## Aberford C of E Primary School - KIRFS

## Year 6 - Autumn 1

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

The Year 6 children should already know ALL the times tables up to $12 \times 12$. The aim is for them to recall these facts instantly. This half term is a chance for Year 6 children to consolidate their knowledge of multiplication and division facts and to increase their speed of recall.

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

They should be able to answer these questions in any order, including missing number questions e.g. $7 \times \bigcirc$ $=28$ or $\bigcirc \div 6=7$. Children who have already mastered their times tables should apply this knowledge to answer questions including decimals e.g. $0.7 \times \bigcirc=4.2$ or $\bigcirc \div 60=0.7$

## Top Tips

You don't need to practise them all at once: perhaps you could start with one particular times tables and ensure they know all of them before moving onto another times table.
https://play.ttrockstars.com/-Children should be regularly practisin g their times_tables on TTRS and improving their speed.

## Aberford C of E Primary School - KIRFS

## Year 6 - Autumn 2

## I can identify common factors of a pair of numbers.

By the end of this half term, children should know the factor pairs of numbers in the times tables. The aim is for them to recall these facts fairly instantly.

The factors of a number are all numbers which it can divide into with no remainders.
E.G. the factors of 24 are $1,2,3,4,6,8$, 12 and 12.

The factors of 56 are 1, 2, 4, 7, 8, 14, 28 and 56.

The common factor of two numbers are the factors they share.

The common factors of 24 and 56 are 1, 2,4 and 8.

The greatest common factor of 24 and 58 is 8 .

Choose 2 numbers from the times tables. Can your child find the factors, then the common factors and then the greatest common factor? Repeat!

## Common Factors

A common factor is a factor of 2 or more numbers.
e.g. 3 is a common factor of 6 and 15 .


Key Vocabulary

Factor
Common factor
Multiple
Greatest common
factor

Children should be able to explain how they know that a number is a common factor.
E.g. 8 is a common factor of 24 and 56 because $24=8 \times 3$ and $56=8 \times 7$.

## 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? If your child is not yet confident with identifying factor pairs of a number, you may want to practise this first.

If you would like more ideas, please speak to your child's teacher.
https://www.mathsisfun.com/greatest-common-factor.html
http://www.conkermaths.org/cmweb.nsf/products/conkerkirfs.html
https://www.topmarks.co.uk/maths-games/7-11-years/multiplication-and-division - lots of games here
Choose two numbers between 1 and 144. Take it in turns to name factors. Who can find the most?

