



## Year 6 - Autumn 2

I can identify common factors of a pair of numbers and

I can identify prime numbers up to 50.

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

The factors of a number are all numbers **which divide it with no remainder**.

E.g. the factors of 24 are 1, 2, 3, 4, 6, 8, 12, and 24. The factors of 56 are 1, 2, 4, 7, 8, 14, 28 and 56.

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

E.g. the common factors of 24 and 56 are 1, 2, 4 and 8. The greatest common factor of 24 and 56 is 8.

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  $56 = 8 \times 7$ . This will be useful when working with fractions!

A **prime number** is a number with no factors other than itself and one.

The following numbers are prime numbers:

2, 3, 5, 7, 11, 13, 17, 19, 23,

27, 29, 31, 37, 41, 43, 47

A **composite number** is divisible by a number other than 1 or itself.

The following numbers are composite numbers:

4, 6, 8, 9, 10, 12, 14, 15, 16, 18, 20,

22, 24, 25, 26, 27, 28, 30, 32, 34, 35, 36,

## Key Vocabulary

factor common factor multiple

greatest common factor prime

number composite number

## 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. If you would like more ideas, please speak to your child's teacher.

There are many online games to practise finding the greatest common factor, for example:  
[www.fun4thebrain.com/beyondfacts/gcfsketch.html](http://www.fun4thebrain.com/beyondfacts/gcfsketch.html)

Choose two numbers. Take it in turns to name factors. Who can find the most?

Make a set of cards for the numbers from 2 to 50. How quickly can your child sort these into prime and composite numbers? How many even prime numbers can they find? How many odd composite numbers?