Addition and Subtraction: *Key Skill 9*

YEAR 3

Use the equals sign to record number sentences that are equal on both sides

The **equals sign** is a symbol used to show that 2 or more amounts have the same value e.g. 5 + 3 = 9 -1

A **number sentence** is an equation. It uses numbers and symbols to describe a maths problem.

The equals sign is like a balance beam! The numbers on either side must always be equal. It doesn't just mean 'write the answer here'. The equals sign's job is easily and quickly forgotten and children need reminding of this often! Talk to your child about number sentences and the equals sign. Use words like 'value', 'same', 'different' and even 'balance beam'.

The key is to be able to explain *how* they got their answer (show working out).

Play with questions like 4 + 6 = 25 – 15.

Play a missing number game where you leave a number out of a number sentence and work together to find out what the number is.

Play a detective game where 1 of the numbers in a number sentence puts the sentence out of balance. Work together to fix the sentence and put it back in balance (see Video: True or false number sentences).

WEB LINKS go to:

Video: Equal number sentences

Video: The equals sign

Video: True or false number sentences

Multiplication and Division: Key Skill 10

Recall multiplication facts for 2s, 3s, 5s and 10s

Multiplication is a process of repeatedly adding the same number a given amount of times. Multiply, product of, times and lots of all mean the same thing.

Children need to know their times tables as they are used in all areas of maths. They are extremely important and any progress in maths slows if they do not know their times tables. Knowing and using them with speed and accuracy makes maths so much easier.

Times tables are easily forgotten and need to be practised often! It can be challenging to fill the gaps of unknown facts so it is important to spend more time on learning these. Check your child remembers their times tables as often as you can!

We teach times tables in 2 ways. Both ways need to be taught:

1 **Rote learning** – repeating them over and over until they are stuck in childrens' minds. Sing along to times tables songs, write out times tables, and test your child each day.

   This can be effective for many children but doesn't help to build a deep understanding of multiplication and how numbers work. For instance, many children can quickly tell you that $4 \times 6 = 24$ but not $24 \div 4 = 6$. So we also teach times tables another way.

2 **Meaningful learning** – This way helps children to find the answer to a multiplication problem from what they know with the other times tables, e.g. skip counting (e.g. 3, 6, 9, 12 etc.) and the commutative law (which means multiplication problems can be solved in any order, e.g. $7 \times 3 = 3 \times 7$). Your child may not know 7×5, but they can easily find 5×7 using these strategies.

Notes: Rote vs meaningful learning

Work together using a combination of songs, playing with arrays, skip counting, races, charts and online games to help your child convert the times tables into their long-term memory.

Here are some useful strategies to help children learn times tables:

2 x tables: Double the number
3 x tables: Double plus 1 more set. $3 \times 5 = 2 \times 5 + 5$
5 x tables: Skip count by 5s. Always end with 5 or 0
10 x tables: Multiples of 10. Always end in 0.

Work together to fill out the 2s, 3s, 5s, and 10s of a multiplication grid. Race against a clock and track your progress. (Here's a multiplication grid you can print.)

WEB LINKS go to:

Notes: Times tables

Notes: Mental strategies

Video: How to easily memorise times tables

Video: 3 times tables – uptown funk

Game: Tables games

Game: Times tables shoot em up