



Key Instant Recall Facts

At St Mary Magdalene Primary our aim is to develop children's fluency in mathematics in order to create competent and confident mathematicians.

To achieve this, we will be focusing on children learning Key Instant Recall Facts (KIRFs). These are a set of key objectives for each year group which align with the National Curriculum and help form a solid foundation for children to be successful.

How will we teach the Key Instant Recall Facts (KIRFs)?

At the beginning of each half term, a new KIRF will be introduced to every year group. The teacher will teach this in an initial lesson and revisit the objective weekly.

How to support your child at home

Once the initial lesson has been taught, the KIRF for that half term will be sent home. This will also include some ideas on how to support your child and activities for them to practise and build fluency.

How will you know your child is progressing?

As the KIRFs are quick recall facts, each week your child will be given a set amount of time to answer as many questions as they can, linked to the objective. The aim is for your child to beat their individual score each week, thus improving their core mathematical skills. This will be done in a fun way to enthuse the children.



Year 6 – Spring 2

I can identify prime numbers up to 50.

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,

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,

Key Vocabulary

prime number

composite number

factor

multiple

Children should be able to explain how they know that a number is composite.

E.g. 39 is composite because it is a multiple of 3 and 13.

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.

It's really important that your child uses mathematical vocabulary accurately. Choose a number between 2 and 50. How many correct statements can your child make about this number using the vocabulary above?

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?



Year 6 – Spring 1

I can convert between decimals, fractions and percentages.

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

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

$$\frac{3}{4} = 0.75$$

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

$$\frac{1}{5} = 0.2$$

$$\frac{3}{5} = 0.6$$

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

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

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

$$\frac{21}{100} = 0.21$$

$$\frac{75}{100} = 0.75$$

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

Key Vocabulary

How many **tenths** is 0.8?

How many **hundredths** is 0.12?

Write 0.75 as a **fraction**.

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

Children should be able to convert between decimals and fractions for $\frac{1}{2}$, $\frac{1}{4}$, $\frac{3}{4}$ and any number of tenths and hundredths. They should be able to recall these instantly and be able to use these in different contexts.

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: start with tenths before moving on to hundredths. If you would like more ideas, please speak to your child's teacher.

Play games - Make some cards with pairs of equivalent fractions and decimals. Use these to play the memory game or snap. Or make your own dominoes with fractions on one side and decimals on the other.

Race someone in your family to see who can find equivalents the quickest



Year 6 – Autumn 2

I can identify common factors of a pair of numbers.

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.

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

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

Online games -

<http://www.sheppardsoftware.com/mathgames/fractions/GreatestCommonFactor.htm>

<https://illuminations.nctm.org/Activity.aspx?id=4134>



Year 6 – Autumn 1

I can recall the multiplication and division facts for all times tables up to 12×12 .

Please see separate sheet for all times table facts.

This is a chance for Year 6 children to consolidate their knowledge of multiplication and division facts and to increase their speed of recall.

Key Vocabulary

What is 12 **multiplied by** 6?

What is 7 **times** 8?

What is 84 **divided by** 7?

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

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 family of the day. If you would like more ideas, please speak to your child's teacher.

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. Below are some websites your child could explore!

www.topmarks.co.uk

www.conkermaths.org

http://www.mathplayground.com/ASB_GrandPrixMultiplication.html

Use memory tricks – For those hard-to-remember facts, www.multiplication.com has some short picture stories to help children remember.