Key Instant Recall Facts

Year 2 - Autumn 1

I know addition and subtraction facts for bridging 10.

By the end of this term, children should know these facts: the aim is for instant recall.

Near doubles: one more or on less than doubles		**Bridging 10:** can be worked out by partitioning the smaller number to make 10 first, so 9 + 5 = 9 + 1 + 4 = 10 + 4 = 14			
6 + 5 = 11	8 + 7 = 15	7 + 4 = 11	8 + 4 = 12	9 + 2 = 11	9 + 5 = 14
5 + 6 = 11	7 + 8 = 15	4 + 7 = 11	4 + 8 = 12	2 + 9 = 11	5 + 9 = 14
11 – 6 = 5	15 – 8 = 7	11 – 4 = 7	12 – 4 = 8	11 – 2 = 9	14 – 5 = 9
11 – 5 = 6	15 – 7 = 8	11 – 7 = 4	12 – 8 = 4	11 – 9 = 2	14 – 9 = 5
7 + 6 = 13	9 + 8 = 17	7 + 5 = 12	8 + 5 = 13	9 + 3 = 12	9 + 6 = 15
6 + 7 = 13	8 + 9 = 17	5 + 7 = 12	5 + 8 = 13	3 + 9 = 12	6 + 9 = 15
13 – 6 = 7	17 – 8 = 9	12 – 4 = 7	13 – 5 = 8	12 – 3 = 9	15 – 6 = 9
13 – 7 = 6	17 – 9 = 8	12 – 7 = 4	13 – 8 = 5	12 – 9 = 3	15 – 6 = 5
		8 + 3 = 11	8 + 6 = 14	9 + 4 = 13	9 + 7 = 16
		3 + 8 = 11	6 + 8 = 14	4 + 9 = 13	7 + 9 = 16
		11 – 3 = 8	14 – 6 = 8	13 – 4 = 9	16 – 7 = 9
		11 – 8 = 3	14 – 8 = 6	13 – 9 = 4	16 – 9 = 7

Children should be able to answer the questions in any order, including with the calculations written either side of the equals sign and missing number questions,

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Useful Questions

What is 6 add 7? What is 4 plus 9? What is 3 less than 12?

How many different ways can you make 13? How many are there altogether?

If you had 16 apples and ate 9, how many would you have left?

If you know 6 + 8 = 14, how many other calculations can you write?

e.g. 11 – 8 = 3 11 = 8 + 3 3 + = 11 8 = 11 -

Top Tips:

The secret to success is to practise little and often -could you practise on the way to school or during a car journey?

You don't need to practise them all at once – perhaps have a fact of the day.

Make it fun!

- Use practical resources – If your child has 8 beans on their plate and you give them four more, can they predict how many they will have now?
- Play number ping pong! Start by saying 'ping', child replies with 'pong'. Repeat and then convert to numbers i.e. say '5' and they reply '8' (for number bonds to 13)
- What's hidden? There are 16 beans on this plate, I hide some under a beaker - how many have I hidden – can you work it out from how many are left?
- https://www.topmarks.co.uk/number-facts/number-fact-families
- http://www.conkermaths.org/cmweb.nsf/products/conkerkirfs.html
- Make a set of cards and play snap by matching the number bonds.
- Play a 'memory game' to find matching number bonds.
- Timed Games: How well are you doing? How many questions can you answer in 2 minutes? Can you beat your own record?

Deepen and apply

- There are 14 fish swimming in a lake. Five swim away, how many are left? How do you know? Can you explain it?
- I have 7p in my purse. How much more do I need to make 15p? Why?
- I have 18 cm of ribbon, I cut off 9 cm. How much ribbon is left? Are you sure? How do you know?
- How many ways can you make 17 using 3 numbers? (example: 6 + 7 + 4)
- 15 - ☐ = ☐ How many ways can you make this true?
- ☐ + ☐ = ☐ + ☐ What numbers could you put in here to make the sentences true?
- https://www.topmarks.co.uk/maths-games/subtraction-grids
- https://nrich.maths.org/14312
- https://nrich.maths.org/2782

Key Instant Recall Facts
Year 2 - Autumn 2

I know number bonds to 20.

By the end of this term, children should know these facts: the aim is for instant recall.

0 + 20 = 20	20 = 20 + 0	20 – 20 = 0	20 = 20 – 0
1 + 19 = 20	20 = 19 + 1	20 – 1 = 19	1 = 20 – 19
2 + 18 = 20	20 = 18 + 2	20 – 2 = 18	2 = 20 – 18
3 + 17 = 20	20 = 17 + 3	20 – 3 = 17	3 = 20 – 17
4 + 16 = 20	20 = 16 + 4	20 – 4 = 16	4 = 20 – 16
5 + 15 = 20	20 = 15 + 5	20 – 5 = 15	5 = 20 - 15
6 + 14 = 20	20 = 14 + 6	20 – 6 = 14	6 = 20 - 14
7 + 13 = 20	20 = 13 + 7	20 – 7 = 13	7 = 20 - 13
8 + 12 = 20	20 = 12 + 8	20 – 8 = 12	8 = 20 - 12
9 + 11 = 20	20 = 11 + 9	20 – 9 = 11	9 = 20 - 11
10 + 10 = 20		20 – 10 = 10	

Children should be able to answer the questions in any order, including with the calculations written either side of the equals sign and missing number questions,

e.g. 19 + ☐ = 20 19 = 20 - ☐ 1 + ☐ = 20 1 = ☐ - 19

Useful Questions

What do I **add** to 5 to make 20?

What is 20 **take away** 6?

What is 3 **less than** 20?

How many more than 16 is 20?

How many are there **altogether**?

Top Tips:

The secret to success is to practise little and often -could you practise on the way to school or during a car journey?

You don't need to practise them all at once – perhaps have a fact of the day.

Use what you already know – Use number bonds to 10 (e.g. 7 + 3 = 10) to work out related number bonds to 20 (e.g. 17 + 3 = 20).

Make it fun!

- Use practical resources – Make collections of 20 objects.
- Show some and ask questions such as, "How many more would I need to make 20?"
- Cover some objects and ask how many are hidden.
- http://www.conkermaths.org/cmweb.nsf/products/conkerkirfs.html Game 2 – number bonds to 20
- http://www.topmarks.co.uk/maths-games/hit-the-button Make 20
- Play number ping pong! Start by saying 'ping', child replies with 'pong'. Repeat and then convert to numbers i.e. say '2' and they reply '18' (for number bonds to 20)
- Make a set of cards and play snap by matching the number bonds.
- Play a 'memory game' to find matching number bonds.
- Timed Games: How well are you doing? How many questions can you answer in 2 minutes? Can you beat your own record?

Deepen and apply

- There are 15 ladybirds on the leaf. If two fly away, how many are left? How do you know? Can you explain it?
- I have 12p in my purse. How much more do I need to make 20p? Why?
- I have 15 cm of ribbon, I cut off 2 cm. How much ribbon is left? How do you know?
- How many ways can you make 20 using 3 numbers? (example; 11 + 1 + 8)
- 20 - ☐ = ☐ How many ways can you make this true?
- ☐ + ☐ = ☐ + ☐ What numbers could you put in here to make the sentences true?
- http://nrich.maths.org/1257 Flip flop Matching Cards
- http://nrich.maths.org/11114 Totality
- http://www.snappymaths.com/addsub/make20/make20.htm

Key Instant Recall Facts

Year 2 – Spring 1

I know the multiplication and division facts for the 2 times table.

By the end of this term, children should know these facts: the aim is for instant recall.

2 × 1 = 2	1 x 2 = 2	2 ÷ 2 = 1	2 ÷ 1 = 2
2 × 2 = 4	2 x 2 = 4	4 ÷ 2 = 2	4 ÷ 2 = 2
2 × 3 = 6	3 x 2 = 6	6 ÷ 2 = 3	6 ÷ 3 = 2
2 × 4 = 8	4 x 2 = 8	8 ÷ 2 = 4	8 ÷ 4 = 2
2 × 5 = 10	5 x 2 = 10	10 ÷ 2 = 5	10 ÷ 5 = 2
2 × 6 = 12	6 x 2 = 12	12 ÷ 2 = 6	12 ÷ 6 = 2
2 × 7 = 14	7 x 2 = 14	14 ÷ 2 = 7	14 ÷ 7 = 2
2 × 8 = 16	8 x 2 = 16	16 ÷ 2 = 8	16 ÷ 8 = 2
2 × 9 = 18	9 x 2 = 18	18 ÷ 2 = 9	18 ÷ 9 = 2
2 × 10 = 20	10 × 2 = 20	20 ÷ 2 = 2	20 ÷ 10 = 2
2 × 11 = 22	11 x 2 = 22	22 ÷ 2 = 11	22 ÷ 11 = 2
2 × 12 = 24	12 x 2 = 24	24 ÷ 2 = 12	24 ÷ 12 = 2

Children should be able to answer the questions in any order, including with the calculations written either side of the equals sign and missing number questions,

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Useful Questions

What is 2 **multiplied by** 3? What are 2 **lots of** 6? What is 3, **doubled**?

What is 20 **divided by** 2? What is **half of** 14? What is 18, **halved**?

What is **double** 12? What is 2 **times** 9? What do you get if you have 4, **twice**?

e.g. 2 × □ = 16 12 = □ ÷ 2

Top Tips:

The secret to success is to practise little and often -could you practise on the way to school or during a car journey?

You don't need to practise them all at once – perhaps have a fact of the day, or a fact family of the day (see below).

Make the connection between doubling (x2) and halving (÷) which the children are already familiar with.

Use what you already know - If I know that 2 x 7 = 14, then 7 x 2 = 14, 14 ÷ 2 = 7 and 14 ÷ 7 = 2. We call this a **fact family**.

If I know that 2 × 5 = 10, 2 x 6 is just 2 more so 2 x 6 = 12.

Make it fun!

- Use practical resources – lay out pebbles, buttons or other objects in arrays (rows and columns) to represent the facts (e.g. 10 x 2 = 20 can be represented by 10 rows of 2).
- 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.
- http://www.conkermaths.org/cmweb.nsf/products/conkerkirfs.html 2 x tables
- http://www.topmarks.co.uk/maths-games/hit-the-button x2
- Play number ping pong! Start by saying 'ping', child replies with 'pong'. Repeat with times tables facts i.e. say '9' and they reply '18'
- Test the Parent – Your child can make up their own tricky division questions for you e.g. What is 18 divided by 2? They need to be able to multiply to create these questions.
- Timed Games: How well are you doing? How many questions can you answer in 2 minutes? Can you beat your own record?
- Games at www.multiplication.com and www.SumDog.com
- Use memory tricks – For those hard-to-remember facts, www.multiplication.com has some strange picture stories to help children remember.

Deepen and apply

- True or false? 5 × 4 = 10 × 2 Explain your reasoning. What do you notice?
- Two friends share 12 sweets equally between them. How many do they each get? Write this as a division number sentence. Make up two more sharing stories like this one.
- Together Rosie and Jim have £12. Rosie has twice as much as Jim. How much does Jim have?
- □□ ÷□ = 2 How many ways can you make this true?

Key Instant Recall Facts
Year 2 – Spring 2

I know the multiplication and division facts for the 10 times table.

By the end of this term, children should know these facts: the aim is for instant recall.

10 × 1 = 10	1 x 10 = 10	10 ÷ 10 = 1	10 ÷ 1 = 10
10 × 2 = 20	2 x 10 = 20	20 ÷ 10 = 2	20 ÷ 2 = 10
10 × 3 = 30	3 x 10 = 30	30 ÷ 10 = 3	30 ÷ 3 = 10
10 × 4 = 40	4 x 10 = 40	40 ÷ 10 = 4	40 ÷ 4 = 10
10 × 5 = 50	5 x 10 = 50	50 ÷ 10 = 5	50 ÷ 5 = 10
10 × 6 = 60	6 x 10 = 60	60 ÷ 10 = 6	60 ÷ 6 = 10
10 × 7 = 70	7 x 10 = 70	70 ÷ 10 = 7	70 ÷ 7 = 10
10 × 8 = 80	8 x 10 = 80	80 ÷ 10 = 8	80 ÷ 8 = 10
10 × 9 = 90	9 x 10 = 90	90 ÷ 10 = 9	90 ÷ 9 = 10
10 × 10 = 100	10 × 10 = 100	100 ÷ 10 = 10	100 ÷ 10 = 10
10 × 11 = 110	11 x 10 = 110	110 ÷ 10 = 11	110 ÷ 11 = 10
10 × 12 = 120	12 x 10 = 120	120 ÷ 10 = 12	120 ÷ 12 = 10

Children should be able to answer the questions in any order, including with the calculations written either side of the equals sign and missing number questions,

e.g. 10 × ☐ = 80 6 = ☐ ÷ 10

Useful Questions

What is 10 **multiplied by** 3?
What is 10 **times** 9?
What is 70 **divided by** 10?
What are 10 lots of 5?
What do you get if you have 5, ten times?

Top Tips:

The secret to success is to practise little and often -could you practise on the way to school or during a car journey?

You don't need to practise them all at once – perhaps have a fact of the day.

Use what you already know – If I know that 10 x 9 = 90, then I know that 9 x 10 = 90 and 90 ÷ 10 = 9 and 90 ÷ 9 = 10

Pronunciation – Make sure that your child is pronouncing the numbers correctly and not getting confused between thir**teen** (13) and thir**ty** (30), four**teen** (14) and for**ty** (40), etc.

Make it fun!

- Use practical resources – lay out pebbles, buttons or other objects in arrays (rows and columns) to represent the facts (e.g. 9 x 10 = 90 can be represented by 10 rows of 9).
- 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.
- http://www.topmarks.co.uk/maths-games/hit-the-button x10
- Play number ping pong! Start by saying 'ping', child replies with 'pong'. Repeat with times tables facts i.e. say '9' and they reply '90'
- Test the Parent – Your child can make up their own tricky division questions for you e.g. What is 90 divided by 10? They need to be able to multiply to create these questions.
- http://www.mathsatplantsbrook.co.uk/Primary/games/qtn_Multiple_Wipe.swf Select 10 x
- Timed Games: How well are you doing? How many questions can you answer in 2 minutes. Can you beat your own record?
- Games at www.multiplication.com and www.SumDog.com
- Use memory tricks – For those hard-to-remember facts, www.multiplication.com has some strange picture stories to help children remember.

Deepen and apply

- Apply these facts to real life situations – How many toes are in your house?
- What other multiplication and division questions can your child make up?
- http://nrich.maths.org/2360 – Lots of lollies problem
- http://nrich.maths.org/154 – Biscuit Decorations problem

Key Instant Recall Facts

Year 2 – Summer 1

I know the multiplication and division facts for the 5 times table.

By the end of this term, children should know these facts: the aim is for instant recall.

5 × 1 = 5	1 x 5 = 5	5 ÷ 5 = 1	5 ÷ 1 = 5
5 × 2 = 10	2 x 5 = 10	10 ÷ 5 = 5	10 ÷ 2 = 5
5 × 3 = 15	3 x 5 = 15	15 ÷ 5 = 3	15 ÷ 3 = 5
5 × 4 = 20	4 x 5 = 20	20 ÷ 5 = 4	20 ÷ 4 = 5
5 × 5 = 25	5 x 5 = 25	25 ÷ 5 = 5	25 ÷ 5 = 5
5 × 6 = 30	6 x 5 = 30	30 ÷ 5 = 6	30 ÷ 6 = 5
5 × 7 = 35	7 x 5 = 35	35 ÷ 5 = 7	35 ÷ 7 = 5
5 × 8 = 40	8 x 5 = 40	40 ÷ 5 = 8	40 ÷ 8 = 5
5 × 9 = 45	9 x 5 = 45	45 ÷ 5 = 9	45 ÷ 9 = 5
5 × 10 = 50	10 × 5 = 50	50 ÷ 5 = 10	50 ÷ 10 = 5
5 × 11 = 55	11 x 5 = 55	55 ÷ 5 = 11	55 ÷ 11 = 5
5 × 12 = 60	12 x 5 = 60	60 ÷ 5 = 12	60 ÷ 12 = 5

Children should be able to answer the questions in any order, including with the calculations written either side of the equals sign and missing number questions,

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Useful Questions

What is 5 **multiplied by** 3?

What are 5 **lots of** 6?

What is 5 **times** 9?

What is 20 **divided by** 5?

What do you get if you have 4, **twice**?

e.g. 5 × = 30 25 = ÷ 5

Top Tips:

The secret to success is to practise little and often - could you practise on the way to school or during a car journey?

You don't need to practise them all at once – perhaps have a fact of the day, or a fact family of the day (see below).

Use what you already know - If I know that 5 x 7 = 35, then 7 x 5 = 35, 35 ÷ 5 = 7 and 35 ÷ 7 = 5. We call this a **fact family**.

If I know that 5 × 5 = 25, 6 x 5 is just 5 more so 6 x 5 = 30.

Spot patterns – What patterns can your child spot in the 5 times table? Are there any similarities with the 10 times table?

Make it fun!

- Use practical resources – lay out pebbles, buttons or other objects in arrays (rows and columns) to represent the facts (e.g. 5 x 4 = 20 can be represented by 4 rows of 5).
- 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.
- http://www.conkermaths.org/cmweb.nsf/products/conkerkirfs.html 5 x tables
- http://www.topmarks.co.uk/maths-games/hit-the-button x 5
- http://downloads.bbc.co.uk/skillswise/maths/ma13time/game/ma13tabl-game- tables-grid-find/timestables_2.swf Choose 5 x
- Play number ping pong! Start by saying 'ping', child replies with 'pong'. Repeat with times tables facts i.e. say '9' and they reply '45'
- Test the Parent – Your child can make up their own tricky division questions for you e.g. What is 60 divided by 5? They need to be able to multiply to create these questions.
- Timed Games: How well are you doing? How many questions can you answer in 2 minutes? Can you beat your own record?
- Games at www.multiplication.com and www.SumDog.com
- Use memory tricks – For those hard-to-remember facts, www.multiplication.com has some strange picture stories to help children remember.

Deepen and apply

- Compare the 5 times and 10 times tables. What do you notice? Can you explain it?
- http://nrich.maths.org/10588 Doubling 5s
- 30 ÷ 5 = 6. How many different number stories can you write to fit this equation?
- ☐ x 5 = ☐ x 10How many ways can you make this true?
- ☐ x 5 = ☐ x 2 How many ways can you make this true?
- ☐ x 5 = ☐ x 10 = ☐ x 2 How many ways can you make this true?

Key Instant Recall Facts
Year 2 – Summer 2

I can tell the time to the nearest five minutes.

Children should be able to tell the time **using a clock with hands**.

This can be broken down into two steps:

- telling the time to the nearest hour.
- telling 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.

Useful Vocabulary

Three **o'clock**	**half past** seven	**quarter past** three
quarter to nine	**five past** one	**twenty-five to** ten

Top Tips:

The secret to success is to practise little and often - could you practise on the way to school or during a car journey?

Talk about time and discuss what time things happen:

- When does your child wake up?
- What time do they eat breakfast?
- What time to they go to school?
- What time is lunch?

Make sure that you have an analogue clock (with hands) visible in your house or that your child wears a watch with hands.

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 quarter past four."

"We need to leave the house at half past eight."

Make it fun!

- Play "What's the time Mr Wolf?"
- Sing songs and chants like Hickory Dickory Dock
- Read books about time eg:
  - The Clock Struck One: A Time-Telling Tale by Trudy Harris, Carrie Hartman
  - Cluck O'clock by Kes Gray
  - It's About Time by Stuart J. Murphy
  - The Monster Diaries by Luciano Saracino
  - Rodeo Time by Stuart J. Murphy

Please ask the class teacher for suggestions of other books.

- http://www.primarygames.com/math/skill/telling-time-math-games.php
- https://www.topmarks.co.uk/time/teaching-clock An interactive clock which can be set to different times
- https://www.primarygames.com/time/question1.htm
- https://www.teachingtime.co.uk/draggames/sthec1.html

Deepen and apply

How long is until ……?

http://www.snappymaths.com/other/measuring/time/time.htm useful worksheets

http://nrich.maths.org/6071/note Stop the clock problem

http://nrich.maths.org/6609/note Times of the day problem

http://nrich.maths.org/4807 Time Line