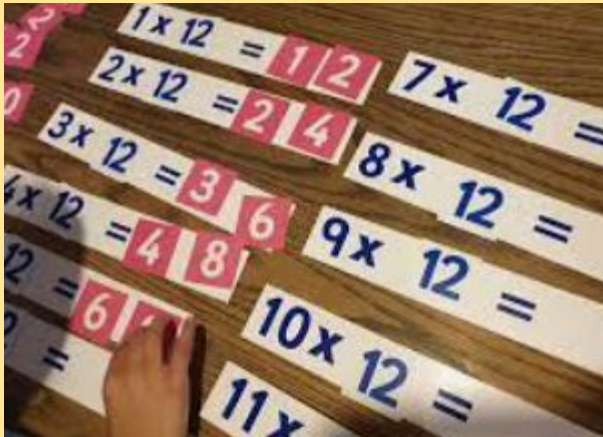


Talking Times Tables



Warm
welcome to
parents and
pupils...

“They just don’t know their tables”

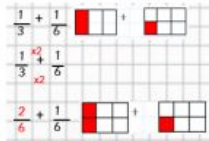
“Why do we need to learn them anyway?”

A light gray thought bubble with a black outline and a small tail at the bottom. Inside the bubble, the text "Who said it?" is written in a bold, black, sans-serif font.

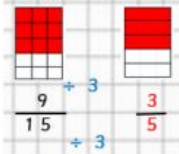
Who said it?

Adding, subtracting, multiplying and dividing fractions

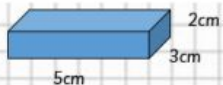
$$\frac{3}{4} \times \frac{2}{3} = \frac{6}{12}$$



Simplifying fractions

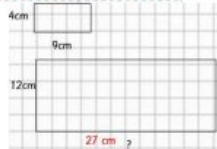


Calculating volume

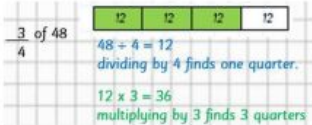


Using scale factors

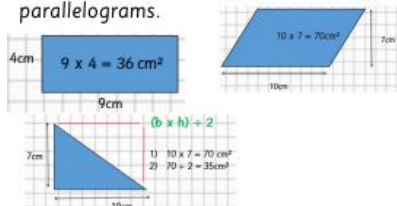
2 people	1 person	5 people
6 eggs	$6 \div 2 = 3$ eggs	$3 \times 5 = 15$ eggs
100g flour	$100 \div 2 = 50$ g	$50 \times 5 = 250$ g



Finding a fraction or a percentage of a number

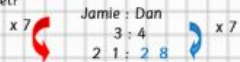


Finding the area of rectangles, triangles and parallelograms.



Calculating ratio

A prize is shared in a ratio of 3 : 4 between Jamie and Dan. If Jamie gets £ 2 1, how much will Dan get?



Using known facts

If $3 \times 2 = 6$, then
 $3 \times 20 = 60$
 $30 \times 2 = 60$
 $30 \times 20 = 600$

Using algebraic rules

- 1st term: $5 \times 1 - 4 = 1$
- 2nd term: $5 \times 2 - 4 = 6$
- 3rd term: $5 \times 3 - 4 = 11$
- 4th term: $5 \times 4 - 4 = 16$
- 5th term: $5 \times 5 - 4 = 21$

Why are times tables useful?

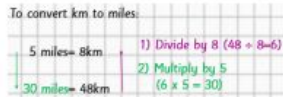
Short and long division

$$\begin{array}{r} 125 \\ 5 \overline{) 625} \\ \underline{5} \\ 12 \\ \underline{10} \\ 22 \\ \underline{20} \\ 25 \\ \underline{25} \\ 0 \end{array}$$

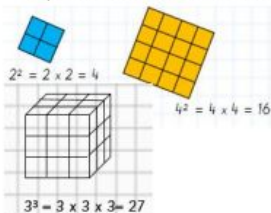
Converting between mixed and improper fractions

$$1\frac{3}{4} = \frac{7}{4}$$

Convert between miles and kilometers



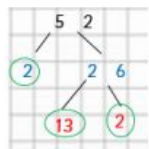
Square and cube numbers



Factors and common factors

4	8	3	6
1) x 4	8	1) x 3	6
2) x 2	4	2) x 1	8
3) x 1	6	3) x 1	2
4) x 1	2	4) x 1	9
6) x 1	8	6) x 1	6

Finding prime factors



Ordering and comparing fractions



Finding equivalent fractions



Identifying prime and composite numbers

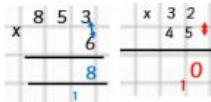
A prime number is a whole number greater than 1 with no divisors except 1 and itself.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20

Multiples and common multiples

Multiples of 3: 3, 6, 9, 12, 18, 21, 24
 Multiples of 4: 4, 8, 12, 16, 20, 24, 28, 32

Short and long multiplication



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

1×1	1×2	1×3	1×4	1×5	1×6	1×7	1×8	1×9
2×1	2×2	2×3	2×4	2×5	2×6	2×7	2×8	2×9
3×1	3×2	3×3	3×4	3×5	3×6	3×7	3×8	3×9
4×1	4×2	4×3	4×4	4×5	4×6	4×7	4×8	4×9
5×1	5×2	5×3	5×4	5×5	5×6	5×7	5×8	5×9
6×1	6×2	6×3	6×4	6×5	6×6	6×7	6×8	6×9
7×1	7×2	7×3	7×4	7×5	7×6	7×7	7×8	7×9
8×1	8×2	8×3	8×4	8×5	8×6	8×7	8×8	8×9
9×1	9×2	9×3	9×4	9×5	9×6	9×7	9×8	9×9

2×2								
3×2	3×3							
4×2	4×3	4×4						
5×2	5×3	5×4	5×5					
6×2	6×3	6×4	6×5	6×6				
7×2	7×3	7×4	7×5	7×6	7×7			
8×2	8×3	8×4	8×5	8×6	8×7	8×8		
9×2	9×3	9×4	9×5	9×6	9×7	9×8	9×9	

If I know 7×4 then I also know.....

Which fact do you find the hardest to remember?

Which fact do you like the best?

Why?

The hardest multiplication was six times eight, which students got wrong 63% of the time (about two times out of three). This was closely followed by 8×6 .

6x

6

x0

x1

x2

x3

x4

x5

x6

x7

x8

x9

x10

x11

x12

0

6

x0

x1

x2

x3

x4

x5

x6

x7

x8

x9

x10

x11

x12

0

6

x0

x1

x2

x3

x4

x5

x6

x7

x8

x9

x10

x11

x12

0

6

x0

x1

x2

x3

x4

x5

x6

x7

x8

x9

x10

x11

x12

0

6

6

x0

x1

x2

x3

x4

x5

x6

x7

x8

x9

x10

x11

x12

0

6

6

x0

x1

x2

x3

x4

x5

x6

x7

x8

x9

x10

x11

x12

0

6

60

6

x0	x1	x2	x3	x4	x5	x6	x7	x8	x9	x10	x11	x12
0	6									60		

6

x0	x1	x2	x3	x4	x5	x6	x7	x8	x9	x10	x11	x12
0	6	12								60		

6

x0	x1	x2	x3	x4	x5	x6	x7	x8	x9	x10	x11	x12
0	6	12								60		

6

x0	x1	x2	x3	x4	x5	x6	x7	x8	x9	x10	x11	x12
0	6	12		24						60		

6

x0	x1	x2	x3	x4	x5	x6	x7	x8	x9	x10	x11	x12
0	6	12		24						60		

6

x0	x1	x2	x3	x4	x5	x6	x7	x8	x9	x10	x11	x12
0	6	12		24				48		60		

6

x0	x1	x2	x3	x4	x5	x6	x7	x8	x9	x10	x11	x12
0	6	12		24				48		60		

6

x0	x1	x2	x3	x4	x5	x6	x7	x8	x9	x10	x11	x12
0	6	12	18	24				48		60		

6

x0	x1	x2	x3	x4	x5	x6	x7	x8	x9	x10	x11	x12
0	6	12	18	24				48		60		

6

x0	x1	x2	x3	x4	x5	x6	x7	x8	x9	x10	x11	x12
0	6	12	18	24		36		48		60		

6

x0	x1	x2	x3	x4	x5	x6	x7	x8	x9	x10	x11	x12
0	6	12	18	24		36		48		60		

6

x0	x1	x2	x3	x4	x5	x6	x7	x8	x9	x10	x11	x12
0	6	12	18	24		36	42	48		60		

6

x0	x1	x2	x3	x4	x5	x6	x7	x8	x9	x10	x11	x12
0	6	12	18	24		36	42	48		60		

6

x0	x1	x2	x3	x4	x5	x6	x7	x8	x9	x10	x11	x12
0	6	12	18	24	30	36	42	48		60		

6

x0	x1	x2	x3	x4	x5	x6	x7	x8	x9	x10	x11	x12
0	6	12	18	24	30	36	42	48		60		

6

x0	x1	x2	x3	x4	x5	x6	x7	x8	x9	x10	x11	x12
0	6	12	18	24	30	36	42	48	54	60		

6

x0	x1	x2	x3	x4	x5	x6	x7	x8	x9	x10	x11	x12
0	6	12	18	24	30	36	42	48	54	60		

6

x0	x1	x2	x3	x4	x5	x6	x7	x8	x9	x10	x11	x12
0	6	12	18	24	30	36	42	48	54	60	66	

6

x0	x1	x2	x3	x4	x5	x6	x7	x8	x9	x10	x11	x12
0	6	12	18	24	30	36	42	48	54	60	66	

6

x0	x1	x2	x3	x4	x5	x6	x7	x8	x9	x10	x11	x12
0	6	12	18	24	30	36	42	48	54	60	66	72

On whiteboards - build a table of your choice

0X 1X 10X 2X 4X 8X 3X 6X 7X 5X

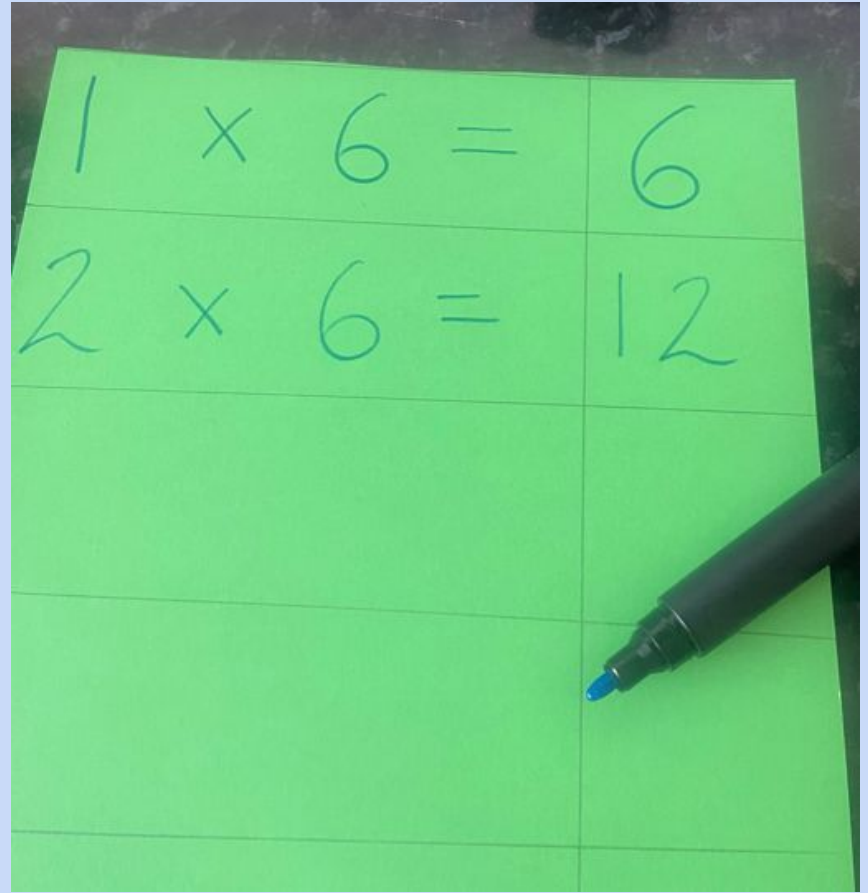
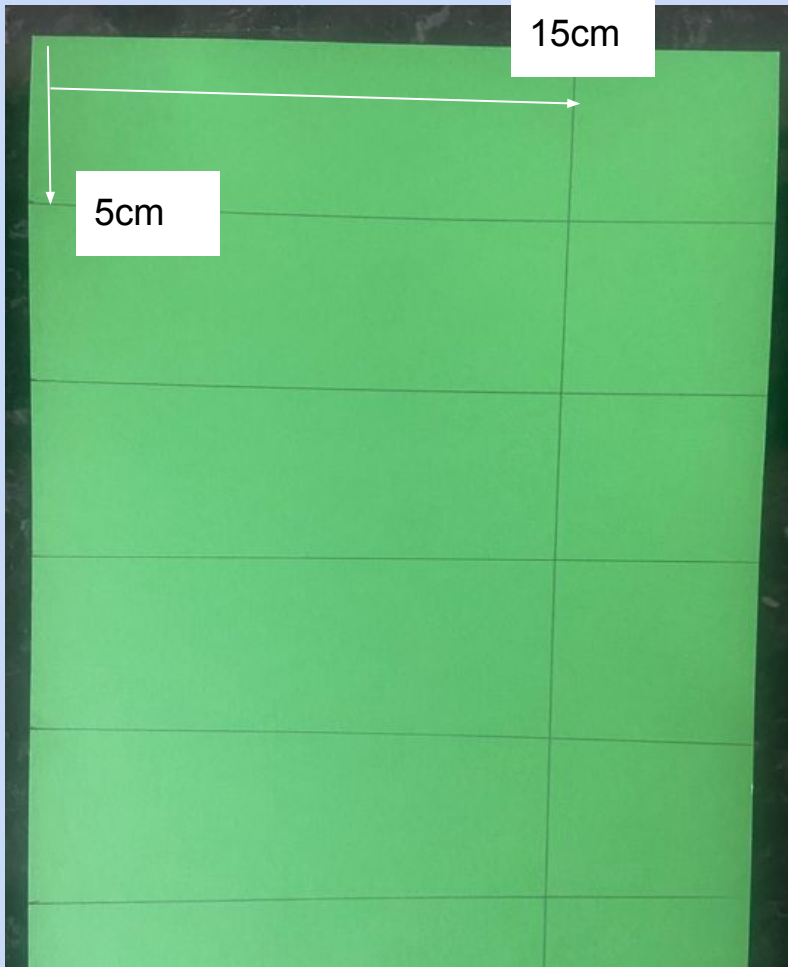
9X 11X 12 X

Making Links - Using what you know

Let's make a game.....

One simple game - many different ways to use it.....

You will need.... 2 pieces of card, ruler, pens and scissors



Then cut - separate the questions and the answers

6 Times Table

$6 \times 1 = 6$

$6 \times 7 = 42$

$6 \times 2 = 12$

$6 \times 8 = 48$

$6 \times 3 = 18$

$6 \times 9 = 54$

$6 \times 4 = 24$

$6 \times 10 = 60$

$6 \times 5 = 30$

$6 \times 11 = 66$

$6 \times 6 = 36$

$6 \times 12 = 72$

“Say the whole sentence” game - win the card if you know it

Matching the times table question to the answer (Start with the answers and match the questions)

Run for it – timed challenge

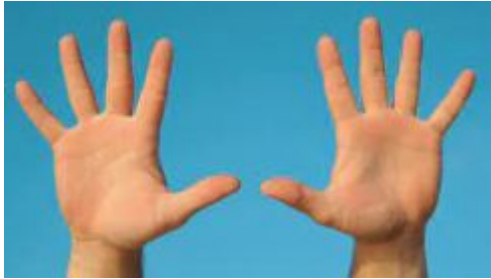
**Other ways to
play....**

Reveal in order (forwards and backwards) with answer cards face down

Quickies



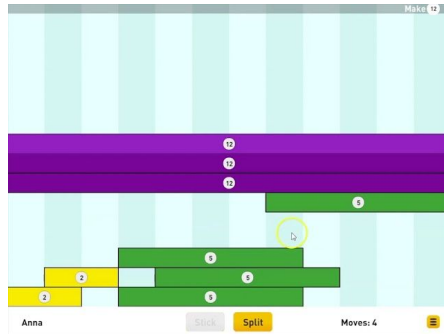
X table snap



X table Hands



Ideas to use on Ipad/Computers



What is they know their tables?

Mega facts

Mini facts

$$6 \times 3 =$$

$$6 \times 0.3 = 1.8$$

$$6 \times 300 = 1800$$

Mega facts

Mini facts

$$6 \times 8 =$$

We



Maths