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 3 – Summer 2

I can recall the multiplication and division facts for the 8 times table in random order.

8 × 1 = 8	1 × 8 = 8	8 ÷ 8 = 1	8 ÷ 1 = 8
8 × 2 = 16	2 × 8 = 16	16 ÷ 8 = 2	16 ÷ 2 = 8
8 × 3 = 24	3 × 8 = 24	24 ÷ 8 = 3	24 ÷ 3 = 8
8 × 4 = 32	4 × 8 = 32	32 ÷ 8 = 4	32 ÷ 4 = 8
8 × 5 = 40	5 × 8 = 40	40 ÷ 8 = 5	40 ÷ 5 = 8
8 × 6 = 48	6 × 8 = 48	48 ÷ 8 = 6	48 ÷ 6 = 8
8 × 7 = 56	7 × 8 = 56	56 ÷ 8 = 7	56 ÷ 7 = 8
8 × 8 = 64	8 × 8 = 64	64 ÷ 8 = 8	64 ÷ 8 = 8
8 × 9 = 72	9 × 8 = 72	72 ÷ 8 = 9	72 ÷ 9 = 8
8 × 10 = 80	10 × 8 = 80	80 ÷ 8 = 10	80 ÷ 10 = 8
8 × 11 = 88	11 × 8 = 88	88 ÷ 8 = 11	88 ÷ 11 = 8
8 × 12 = 96	12 × 8 = 96	96 ÷ 8 = 12	96 ÷ 12 = 8

Key Vocabulary

What is 8 **multiplied by** 6?

What is 8 **times** 8?

What is 24 **divided by** 8?

How many **lots of** 8 in 40?

Your child should be able to answer these questions in any order, including missing number questions e.g. 8 × ◯ = 16 or ◯ ÷ 8 = 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.

Songs and Chants – You can buy Times Tables CDs or find multiplication songs and chants online. If your child creates their own song, this can make the times tables even more memorable.

Double your fours – Multiplying a number by 8 is the same as multiply by 4 and then doubling the answer. 8 × 4 = 32 and double 32 is 64, so 8 × 8 = 64.

Five six seven eight – fifty-six is seven times eight (56 = 7 × 8).

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

Play games – There are many interactive games online. Try the websites below!

www.conkermaths.org

www.topmarks.co.uk

www.mathplayground.com

Year 3 – Summer 1

I can read the time on an analogue clock.

Children need to be able to tell the time using an analogue clock. This target can be broken down into several steps, some of which will have been taught in Year 1 and Year 2.

- I can tell the time to the nearest hour.
- I can tell the time to the nearest half hour.
- I can tell the time to the nearest quarter hour.
- I can tell the time to the nearest five minutes.
- I can tell the time to the nearest minute.

Key Vocabulary

Twelve **o'clock**

Half past two

Quarter past three

Quarter to nine

Five **past** one

Twenty-five **to** ten

Top Tips

The secret to success is practising **little** and **often**. Use time wisely. If you would like more ideas, please speak to your child's teacher.

Talk about time - Discuss what time things happen. When does your child wake up? What time do they need to leave home in order to be at school on time? Make sure that you have an analogue clock visible in your house or that your child wears a watch with hands. Once your child is confident telling the time, see if you can find more challenging clocks e.g. with Roman numerals or no numbers marked.

Ask your child the time regularly – You could also give your child some responsibility for watching the clock:

"The cakes need to come out of the oven at twenty-two minutes past four exactly."

"We need to leave the house at twenty-five to nine."

Year 3 – Spring 2

I can recall the multiplication and division facts for the 4 times table in random order.

4 × 1 = 4	1 × 4 = 4	4 ÷ 4 = 1	4 ÷ 1 = 4
4 × 2 = 8	2 × 4 = 8	8 ÷ 4 = 2	8 ÷ 2 = 4
4 × 3 = 12	3 × 4 = 12	12 ÷ 4 = 3	12 ÷ 3 = 4
4 × 4 = 16	4 × 4 = 16	16 ÷ 4 = 4	16 ÷ 4 = 4
4 × 5 = 20	5 × 4 = 20	20 ÷ 4 = 5	20 ÷ 5 = 4
4 × 6 = 24	6 × 4 = 24	24 ÷ 4 = 6	24 ÷ 6 = 4
4 × 7 = 28	7 × 4 = 28	28 ÷ 4 = 7	28 ÷ 7 = 4
4 × 8 = 32	8 × 4 = 32	32 ÷ 4 = 8	32 ÷ 8 = 4
4 × 9 = 36	9 × 4 = 36	36 ÷ 4 = 9	36 ÷ 9 = 4
4 × 10 = 40	10 × 4 = 40	40 ÷ 4 = 10	40 ÷ 10 = 4
4 × 11 = 44	11 × 4 = 44	44 ÷ 4 = 11	44 ÷ 11 = 4
4 × 12 = 48	12 × 4 = 48	48 ÷ 4 = 12	48 ÷ 12 = 4

Key Vocabulary

What is 4 **multiplied by** 6?

What is 8 **times** 4?

What is 24 **divided by** 4?

Your child should be able to answer these questions in any order, including missing number questions e.g. 4 × ◯ = 16 or ◯ ÷ 4 = 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.

What do you already know? – Your child will already know many of these facts from the 2, 3, 5 and 10 times tables.
Double and double again – Multiplying a number by 4 is the same as doubling and doubling again. Double 6 is 12 and double 12 is 24, so 6 × 4 = 24.
Buy one get three free – If your child knows one fact (e.g. 12 × 4 = 48), can they tell you the other three facts in the same fact family (e.g. 4 x 12 = 48, 48 ÷ 4 = 12 and 48 ÷ 12 = 4)?
Play games – Check out the great websites listed below.
www.conkermaths.org
www.topmarks.co.uk
www.mathplayground.com

Year 3 – Spring 1

I can recall facts about durations of time.

There are 60 seconds in a minute.
There are 60 minutes in an hour.
There are 24 hours in a day.
There are 7 days in a week.
There are 12 months in a year.
There are 365 days in a year.
There are 366 days in a leap year.

Number of days in each month

January	31	July	31
February	28/29	August	31
March	31	September	30
April	30	October	31
May	31	November	30
June	30	December	31

Children also need to know the order of the months in a year. Your child should practise applying these facts to answer questions, such as:

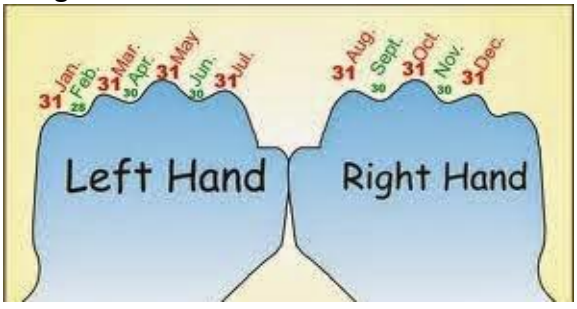
What day comes after 30th April?

What day comes before 1st February?

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.

Use rhymes and memory games– The rhyme, *Thirty days hath September*, can help children remember which months have 30 days. There are also poems describing the months of the year in order.
Use calendars – If you have a calendar for the New Year, your child could be responsible for recording the birthdays of friends and family members in it. Your child could even make their own calendar!
How long is a minute? – Ask your child to sit with their eyes closed for exactly one minute while you time them. Can they guess the length of a minute? Carry out different activities for one minute. How many times can they jump in sixty seconds?
Use your hands! – Your knuckles are the months with the greatest number of days (31) and the grooves in between are the months with the fewest days (30 or 28/29 in February).



Year 3 – Autumn 2

I can recall the multiplication and division facts for the 3 times table in random order.

3 × 1 = 3	1 × 3 = 3	3 ÷ 3 = 1	3 ÷ 1 = 3
3 × 2 = 6	2 × 3 = 6	6 ÷ 3 = 2	6 ÷ 2 = 3
3 × 3 = 9	3 × 3 = 9	9 ÷ 3 = 3	9 ÷ 3 = 3
3 × 4 = 12	4 × 3 = 12	12 ÷ 3 = 4	12 ÷ 4 = 3
3 × 5 = 15	5 × 3 = 15	15 ÷ 3 = 5	15 ÷ 5 = 3
3 × 6 = 18	6 × 3 = 18	18 ÷ 3 = 6	18 ÷ 6 = 3
3 × 7 = 21	7 × 3 = 21	21 ÷ 3 = 7	21 ÷ 7 = 3
3 × 8 = 24	8 × 3 = 24	24 ÷ 3 = 8	24 ÷ 8 = 3
3 × 9 = 27	9 × 3 = 27	27 ÷ 3 = 9	27 ÷ 9 = 3
3 × 10 = 30	10 × 3 = 30	30 ÷ 3 = 10	30 ÷ 10 = 3
3 × 11 = 33	11 × 3 = 33	33 ÷ 3 = 11	33 ÷ 11 = 3
3 × 12 = 36	12 × 3 = 36	36 ÷ 3 = 12	36 ÷ 12 = 3

Key Vocabulary

What is 3 **multiplied by** 8?

What is 8 **times** 3?

What is 24 **divided by** 3?

What is 7 **lots of** 3?

Your child should be able to answer these questions in any order, including missing number questions e.g. 3 × ◯ = 18 or ◯ ÷ 3 = 11.

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.

Songs and Chants – You can buy Times Tables CDs or find multiplication songs and chants online. If your child creates their own song, this can make the times tables even more memorable!

Buy one get three free – If your child knows one fact (e.g. 3 × 5 = 15), can they tell you the other three facts in the same fact family (e.g. 5x3=15, 15÷3=5 and 15÷5=3)?

Warning! – When creating fact families, children sometimes get confused by the order of the numbers in the division number sentence. It is tempting to say that the biggest number goes first, but it is more helpful to say that the answer to the multiplication goes first, as this will help your child more in later years when they study fractions, decimals and algebra.

E.g. 3 × 12 = 36. The answer to the multiplication is 36, so 36 ÷ 3 = 12 and 36 ÷ 12 = 3.

Play games – Try the fun games on the websites below!

www.conkermaths.org

www.topmarks.co.uk

www.mathplayground.com

Year 3 – Autumn 1

I know number bonds for all numbers to 20.

2 + 9 = 11
3 + 8 = 11
4 + 7 = 11
5 + 6 = 11
3 + 9 = 12
4 + 8 = 12
5 + 7 = 12
6 + 6 = 12
4 + 9 = 13
5 + 8 = 13
6 + 7 = 13

5 + 9 = 14
6 + 8 = 14
7 + 7 = 14
6 + 9 = 15
7 + 8 = 15
7 + 9 = 16
8 + 8 = 16
8 + 9 = 17
9 + 9 = 18

Example of a fact family

6 + 9 = 15
9 + 6 = 15
15 – 9 = 6
15 – 9 = 6

Examples of other facts

4 + 5 = 9
13 + 5 = 18
19 – 7 = 12
10 – 6 = 4

Key Vocabulary

What do I **add** to 5 to make 19?

What is 17 **take away** 6?

What is 13 **less than** 15?

How many more than 8 is 11?

What is the **difference** between 9 and 13?

This list includes the most challenging facts but children will need to learn **all** number bonds for each number to 20 (e.g. 15 + 2 = 17). This includes related subtraction facts (e.g. 17 – 2 = 15).

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.

Buy one get three free - If your child knows one fact (e.g. 8 + 5 = 13), can they tell you the other three facts in the same fact family (e.g. 5+8=13, 13-5=8 and 13-8=5?
Use doubles and near doubles – If you know that 6 + 6 = 12, how can you work out 6 + 7? What about 5 + 7?
Play games – There are missing number questions at www.conkermaths.com . See how many questions your child can answer in just one minute!
www.conkermaths.org
www.topmarks.co.uk
www.mathplayground.com