Knowing My Multiplication Facts

Thank you for your feedback on the Maths homework. The Maths homework focus for Years 3 and 4 has been multiplication facts (times tables). This is a very broad area of Maths and one which the children need a comprehensive understanding of to enable them to fully engage with the Years 5 and 6 curriculum. Here is the information that was requested on what we mean by knowing all the multiplication facts.

Knowing the multiplication facts in order

Children should be able to tell you the facts, within 5 seconds, from 1-12, in order, without using resources, even **fingers**.

Knowing the multiplication facts out of order

Children should be able to fluently recite any fact from the 0 to 12 multiplication facts. The new government tests, coming into effect next year, expects children to know the number fact and enter it into a computer within 5 seconds.

Knowing the associated division facts

To say that a child is fluent in all their times tables they should be confident with all the associated division facts as they are with the multiplication facts. For example, if they know that 12 X 2 = 24 then they should also know that 24 ÷ 2 = 12 and 24 ÷ 12 = 2 without any hesitation.

Be able to use numbers in a multiplication fact to create other facts (related number facts).

Example

12 X 2 = 24 24 ÷ 2 = 12

2 X 12 = 24 24 ÷ 12 = 2

Children should be confident finding factors of different numbers

We teach factors as factor pairs. They are two whole numbers (integers) that multiply together to generate a given number.

Example

1, 2, 3, 4, 6 and 12 are all factors of 12 because 1 X 12 = 12, 2 X 6 = 12 and 3 X 4 = 12

Children should be confident finding multiples of different numbers

A multiple is the result you get when you multiply one whole number with another.

Example

3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33 & 36 are the first twelve multiples of 3

Use multiplication facts confidently in problem solving activities

Children should be able to derive which multiplication facts are needed to solve a range of problems, without being prompted.

Example

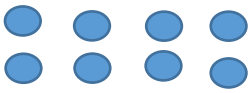
A farmer has 12 boxes with 6 eggs each. How many eggs does he have?

In the above problem, the children should, independently, be able to recognise that you need to multiply 12 by 6 to get the answer.

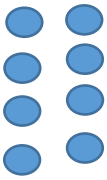
Show multiplication and division facts using the correct arrays

Example

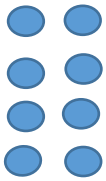
2 X 4 = 8



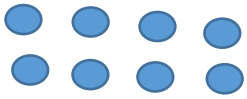
4 X 2 = 8



8 ÷ 4 = 2



8 ÷ 2 = 4



Extension:

Children can be extended with their multiplication facts by using them in different contexts. They must be confident in all other facts first or this will promote confusion.

Decimals

2 X 0.8 = 1.6 1.6 ÷ 2 = 0.8

Using the number facts to help with bigger numbers

If we know that 2 X 8 = 16 then we should make the connection that 2 X 80 = 160 or that 2 X 800 = 1600

For Years 3 and 4, this is what we mean by knowing your multiplication facts. Sometimes children think that when they know the facts in order that they no longer have to work on them, this is not the case.

We realise that going over multiplication facts every night can be a bit monotonous, however they can be learnt in lots of fun ways such as singing them, playing multiplication fact bingo, reciting them while out a family walk, drawing them out with felt tips pens. The children also have access to online resources, such as my USO and EducationCity, to help them.

These facts are a key foundation stone for the maths that the children will do in the future so it is vital that by the end of lower Key Stage 2, they are confident in all aspects of multiplication facts.

If children learn their multiplication facts every night, with adult help, it will have a hugely positive impact on children's maths ability and attitude towards the subject. This is why we have made this the homework focus in Years 3 and 4.

In addition, if you would like to work on other skills/topics with your children, the weekly Maths class focus will continue to be recorded in your child's homework diary every week. Also, encouraging your children to be able to tell the time in analogue, and digital time form, will be to their benefit. However, it is important that mastery of multiplication facts remains the main homework focus.

Any questions about the Maths homework policy, please do not hesitate to contact your child's class teacher.

Many thanks for your continued support,

Lower Key Stage 2 Team