



# MARVELLOUS MENTAL MATHS - KEY SKILLS!



## MULTIPLICATION AND DIVISION

In addition to the fluent recall of 2, 5 and 10 times tables, know your 3x 4x 8x tables inside out and recognise their multiples

### 3 Times Table

- $0 \times 3 = 0$
- $1 \times 3 = 3$
- $2 \times 3 = 6$
- $3 \times 3 = 9$
- $4 \times 3 = 12$
- $5 \times 3 = 15$
- $6 \times 3 = 18$
- $7 \times 3 = 21$
- $8 \times 3 = 24$
- $9 \times 3 = 27$
- $10 \times 3 = 30$
- $11 \times 3 = 33$
- $12 \times 3 = 36$

And  $\div$  facts  
For example:

- $3 \div 3 = 1$
- $12 \div 3 = 4$
- $27 \div 3 = 9$

### 4 Times Table

- $0 \times 4 = 0$
- $1 \times 4 = 4$
- $2 \times 4 = 8$
- $3 \times 4 = 12$
- $4 \times 4 = 16$
- $5 \times 4 = 20$
- $6 \times 4 = 24$
- $7 \times 4 = 28$
- $8 \times 4 = 32$
- $9 \times 4 = 36$
- $10 \times 4 = 40$
- $11 \times 4 = 44$
- $12 \times 4 = 48$

And  $\div$  facts  
For example:

- $8 \div 4 = 2$
- $16 \div 4 = 4$
- $36 \div 4 = 9$

### 8 Times Table

- $0 \times 8 = 0$
- $1 \times 8 = 8$
- $2 \times 8 = 16$
- $3 \times 8 = 24$
- $4 \times 8 = 32$
- $5 \times 8 = 40$
- $6 \times 8 = 48$
- $7 \times 8 = 56$
- $8 \times 8 = 64$
- $9 \times 8 = 72$
- $10 \times 8 = 80$
- $11 \times 8 = 88$
- $12 \times 8 = 96$

And  $\div$  facts  
For example:

- $24 \div 8 = 3$
- $40 \div 8 = 5$
- $48 \div 8 = 6$

# Y3

## PLACE VALUE AND COUNTING

Count from 0 in multiples of 4, 8, 50 and 100

Find 10 more or 10 less than any given number

Find 100 more or 100 less of any given number

Recognise the place value of each digit in a three-digit number  
Partition numbers into 100s, 10s and 1s (e.g.  $253 = 200 + 50 + 3$ )

Compare and order numbers to 1000

Read and write numbers to 1000 (in numbers and words)

Round to the nearest 10 and 100

## CALCULATION (+ - x $\div$ )

Add and subtract mentally 1s, 10s and 100s to any 3 digit number

Mentally add or subtract any pair of 2 digit numbers

Multiply any 2 digit number by 10 (e.g.  $24 \times 10 = 240$ )

Multiply any 1 digit number by 100 (e.g.  $7 \times 100 = 700$ )

**USE AND APPLY YOUR TIMES TABLES! (with 2 digit numbers)**

For example: If you know that  $2 \times 3 = 6$

You also know.... $20 \times 3 = 60$  or  $60 \div 2 = 30$

**USE PARTITIONING TO DOUBLE OR HALVE ANY NUMBER**

(e.g. Half of 58: Half of 50 = 25, Half of 8 = 4.  $25 + 4 = 29$ )

## FRACTION ACTION!

Count up and down in tenths (and understand tenths!) e.g.  $1/10, 2/10, 3/10$

Recognise fractions AS numbers (amounts between two whole numbers) e.g.  $1\frac{1}{2}, 1\frac{3}{4}, 2\frac{1}{4}$

Understand, recognise and use fractions OF numbers (e.g. find  $\frac{1}{4}$  of  $32 = 8$ )

Add and subtract fractions with the same denominator with one whole (e.g.  $5/7 + 1/7 = 6/7$   
and  $5/7 + 2/7 = 7/7$  or 1 whole)

## NUMBER PAIRS THAT TOTAL 100

For example...

- $30 + 70 = 100$
- $15 + 85 = 100$
- $32 + 68 = 100$
- $44 + 56 = 100$

And INVERSE

- $100 - 30 =$
- $100 - 85 =$
- $100 - ? = 68$
- $100 - ? = 56$

Interactive Resources: Multiple Wipeout, Wipeout Walls, Time Table, Connect it, Eggs on Legs

Dice Games: Shall I risk it, SPROD, Gozinto