YEAR 6 MENTAL MATHS – KEY SKILLS!

MULTIPLICATION AND DIVISION

Multiply and divide mentally with increasingly large numbers!
Perform mental calculations of increasing complexity – including mixed operations and large numbers!
Identify common factors, common multiples and prime numbers.
Explore the order of operations using brackets () ÷ x + -
Use estimation to check answers

PLACE VALUE AND COUNTING

Read, write, order and compare numbers up to 10, 000, 000 and understand the value of each digit.
Use negative numbers in context and calculate intervals across zero (e.g. the difference between -14 and 23)
Round any whole number to a required degree of accuracy

ADDITION AND SUBTRACTION

Add or subtract mentally with increasingly large numbers!
Perform mental calculations of increasing complexity – including mixed operations and large numbers!
Explore the order of operations using brackets () ÷ x + -
Use estimation to check answers

Y6

FRACTION ACTION!

Use common factors to simplify fractions (e.g. 5/15 = 1/3)
Use common multiples to express fractions in the same denomination
Compare and order fractions including those that are more than 1 (e.g. 6/5)
Identify the value of each digit to 3 decimal places
Multiply and divide numbers by 10, 100 and 1000 giving answers up to 3 decimal places
Multiply 1 digit numbers with up to 3 d.p. by whole numbers (e.g. 0.4 x 2 = 0.8)

Add and subtract some fractions mentally
Recall and use these fraction, decimal & percentages equivalents..

$\frac{1}{2}$ = 0.5 = 50%	$\frac{1}{4}$ = 0.25 = 25%	$\frac{3}{4}$ = 0.75 = 75%
1/5 = 0.2 = 20%	2/5 = 0.4 = 40%	4/5 = 0.8 = 80%
1/10 = 0.1 = 10%	1/100 = 0.1 = 1%	1/3 = 0.333 = 33.3%

PRIME NUMBERS!

Know there are 25 primes under 100

2 (1, 2)
3 (1, 3)
5 (1, 5)
7 (1, 7)
11(1, 11)
13 (1, 13)
17 (1, 17)
19 (1, 19)
23 (1, 23)
29 (1, 29)
31 (1, 31)
37 (1, 37)
41 (1, 41)
43 (1, 43)
47 (1, 47)
53 (1, 53)
59 (1, 59)
61 (1, 61)
67 (1, 67)
71 (1, 71)
73 (1, 73)
79 (1, 79)
83 (1, 83)
89 (1, 89)
97 (1, 97)

SQUARE NUMBERS!

Square of numbers	Squares of multiples of 10
1 x 1 = 1	10 x 10 = 100
2 x 2 = 4	20 x 20 = 400
3 x 3 = 9	30 x 30 = 900
4 x 4 = 16	40 x 40 = 1600
5 x 5 = 25	50 x 50 = 2500
6 x 6 = 36	60 x 60 = 3600
7 x 7 = 49	70 x 70 = 4900
8 x 8 = 64	80 x 80 = 6400
9 x 9 = 81	90 x 90 = 8100
10 x 10 = 100	100 x 100 = 10,000
11 x 11 = 121	110 x 110 = 12,100
12 x 12 = 144	120 x 120 = 14,400

You should know all your times tables off by heart now.
Ask someone to test you on any times tables – put the timer on. How fast can you say the answers? Can you do it in less than 20 seconds?