



Infant School



Maths Toolkit



There are lots of mental skills and strategies that we need to master in order to become quicker and more accurate at number work and calculation. These skills will help you with maths in everyday life – for example when you need to work out how much you will need to pay for a few things when shopping, how much discount or change you should get, how to work out how far a journey is or how long it will take.

All of the skills and strategies in these lists need to be really understood (your teacher will help you with this), then you need to practise them regularly until you are very quick and know them instantly – without having to work it out or use your fingers. It's fine to use fingers – and other resources – to help your thinking when you are learning about things in maths. But there are some things that it is really useful to just know – and to be able to recall instantly. The more of these things you have in your “toolkit”, the easier and quicker it will be to solve a mathematical problem or work out an answer or solution.

Mental Maths Toolkit Red

I can count out loud up to 10 and then up to 20

I know the numbers from 11 to 20, including the “teen numbers”

I am beginning to write my numbers to 10

I am beginning to write my numbers to 20

I can put my numbers in order to 10

I can put my numbers in order to 20

I can say the number that is one more than a number up to 20

I can say the number that is one less than a number up to 20

I can count on from a number that is in my head to 20

I can count back in ones from 10 and then from 20

I can count on in tens to 100 and then back in tens from 100

I can follow a number line to 20 then 30

I can count on a hundred square

I know my number pairs with a total of 10

I know my number pairs with a total of 9

I know my number pairs with a total of 8

I know my number pairs with a total of 7

I can count on from any number in a sequence

I can recognise numbers in and out of order

I can solve problems including doubling, halving and sharing

Mental Maths Toolkit Orange

I can count up to ten objects accurately

I can read, write and order most / all numbers to ten and correct reversals

I can count out loud to ten and beyond

I can quickly say the number that is one more than any number up to 10

I can quickly say the number that is one less than any number up to 10

I can quickly say the number that is ten more than any number up to 10

I can quickly say the number that is ten less than any number up to 10

I know my number pairs with a total of ten by quick recall – no fingers!

I know number pairs for other numbers up to 10 e.g. pairs to make 5, 4, 7 by quick recall

I know doubles of numbers to 10 by quick recall

I can count forwards and backwards to and from any number from 20 and then 30

I can count up to 20 objects accurately

I know the numbers from 11 to 20, including the 'teen numbers' and can explain what each digit represents

In my head, I can quickly add or subtract any pair of single digit numbers e.g. $4 + 5$, $8 - 3$

I can count forwards and backwards in ones from any number up to 30 or 50

I can count on in tens to 50 and then 100 and back again

I can say what each digit represents in any two-digit number to 50

I can order numbers up to 50

I can count forwards and backwards in 5's to 50

I can tell the time to the nearest hour and then half hour

Mental Maths Toolkit Green

I can recognise and say all numbers to 30, then 50 then 100
I can count forwards and backwards in ones to 100
I can read and write numbers in figures and words accurately to 30, then 50 and 100
I can order any 2 digit number to 100 and explain how I did this
I can count in tens to 100 and back
I can explain what a multiple of ten is
I can quickly say the number that is one more or one less than any number
I know all number pairs that total 10 by quick recall – no fingers!
I can quickly add together in my head any two numbers up to 10
I know all number pairs that total 20 by quick recall
I can quickly add together in my head multiples of ten e.g. $20 + 30$, $70 + 20$
I can quickly add together in my head any two numbers up to 20
I can say the number that is ten more or ten less than any number up to 100 by quick recall
I can quickly add a multiple of ten to any number up to 100
I can partition numbers into tens and ones and explain the value of each digit
I can tell if a number is odd or even and explain how I know
I can count forwards and backwards in 2's to 100 and then beyond
I can count forwards and backwards in 10's to 100 and then beyond
I can count forwards and backwards in 5's to 100 and then beyond
I know the 2 times table by quick recall, then in random order
I know the 5 times table by quick recall, then in random order
I know the 10 times table by quick recall, then in random order
In my head, I can quickly add or subtract any one-digit number to or from a multiple of ten
In my head, I can quickly add or subtract a one-digit number from any two-digit number
I understand and use £.p notation
I can use units of time such as seconds, minutes, hours and days
I can tell the time to the nearest $\frac{1}{4}$ hour

Mental Maths Toolkit Gold

I can order numbers to 1000 and explain how I have done this

I can count on **and back** from any number up to 1000

I can count forwards **and backwards** in 100's from any number to 1000

In my head, I can add together one-digit and two-digit numbers

I know my 3 times table by quick recall, then in random order

I know my 4 times table by quick recall, then in random order

I know my 6 times table by quick recall, then in random order

I can quickly work out doubles of numbers up to 50 and then 100 in my head

I can quickly work out half of any even number to 100 in my head

I can explain what each digit in a 4-digit number represents

I can round numbers to the nearest 10 or 100

I know my 7 times table by quick recall, then in random order

I know my 8 times table by quick recall, then in random order

I know my 9 times table by quick recall, then in random order

I can explain what each digit represents in a decimal number to two decimal places

I can order decimal numbers to two decimal places

Begin to recognise equivalence between decimals and fraction forms of one half, quarters, tenths, hundredths

I can recognise fractions such as $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{1}{10}$ and use them to find fractions of shapes and numbers