Key Instant Recall Facts

I know the number bonds for 20.
By the end of this half term, children should know the following facts.
The aim is for them to recall these facts instantly.

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

Key Vocabulary

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**?

They should be able to answer these questions in any order, including missing number questions e.g. 19 + ◯ = 20 or 20 – ◯ = 8.

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.

Key Instant Recall Facts

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).

Year 2 – Autumn 1

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 ……..?"
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?

Broaden and apply

There are 15 ladybirds on the leaf. 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?

Key Instant Recall Facts

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

Year 2 – Autumn 2

I know the multiplication and division facts for the 10 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.

$10 \times 1 = 10$	$10 \div 10 = 1$	$10 \times 2 = 20$	$20 \div 10 = 2$
$10 \times 3 = 30$	$30 \div 10 = 3$	$10 \times 4 = 40$	$40 \div 10 = 4$
$10 \times 5 = 50$	$50 \div 10 = 5$	$10 \times 6 = 60$	$60 \div 10 = 6$
$10 \times 7 = 70$	$70 \div 10 = 7$		
$10 \times 8 = 80$		$80 \div 10 = 8$	
$10 \times 9 = 90$		$90 \div 10 = 9$	
$10 \times 10 = 100$		$100 \div 10 = 10$	
$10 \times 11 = 110$		$110 \div 10 = 11$	
$10 \times 12 = 120$		$120 \div 10 = 12$	

Key   Vocabulary

What is 10 **multiplied by** 3?

What is 10 **times** 9?

What is 70 **divided by** 10?

They should be able to answer these questions in any order, including missing number questions e.g. $10 \times \bigcirc = 80$ or $\bigcirc \div 10 = 6$.

Key Instant Recall Facts

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
Use what you already know:

Pronunciation – Make sure that your child is pronouncing the numbers correctly and not getting confused between thirt**een** and thirt**y**.

Year 2 – Autumn 2

Make it fun!

- 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?

Key Instant Recall Facts

▸ Games at www.multiplication.com and www.SumDog.com

▸ <u>Use memory tricks</u> – For those hard-to-remember facts, www.multiplication.com has some strange picture stories to help children remember.

<u>**Broaden and apply**</u>

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

Year 2 – Spring 1

I know the multiplication and division facts for the 2 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.

Key Instant Recall Facts

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

Key   Vocabulary

What is 2 **multiplied by** 7?

What is 2 **times** 9?

What is 12 **divided by** 2?

They should be able to answer these questions in any order, including missing number questions e.g. 2 × 〇 = 8 or 〇 ÷ 2 = 6.

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.

Use what you already know:

If your child knows that 2 × 5 = 10, they can use this fact to work out that 2 × 6 = 12.

If they know that 2 x 7 = 14 then they know that 7 x 2 = 14.

Year 2 – Spring 1

Make it fun!

Key Instant Recall Facts

▸ 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?

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.

Broaden 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?

Key Instant Recall Facts

□ □ ÷ □ = 2   How many ways can you make this true?

Year 2 – Spring 2

I know doubles and halves of numbers to 20.

By the end of this half term, children should know the following facts.

The aim is for them to recall these facts instantly.

0 + 0 = 0   ½ of 0 = 0   1 + 1 = 2   ½ of 2 = 1   11 + 11 = 22 2 + 2 = 4   ½ of 4 = 2   12 + 12 = 24 3 + 3 = 6   ½ of 6 = 3   13 + 13 = 26   4 + 4 = 8   ½ of 8 = 4   14 + 14 = 28 5 + 5 = 10 ½ of 10 = 5   15 + 15 = 30 6 + 6 = 12 ½ of 12 = 6   16 + 16 = 32 7 + 7 = 14   ½ of 14 = 7   17 + 17 = 34 8 + 8 = 16 ½ of 16 = 8   18 + 18 = 36   9 + 9 = 18   ½ of 18 = 9   19 + 19 = 38 10 + 10 = 20 ½ of 20 = 10   20 + 20 = 40

Key Vocabulary

What is **double** 9?

What is **half** of 14?

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.

Use what you already know – Encourage your child to find the connection between the 2 times table and double facts.

Year 2 – Spring 2

Make it fun!

▸   Play number ping pong! Start by saying 'ping', child replies with 'pong'.

Repeat and then convert to numbers i.e. say '6' and they reply '12' (doubles)

▸ Play number ping pong! Start by saying 'ping', child replies with 'pong'. Repeat and then convert to numbers i.e. say '18' and they reply '' (halves)

▸ Make a set of cards and play snap by matching the doubles and halves.

▸ http://www.topmarks.co.uk/maths-games/hit-the-button Select doubles or halves

▸ http://www.conkermaths.org/cmweb.nsf/products/conkerkirfs.html choose game 4 from doubles and halves

▸ Make up your own songs and rhymes

▸ Timed Games: How well are you doing? How many questions can you answer in 2 minutes. Can you beat your own record?

▸ http://www.ictgames.com/rhoodbeyond10.html

Broaden and apply

Jo bought a bag of 12 cherries. Jo ate half the number of cherries in the bag. How many cherries did Jo eat?

Jo bought a bag of cherries. Jo ate half the number of cherries in the bag. Jo had 7 cherries left. How many cherries did Jo buy?

Key Instant Recall Facts

Doubling problem Year

2 – Summer 1

I can tell the time to the nearest five minutes.

Children need to be able to tell the time using a clock with hands. This target 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.

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**.

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 :

Key Instant Recall Facts

"The cakes need to come out of the oven at quarter past four."

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

Year 2 – Summer 1

Make it fun!

- Play "What's the time Mr Wolf?"

- http://tpet.co.uk/mrwolf/playfree.html What time is it Mr Wolf? Set five minute options first

- 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. Stuart J. Murphy
    Please ask your class teacher for suggestions of other books.

- http://www.iboard.co.uk/iwb/Time-Reader-Analogue-466 An interactive clock which can be set and then says the time out loud

- http://www.primarygames.com/math/skill/telling-time-math-games.php

- http://www.oswego.org/ocsd-web/games/StopTheClock/sthec3.html

Broaden and apply - enrichment

How long is it until ……?

Jack says, 'There isn't any point in having a minute hand on a clock because I can still tell the time without it.' Do you agree with him? Explain your answer

Key Instant Recall Facts

Year 2 – Summer 2

I know the multiplication and division facts for the 5 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.

$5 \times 1 = 5$	$5 \div 5 = 1$
$5 \times 2 = 10$	$10 \div 5 = 2$
$5 \times 3 = 15$	$15 \div 5 = 3$
$5 \times 4 = 20$	$20 \div 5 = 4$
$5 \times 5 = 25$	$25 \div 5 = 5$
$5 \times 6 = 30$	$30 \div 5 = 6$
$5 \times 7 = 35$	$35 \div 5 = 7$
$5 \times 8 = 40$	$40 \div 5 = 8$
$5 \times 9 = 45$	$45 \div 5 = 9$
$5 \times 10 = 50$	$50 \div 5 = 10$
$5 \times 11 = 55$	$55 \div 5 = 11$
$5 \times 12 = 60$	$60 \div 5 = 12$

Key   Vocabulary

What is 5 **multiplied by** 7?

What is 5 **times** 9?

What is 60 **divided by** 5?

They should be able to answer these questions in any order, including missing number questions e.g. $5 \times \bigcirc = 40$ or $\bigcirc \div 5 = 9$.

Key Instant Recall Facts

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.

Use what you already know:

can use this fact to work out that 5 × 7 = 35 and that 35 ÷ 7= 5 and 35 ÷ 5 = 7.

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

Year 2 – Summer 2

Make it fun!

‣ 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-gametables-gridfind/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'

Key Instant Recall Facts

- 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

- <u>Use memory tricks</u> – For those hard-to-remember facts, www.multiplication.com has some strange picture stories to help children remember.

Broaden and apply

Compare the 5 and 10 times tables. What do you notice?

http://nrich.maths.org/10588 Doubling 5s

□ x 5 = □ How many different answers can you make?