## I know the multiplication and division facts for all times tables up to $12 \times 12$

By the end of this half term, children should know the following facts. The aim is for them to recall these facts instantly.

| $\mathbf{x}$ | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | $\mathbf{6}$ | $\mathbf{7}$ | $\mathbf{8}$ | $\mathbf{9}$ | $\mathbf{1 0}$ | $\mathbf{1 1}$ | $\mathbf{1 2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{1}$ | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | 4 | $\mathbf{5}$ | 6 | $\mathbf{7}$ | 8 | 9 | 10 | 11 | 12 |
| $\mathbf{2}$ | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | 24 |
| $\mathbf{3}$ | $\mathbf{3}$ | 6 | $\mathbf{9}$ | 12 | 15 | 18 | 21 | 24 | 27 | 30 | 33 | 36 |
| $\mathbf{4}$ | 4 | 8 | 12 | 16 | 20 | 24 | 28 | 32 | 36 | 40 | 44 | 48 |
| $\mathbf{5}$ | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 |
| $\mathbf{6}$ | 6 | 12 | 18 | 24 | 30 | 36 | 42 | 48 | 54 | 60 | 66 | 72 |
| $\mathbf{7}$ | $\mathbf{7}$ | 14 | 21 | 28 | 35 | 42 | 49 | 56 | 63 | 70 | 77 | 84 |
| $\mathbf{8}$ | 8 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 | 88 | 96 |
| $\mathbf{9}$ | 9 | 18 | 27 | 36 | 45 | 54 | 63 | 72 | 81 | 90 | 99 | 108 |
| $\mathbf{1 0}$ | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 |
| $\mathbf{1 1}$ | 11 | 22 | 33 | 44 | 55 | 66 | 77 | 88 | 99 | 110 | 121 | 132 |
| $\mathbf{1 2}$ | 12 | 24 | 36 | 48 | 60 | 72 | 84 | 96 | 108 | 120 | 132 | 144 |

## Key Questions

What is 4 multiplied by 9 ?
What is 7 times 8?
What is 18 divided by 3 ?
How many 12s are there in 96?

This is a chance for children to consolidate their knowledge of multiplication and division facts for all the times tables up to $12 \times 12$ and to increase their speed of recall.

Children should also be able to answer missing number questions such as:
$7 x$ $\square$ $=84$ or $\square$

## Top Tips

The secret to success is practising little and often. Can you practise these KIRFs while walking to school or during a car journey? You don't need to practice them all at once, perhaps you could have a times table of the day/week.

- Practise all the times tables on 'Times Tables Rock Stars' for at least 5 minutes everyday.
- Speed Challenge: Take two packs of playing cards and remove the kings. Turn over two cards and ask child to multiply them together (ace = 1, jack = 11 and queen = 12). How many questions can they answer correctly in two minutes?
- Online game: http://topmarks.co.uk/maths-games/hit-the-button
- Memory Tricks: For those hard to remember facts, www.multiplication.com has some strange picture stories to help children remember!
- Children complete a random times table grid every week. Can they beat their score/time from the previous week? (See attached sheets)


## Key Instant Recall Facts Year 5 Autumn 2

## Key Vocabulary

Factor pairs - two numbers which multiply together to make a certain number.

Product - the answer you get when you multiply two numbers together.

## Key Questions

What are the factor pairs of 18 ?
Find two numbers whose product is 20.

## I can recall all the factor pairs of a number

By the end of this half term, children should know the following facts. The aim is for them to recall these facts instantly.

Children should now know all the multiplication and division facts up to $12 \times 12$.
When given a number in one of the times tables, children should now be able to state all the factor pairs which multiply to make this number. Below are some examples:

The factor pairs of $24=4$ and 6 . We know this because $4 \times 6=24$. Another factor pair of $24=12$ and 2 . We know this because $2 \times 12=24$. The factor pairs of $56=7$ and 8 . We know this because $7 \times 8=56$.

## Top Tips

The secret to success is practising little and often. Can you practise these KIRFs, while walking to school or during a carjourney? You don't need to practice them all at once, perhaps you could have a number of the day and try to recall all the factors of that number.
Think of the question - One player thinks of a times table question (e.g. $4 \times 12$ ) and states the answer. The other player has to guess the original question.
You can also create factor rainbows to find factor pairs.


| Key Vocabulary |
| :--- |
| Multiply |
| Divide |
| Times |
| Lots of |
| Inverse |

## Key Questions

What are 5 lots of 7 ?
Which two numbers multiplied together give you the answer 70?

I know the multiplication and division facts, for the 7 and 11 times table.
By the end of this half term, children should know the following facts. The aim is for them to recall these facts instantly.

$$
\begin{array}{ll}
7 \times 1=7 & 11 \times 1=11 \\
7 \times 2=14 & 11 \times 2=22 \\
7 \times 3=21 & 11 \times 3=33 \\
7 \times 4=28 & 11 \times 4=44 \\
7 \times 5=35 & 11 \times 5=55 \\
7 \times 6=42 & 11 \times 6=66 \\
7 \times 7=49 & 11 \times 7=77 \\
7 \times 8=56 & 11 \times 8=88 \\
7 \times 9=63 & 11 \times 9=99 \\
7 \times 10=70 & 11 \times 10=110 \\
7 \times 11=77 & 11 \times 11=121 \\
7 \times 12=84 & 11 \times 12=132
\end{array}
$$

Top Tips

The secret to success is practising little and often. Use time wisely. Can you practise these KIRFs while walking to school or during a car journey?
You don't need to practise them all at once: perhaps you could have a fact of the day.
Songs and Chants - You can buy Times Tables CDs or find multiplication songs and chants online. If your child creates their own song, this can make the times tables even more memorable.

Buy one get three free - If your child knows one fact (e.g. $3 \times 12=36$ ), can they tell you the other three facts in the same fact family? Warning! - When creating fact families, children sometimes get confused by the order of the numbers in the division number sentence. It is tempting to say that the biggest number goes first, but it is more helpful to say that the answer to the multiplication goes first, as this will help your child more in later years when they study fractions, decimals and algebra.
E.g. $6 \times 12=72$. The answer to the multiplication is 72 , so $72 \div 6=12$ and $72 \div 12=6$

