## I know the multiplication and division facts for all <br> times tables up to $\mathbf{1 2 \times 1 2}$

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

## Top tips for learning at home

We will be sending out KIRFs homework weekly but there are lots of activities you could do at home too. When learning key recall facts it is important to do so little but often. In order for your child to progress in Maths in Years 5/6, it is essential that they are able to quickly recall their times tables up to $12 \times 12$, along with their corresponding division facts.
Speed Challenge - Take two packs of playing cards and remove the kings. Turn over two cards and ask your child to multiply the numbers together (Ace = 1, Jack = 11, Queen = 12). How many questions can they answer correctly in 2 minutes? Practise regularly and see if they can beat their high score.
Online games - There are many games online which can help children practise their multiplication and division facts. www.conkermaths.org is a good place to start.


Practise your times tables using the different game modes on Times Tables Rock Stars.

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

## Key Instant Recall Facts

## I can recall square numbers up to 12 squared

$$
\begin{array}{lr}
1^{2}=1 \times 1=1 & \vee 1=1 \\
2^{2}=2 \times 2=4 & \vee 4=2 \\
3^{2}=3 \times 3=9 & \vee 9=3 \\
4^{2}=4 \times 4=16 & \vee 16=4 \\
5^{2}=5 \times 5=25 & \sqrt{ } 25=5 \\
6^{2}=6 \times 6=36 & \sqrt{ } 36=6 \\
7^{2}=7 \times 7=49 & \sqrt{ } 49=7 \\
8^{2}=8 \times 8=64 & \vee 64=8 \\
9^{2}=9 \times 9=81 & \sqrt{ } 81=9 \\
10^{2}=10 \times 10=100 & \sqrt{ } 100=10
\end{array}
$$

and their square roots.

## Year 5 <br> Auruma Term 2

| Vocabulary |  |
| :--- | :--- |
| Square Number | The product of a number multiplied by itself <br> e.g. $2 \times 2=4$ |
| Square Root | A square root is the opposite of squaring a <br> number e.g. 6 is the square root of 36 because <br> $6 \times 6=36$. |
| Squared | multiply a number by itself. |
| Product | The answer to a multiplication question. |

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Cycling Squares - At http://nrich.maths.org/1151 there is a challenge involving square numbers. Can you complete the challenge and then create your own examples?

Matching Games-Try the online matching pairs game at: https://www.mymathsroom.com/SquareNumbers.html

