Year 4 - Spring 2

I know the multiplication and division facts for all times tables up to 12 x 12.

By the end of this half term, children should know **the multiplication and division facts for all times tables up to 12 x 12,** including missing number questions eg ? x 5 = 35 or ? ÷ 5 = 7.
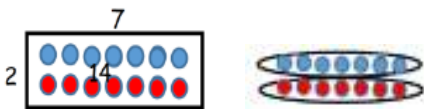
The aim is for the children to recall these facts **instantly**.

Key Imagery:

Prove using array:

$7 \times 2 = 14$

Prove using array (grouping):

$14 \div 2 = 7$

$7 \times 2 = 14$ the commutative is $2 \times 7 = 14$

The **factors** have changed places but the **product** remains the same.

$14 \div 2 = 7$ and $14 \div 7 = 14$ are the inverse.

Key Vocabulary:

What is 12 **multiplied by** 6?

What is 7 **times** 8?

What is the **product of** 3 and 5?

What is 84 **divided by** 7?

What is 81 **shared by** 9?

What is the **whole**?

What are the **parts**?

What is the **commutative**?

What is the **inverse**?

How many are in each **group**?

How many **groups** are there?

Helpful Hint!

The secret to success is little and often. Make sure that you use your time wisely! Can you practise your KIRFs whilst travelling to school? It might help to have a fact a day. Remember, you don't need to practise them all at once.

Remember: If you know one fact (eg 2 x 6 = 12) then you know three more! Can you recall all of the facts in the fact family?

Remember also to include 0! Whenever you multiply any number by 0 the product will always be 0.

Activity Ideas:

Play games: Playing cards. Remove the kings. Turn over two cards and ask your child to multiply the numbers together. (Ace = 1, Jack = 11, Queen = 12.) You could time this challenge to make it more competitive? Or even leave in the King and use it as a squared card!

Poster. You could ask your child to make a poster of all multiplication and division facts relating to a given set of numbers eg 5, 3 and 15. For example 5 x 3 = 15. 3 x 5 = 15. 15 ÷3 = 5. 15 ÷ 5 = 3.

Practically. Allowing the children to build arrays/group/share will really enhance understanding. This can be done using any objects for eg cereal.

Songs and chants. Singing and chanting the times tables can really help the children to learn and memorise key facts. These are readily available on the internet.

Visit http://www.conkermaths.org/ and play Conker KIRFS. You will need Adobe Flash Player!

Or practise your multiplication and division online using **Hit the Button - Quick fire maths practise for 6-11 year olds (topmarks.co.uk)** (You don't have to purchase it, just press play game and select the game that you wish to play) TTRS is a fantastic resource that is subscribed to by school.

You will also find many free interactive games on the internet, for example www.multiplication.com and MathsFrame (select the free games).