

Key Instant Recall Facts (KIRFs)

Year 6: Autumn 1

I know the multiplication and division facts for all times tables up to 12x12.

By the end of this half term, children should know the following facts. 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 to increase their speed of recall. This was covered previously in years 2,3 and 4.

These facts are crucial this year as we will need them in a lot of other areas of our Maths work, especially fractions, and recalling them as quickly as possible will really help your child.

Key Vocabulary

What is 12 **multiplied by** 6?

What is 7 **times** 8?

What is 84 **divided by** 7?

Top Tips:

The secret to success is practising little and often. Use your time wisely. Can you practise these KIRFs whilst walking to school or during a car journey? You don't need to practise them all at once: perhaps you could have a 'fact family of the day.'

Times Table Rockstars: Please encourage your child to spend 15 mins each day on TTRS. This is a fantastic way to increase the speed of their recall.

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 and Queen=12). How many questions can they answer in 2 minutes? Practise regularly and see if they can beat their high score.

Key Instant Recall Facts (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 following facts. The aim is for them to recall these facts **instantly**.

The factors of a number are numbers which divide into it without leaving remainders.

Eg. Factors of 24 are 1,2,3,4,6,8,12 and 24.

Factors of 56 are 1,2,4,7,8,28 and 56.

The **common factors** are the factors that both numbers share. So in the case of 24 and 56 the **common factors** are 1,2,4 and 8. These factors appear in both the lists above.

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**.

Eg. 8 is a **common factor** of 24 and 56 because $24=8 \times 3$ and $56=8 \times 7$.

Key Vocabulary

Factor

Common factor

Multiple

Greatest common factor

Divisible by

Top Tips:

The secret to success is practising little and often. Use your time wisely. Can you practise these KIRFs whilst walking to school or during a car journey? If your child is not yet confident in identifying factor pairs of a number, you may wish to refer to the Y5 Summer 2 sheet to practise first. This can be found here on our website here:

<https://www.stsilasprimary.co.uk/classes-curriculum/curriculum-overview/mathematics>. If you scroll down the page you will find it towards the bottom.

Choose two number: Take it in turns to name factors. Who can find the most? Who can find the highest common factor?

Key Instant Recall Facts (KIRFs)

Year 6: Spring 1

I can convert between decimals, fractions and percentages..

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

Children need to know families for all fractions, decimals and percentages. Below are some common ones but it is useful to know all fifths, tenths and hundredths too.

$$\frac{1}{2}=0.5=50\%$$

$$\frac{1}{4}=0.25=25\%$$

$$\frac{3}{4}=0.75=75\% \text{ ALSO } \frac{75}{100}=0.75=75\%$$

$$\frac{1}{10}=0.1=10\%$$

$$\frac{2}{10}=0.2=20\% \text{ ALSO } \frac{1}{5}=0.2=20\%$$

$$\frac{9}{10}=0.9=90\%$$

$$\frac{1}{100}=0.01=1\%$$

$$\frac{7}{100}=0.07=7\%$$

$$\frac{99}{100}=0.99=99\%$$

Key Vocabulary

How many **tenths** are in 0.8?

How many **hundredths** are in 0.12?

Write 0.75 as a **fraction** and as a **percentage**.

Write $\frac{1}{4}$ as a **decimal** and as a **percentage**.

Top Tips:

The secret to success is practising little and often. Use your time wisely. Can you practise these KIRFs whilst walking to school or during a car journey? You don't need to practise them all at once: start with tenths before moving on to hundredths.

Play games: Make some cards with equivalent fractions, decimals and percentages on them. Use these to play the memory game or to play a game of snap.

Key Instant Recall Facts (KIRFs)

Year 6: Spring 2

I can identify prime and composite 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**.

A **prime number** is any number with only two factors, 1 and itself.

The following are **prime numbers** up to 50:

2,3,5,7,11,13,17,19,23,29,31,37,41,43 and 47.

A **composite number** is any number that is divisible by other numbers as well as itself and 1. It has more than two factors.

The following are **composite numbers** up to 20:

4,6,8,9,10,12,14,15,16,18,20,22,24,25,26,27,28,30,32,33,34,35,36,38,39,40,42,44,45,46,48,49 and 50.

Children should be able to explain how they know that a number is **Prime** or **Composite**. Eg. I know 39 is composite because....

I know 37 is prime because...

Key Vocabulary

Prime number
Composite number
Factor
Multiple
Divisible by

Top Tips:

The secret to success is practising little and often. Use your time wisely. Can you practise these KIRFs whilst 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 see your child's class teacher.

Using mathematical vocabulary: It is very important that your child uses mathematical vocabulary correctly. Choose a number between 2 and 50. How many correct statements can your child make about this number using the vocabulary above?

Sorting activities: Can your child sort all the numbers from 2 to 50 into groups using the vocabulary above as the group headings?

