

Key Instant Recall Facts (KIRFs)

Year 3: Autumn 1

I know number bonds for all numbers to 20.

By the end of this half term, children should know the bonds for **ALL** numbers up to 20, including all combinations. The aim is for the children to recall these facts **instantly**. The following are **EXAMPLES**.

$2+9=11$

$5+9=14$

Example of a fact family:

$3+8=11$

$6+8=14$

$6+9=15$

$4+7=11$

$7+7=14$

$9+6=15$

$5+6=11$

$6+9=15$

$15-9=6$

$3+9=12$

$7+8=15$

$15-6=9$

$4+8=12$

$7+9=16$

Remember to include other facts:

$5+7=12$

$8+8=16$

$6+6=12$

$8+9=16$

$4+9=13$

$8+9=17$

$5+8=13$

$9+9=18$

$6+7=13$

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 know **ALL** number bonds for each number to 20 (eg. $15+2=17$). This includes related **subtraction** facts (eg. $17-2=15$)

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.

Buy one get three free: If your child knows one fact (eg. $8+5=13$), can they tell you the other three facts in that family?

Use doubles and near doubles: If you know that $6+6=12$, how can you work out $6+7$? What about $5+7$?

Key Instant Recall Facts (KIRFs)

Year 3: Autumn 2

I know the multiplication and division facts for the 3 times table.

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

$3 \times 1 = 3$	$1 \times 3 = 3$	$3 \div 3 = 1$	$3 \div 1 = 3$
$3 \times 2 = 6$	$2 \times 3 = 6$	$6 \div 3 = 2$	$6 \div 2 = 3$
$3 \times 3 = 9$	$3 \times 3 = 9$	$9 \div 3 = 3$	$9 \div 3 = 3$
$3 \times 4 = 12$	$4 \times 3 = 12$	$12 \div 3 = 4$	$12 \div 4 = 3$
$3 \times 5 = 15$	$5 \times 3 = 15$	$15 \div 3 = 5$	$15 \div 5 = 3$
$3 \times 6 = 18$	$6 \times 3 = 18$	$18 \div 3 = 6$	$18 \div 6 = 3$
$3 \times 7 = 21$	$7 \times 3 = 21$	$21 \div 3 = 7$	$21 \div 7 = 3$
$3 \times 8 = 24$	$8 \times 3 = 24$	$24 \div 3 = 8$	$24 \div 8 = 3$
$3 \times 9 = 27$	$9 \times 3 = 27$	$27 \div 3 = 9$	$27 \div 9 = 3$
$3 \times 10 = 30$	$10 \times 3 = 30$	$30 \div 3 = 10$	$30 \div 10 = 3$
$3 \times 11 = 33$	$11 \times 3 = 33$	$33 \div 3 = 11$	$33 \div 11 = 3$
$3 \times 12 = 36$	$12 \times 3 = 36$	$36 \div 3 = 12$	$36 \div 12 = 3$

Key Vocabulary

What is 3 **multiplied by** 8?

What is 8 **times** 3?

What is 24 **divided by** 3?

Children should be able to answer questions in any order, including missing number questions. Eg. $3 \times \underline{\quad} = 24$ or $\underline{\quad} \div 3 = 11$

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.

Songs and chants: There are many songs / chants to help children to learn these facts. Many are available online.

Buy one get three free: If your child knows one fact (eg. $3 \times 5 = 15$), can they tell you the other three facts in that family?

Warning: When creating fact families, children sometimes get confused by the order of the numbers in a division number sentence. It is tempting to say that the largest number goes first but this can lead to problems later. A fact family for multiplication tables should always have four facts. See above.

Key Instant Recall Facts (KIRFs)

Year 3: Spring 1

I know the multiplication and division facts for the 4 times table.

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

$4 \times 1 = 4$	$1 \times 4 = 4$	$4 \div 4 = 1$	$4 \div 1 = 4$
$4 \times 2 = 8$	$2 \times 4 = 8$	$8 \div 4 = 2$	$8 \div 2 = 4$
$4 \times 3 = 12$	$3 \times 4 = 12$	$12 \div 4 = 3$	$12 \div 3 = 4$
$4 \times 4 = 16$	$4 \times 4 = 16$	$16 \div 4 = 4$	$16 \div 4 = 4$
$4 \times 5 = 20$	$5 \times 4 = 20$	$20 \div 4 = 5$	$20 \div 5 = 4$
$4 \times 6 = 24$	$6 \times 4 = 24$	$24 \div 4 = 6$	$24 \div 6 = 4$
$4 \times 7 = 28$	$7 \times 4 = 28$	$28 \div 4 = 7$	$28 \div 7 = 4$
$4 \times 8 = 32$	$8 \times 4 = 32$	$32 \div 4 = 8$	$32 \div 8 = 4$
$4 \times 9 = 36$	$9 \times 4 = 36$	$36 \div 4 = 9$	$36 \div 9 = 4$
$4 \times 10 = 40$	$10 \times 4 = 40$	$40 \div 4 = 10$	$40 \div 10 = 4$
$4 \times 11 = 44$	$11 \times 4 = 44$	$44 \div 4 = 11$	$44 \div 11 = 4$
$4 \times 12 = 48$	$12 \times 4 = 48$	$48 \div 4 = 12$	$48 \div 12 = 4$

Key Vocabulary

What is 4 **multiplied by** 8?

What is 8 **times** 4?

What is 36 **divided by** 4?

Children should be able to answer questions in any order, including missing number questions. Eg. $4 \times \underline{\quad} = 24$ or $\underline{\quad} \div 4 = 11$

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.

Songs and chants: There are many songs / chants to help children to learn these facts. Many are available online.

Buy one get three free: If your child knows one fact (eg. $4 \times 5 = 20$), can they tell you the other three facts in that family?

Warning: When creating fact families, children sometimes get confused by the order of the numbers in a division number sentence. It is tempting to say that the largest number goes first but this can lead to problems later. A fact family for multiplication tables should always have four facts. See above.

Key Instant Recall Facts (KIRFs)

Year 3: Spring 2

I can recall facts about the duration of time.

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

There are 60 seconds in 1 minute.

There are 60 minutes in 1 hour.

There are 24 hours in 1 day.

There are 7 days in 1 week.

There are 365 days in 1 year.

There are 366 days in a leap year.

Number of days in each month:

January 31

July 31

February 28 (29)

August 30

March 31

September 30

April 30

October 31

May 31

November 30

June 30

December 31

Key Questions:

Children should also know the order of the months in a year and should be able to use this knowledge 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 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.

Songs and chants: The rhyme, *30 days hath September, April, June and November. All the rest have 31 except February which has 28 days clear and 29 each leap year.* This really helps children to remember.

Use calendars: If you have a calendar for the new year, ask your child to record important dates on it such as birthdays etc. Discuss the dates / months using good questioning.

Key Instant Recall Facts (KIRFs)

Year 3: Summer 1

I can tell the time to the nearest minute.

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 be able to tell the time using a clock with hands. This can be broken down into several steps:

- 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 five.

Five past one.

Twenty five to ten.

Top Tips:

The secret to success is practising little and often.

Talk about the time: Discuss what time things happen. What time do you wake up? What time do you have breakfast?

Always link these questions to an **analogue** clock (one with hands).

Ask your child the time regularly: You could also give your child responsibility for monitoring the time.

Key Instant Recall Facts (KIRFs)

Year 3: Summer 2

I know the multiplication and division facts for the 8 times table.

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

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

Key Vocabulary

What is 8 **multiplied by** 6?

What is 8 **times** 8?

What is 96 **divided by** 8?

Children should be able to answer questions in any order, including missing number questions. Eg. $4 \times _ = 24$ or $_ \div 4 = 11$

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.

Songs and chants: There are many songs / chants to help children to learn these facts. Many are available online.

Buy one get three free: If your child knows one fact (eg. $8 \times 5 = 40$), can they tell you the other three facts in that family?

Warning: When creating fact families, children sometimes get confused by the order of the numbers in a division number sentence. It is tempting to say that the largest number goes first but this can lead to problems later. A fact family for multiplication tables should always have four facts. See above.

