

Key Instant Recall Facts

Reception, Year 1, 2
and 3: Autumn 1

This half term your child is working towards achieving knowledge of KIRFs, indicated below.
The ultimate aim is for your child to be able to recall these facts **instantly!**

Say the
number names
in order to 5

Know all the
number bonds
to 5 (then
moving to 10)

Know all the
number bonds to
20

Know all the
number bonds for
each number to
20

Example of number bonds to 5:



Five teddies are sitting on a shelf, 1 fell off,
how many are left?

Well done, that was
quick!

Four are left!

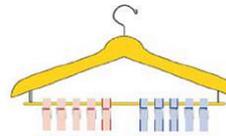
All number bonds to 10:



$$6 + ? = 10$$
$$10 - 6 = ?$$



$$? + 6 = 10$$
$$10 - 4 = 6$$



$$0 + 10 = 10$$

$$1 + 9 = 10$$

$$2 + 8 = 10$$

$$3 + 7 = 10$$

$$4 + 6 = 10$$

$$5 + 5 = 10$$

$$6 + 4 = 10$$

$$7 + 3 = 10$$

$$8 + 2 = 10$$

$$9 + 1 = 10$$

$$10 + 0 = 10$$

Helpful hints for parents

Reception, Year 1, 2 and 3: Autumn 1

- Use objects to consider the bonds in a practical way.
- Look at the patterns with both objects and numbers e.g. as one number increases the other one decreases.
- Practise with the numbers in order and chosen randomly - remember the aim is for the child to be able to respond immediately.

Key vocabulary

Add, Total, How many more to make?, Altogether

Make it real!



There are 5 ladybirds on the leaf. Two fly away, how many are left?

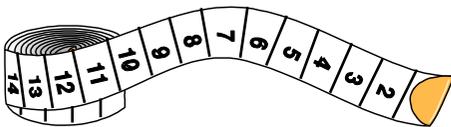
*3 ladybirds!
How do you know?
Well, 2 add 3 make
5.*

I have 7p in my purse. How much more do I need to make 10p?



*3p!
Why?
Because 3p and 7p totals
10p*

I have 18 cm of ribbon, I cut off 14 cm. How much ribbon is left?



*4 centimetres.
Are you sure?
Yes, because I know that 4 and 14 make 18
altogether.*

Make it fun!

Call out!

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 '8' (number bonds to 10)

What's hidden?

There are 5 beans on this plate, I hide some under a beaker - how many have I hidden?

Playing cards:

Take out the picture cards from the deck of cards. Include the jokers as 'zero'.

- 1) Play snap by matching the number bonds.
- 2) Play the 'memory game' to find matching number bonds.

Dominoes:

Connect two dominoes to make the bond.



Songs and rhymes

e.g. 5 speckled frogs, 10 in a bed, 10 green bottles

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

Reception, Year 1, 2
and 3: Autumn
Term 2

Begin to know
the days of
the week

Know the days of
the week and the
seasons and
months of the
year

Know multiplication
and division facts
for 2x table.

Know multiplication
and division facts
for 5x and 10x
tables

Example of 2 times table fact:

If I have 5 pairs of socks how many socks will I have?



$$2 \times 5 = 10$$



Arrays

$$\begin{aligned} 0 \times 10 &= 0 \\ 1 \times 10 &= 10 \\ 2 \times 10 &= 20 \\ 3 \times 10 &= 30 \\ 4 \times 10 &= 40 \end{aligned}$$

AND

$$5 \times 2 = 10$$



$$\begin{aligned} 10 \div 10 &= 1 \\ 20 \div 10 &= 2 \\ 30 \div 10 &= 3 \\ 40 \div 10 &= 4 \end{aligned}$$

Well done, that was quick!

10 socks!

Helpful hints for parents

- Create regular opportunities for rapid fire questions where an instant correct answer is required
- Encourage children to look for patterns, such as all the answers end in 5 or 0 for the 5x table
- Chanting tables really does help. Make it fun by adding actions too or singing!
- Don't forget to chant those division facts too, they are often much harder to recall.

Key vocabulary

times multiplied by lots of groups of multiple of divided by shared double half

Make it real!



How many days are there in a week? Which day comes after Wednesday?

7 days in a week! Thursday!
Well done - let's look on the calendar to see what we are doing on Thursday.

There are 2 buns in one row - how many buns will be in three rows?

6 buns!
Great - how do you know?
Because 3 times 2 is 6.



There are 20 stamps on a sheet. There are 5 stamps in a row, how many rows are there altogether?



4 rows!
How did you work that out?
Because I know 20 divided by 5 is 4.

Many other things form an array like window panes, milk crates, stickers and wrapping paper!

Make it fun!

Call out!

Play Fizz Buzz. To practice the 2 and 10 times tables together take it in turns to count in ones. If a number is in the 2x table say 'Fizz' instead of the number. Say 'Buzz' if it's in the 10's and 'Fizz Buzz' if it's in both.

Sequencing

Cut up an old calendar. Ask children to order the months and talk about the seasons.

Playing cards:

Remove picture cards from the pack. Pick a card and state the multiplication and division fact that the child is working on.
eg Pick the '8' card; so $5 \times 8 = 40$ and 40 divided by 5 = 8

Dominoes:

Pick a domino, add the number of dots together then multiply by the table they are working on.

Songs and rhymes

There are lots of CDs available with musical tables. Great fun to sing along to on long car journeys!



Timed Games:

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

Reception, Year 1, 2
and 3: **Autumn 2**

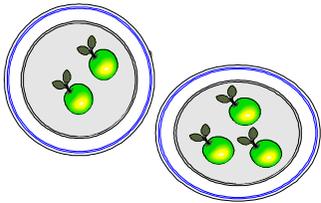
Key Instant Recall Facts

Reception, Year 1, 2
and 3: Spring Term 1

This half term your child is working towards achieving knowledge of KIRFs, indicated below.
The ultimate aim is for your child to be able to recall these facts **instantly!**

Be able to partition numbers to 5 into two groups	Know all doubles and halves to 10	Know the doubles and halves of all numbers to 20	Know doubles and halves of: All whole numbers to 20 All multiples of 10 to 500 All multiples of 100 to 5000
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If I have 5 apples and two plates how many apples can I put on each plate?



2 on one plate
3 on the other

Well done! Can you do it another way?

Double

$1 \rightarrow 2$

$2 \rightarrow 4$

$3 \rightarrow 6$

Halves

$20 \rightarrow 10$

$19 \rightarrow 9\frac{1}{2}$

$18 \rightarrow 9$

Example of doubles and halves of multiples of 100:

What is half of 360?



$\frac{1}{2} \text{ of } 300 = 150$



$\frac{1}{2} \text{ of } 60 = 30$

So half of 360 must be 180!

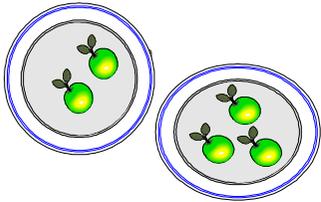
Key Instant Recall Facts

Reception, Year 1, 2
and 3: Spring Term 2

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Be able to partition numbers to 5 into two groups	Know all doubles and halves to 10	Know the doubles and halves of all numbers to 20	Know doubles and halves of: All whole numbers to 20 All multiples of 10 to 500 All multiples of 100 to 5000
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If I have 5 apples and two plates how many apples can I put on each plate?



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Halves

$20 \rightarrow 10$

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Example of doubles and halves of multiples of 100:

What is half of 360?



 $1/2 \text{ of } 300 = 150$

 $1/2 \text{ of } 60 = 30$

So half of 360 must be 180!

Key Instant Recall Facts

Reception, Year 1,
2 and 3: **Summer 1**

This half term your child is working towards achieving knowledge of KIRFs, indicated below.
The ultimate aim is for your child to be able to recall these facts **instantly!**

Count in 10s	Know all addition and subtraction facts for all numbers between 0 and 10	Know all addition and subtraction facts for multiples of 10 to 100	Know all addition and subtraction facts for: Multiples of 100 to 1000 Multiples of 5 with a total of 100 Number pairs that total 100
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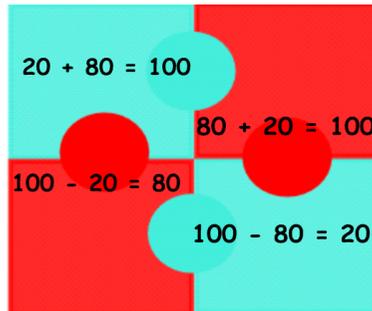
If we cut the pizza into 6 pieces and we eat 4 how many pieces will be left?



2 pieces!

Well done, that was quick!

Remember, when you know 1 fact,
you also know 3 more!



e.g.
 $200 + 800 = 1\ 000$; $800 + 200 = 1\ 000$
so
 $1\ 000 - 800 = 200$; $1\ 000 - 200 = 800$

$35 + 65 = 100$; $65 + 35 = 100$
so
 $100 - 65 = 35$; $100 - 35 = 65$

$27 + 73 = 100$; $73 + 27 = 100$
so
 $100 - 27 = 73$; $100 - 73 = 27$

Helpful hints for parents

Reception, Year 1, 2 and 3:
Summer 1

- Remember to count backwards at least as many times as forwards as this is what children find most difficult
- Remind children that if they know $6 + 3 = 9$ they also know that $3 + 6 = 9$, $60 + 30 = 90$ and that $600 + 300 = 900$
- List pairs of numbers. Jot the opposite statements alongside e.g. $17 + 13 = 30$ $13 + 17 = 30$

Key vocabulary

How many more to make? altogether make sum total add how much more is...than...? ...difference between

Make it real!

We have eaten 3 ice lollies and there are 5 left in the box. How many were in the box to start with?

8 lollies!
How do you know?
I know because 3 plus 5 makes 8!



We invited 30 children to the party but 4 children can't come. How many children will be at the party?

26 children!
Why?
Because 30 take away 4 is 26!



If I put 65 pence into the piggy bank, how much more do I need to make a pound?

35 pence!
How did you work that out?
Well I know that 35 and 65 make 100 and there are 100 pennies in a pound!



There are 100 pages in my book. If I have read 66 pages, how many more do I need to read?

34 pages
Why?
Because 66 plus 34 makes 100!



Make it fun!



Call out!

Tap a number of regular beats. Ask

the child to count silently in tens, calling out the number you stop on.

What's Hidden?

Have a bag of twenty 5 pence pieces. The child can select a random number and quickly call out the change from a pound which is hidden in the bag.

Playing cards:

Remove the picture cards from the pack. Pick 2 cards and use one to represent the tens and the other to represent the unit.

e.g. pick '3' card and '6' card making the number 36

Ask the child to find another pair to make the total a multiple of 10 such as 90, 80, 70 etc



Dominoes:

Pick a domino from a set facing down. Choose one end to represent the tens and the other to be the unit. Ask how much more is needed to make 60, 70, 80 etc.

e.g. picture shows 52 - so answer would be 8, 18, 28

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

Reception, Year 1, 2
and 3: **Summer 2**

This half term your child is working towards achieving knowledge of KIRFs, indicated below.
The ultimate aim is for your child to be able to recall these facts **instantly!**

Count in 2s	Count forward and backward in steps of 2, 5 and 10	Know multiplication and division facts for 5x tables	Know all multiplication and division facts for 3x, 6x and 9x table
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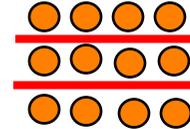
Can you count the teddies' eyes?

2,4,6,8!

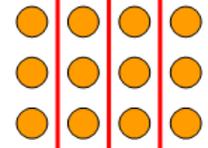
Well done, that was quick!

$$\begin{aligned}1 \times 5 &= 5 \\2 \times 5 &= 10 \\3 \times 5 &= 15 \\4 \times 5 &= 20 \\ \text{So...} \\5 \div 5 &= 1 \\10 \div 5 &= 2 \\15 \div 5 &= 3 \\20 \div 5 &= 4\end{aligned}$$

▶ ARRAYS



$$3 \times 4$$



$$4 \times 3$$

so, $12 \div 4 = 3$ and $12 \div 4 = 3$

Helpful hints for parents

Reception, Year 1, 2
and 3: **Summer 2**

- Encourage children to use doubling to work out their 6x table if they already know their 3x table.
- Remember to count backwards at least as many times as forwards as this is what children find most difficult
- Chanting tables really does help. Make it fun by adding actions too or singing!
- Don't forget to chant those division facts too, they are often much harder to recall

Key vocabulary

add total how many more to make? altogether

times multiplied by lots of groups of multiple of divided by shared double half

Make it real!

There are seven 5p coins in my purse. How much is there all together?

35p!

How do you know?

Because seven fives are 35.



A tent sleeps three. How many tents will you need for 18 children?



6!

Can you explain why?

There are 6 groups of 3 in 18.

Six beans are planted in each pot. There are 8 pots, how many beans will be needed?

48!

Are you sure?

Yes, because 6 times 8 equals 48.



There are some interesting patterns in the 9 x table. Look at the answers to the multiplications in the 9 times table. The digit sum is always 9!
e.g. $36 \dots 3 + 6 = 9$

Make it fun!

Call out!

Use a puppet or favourite teddy to count in 2s, making a mistake. Can the child spot the mistake and explain what is wrong - then count along correctly with you.

Dominoes?

Pick a domino and add the dots. The child multiplies the total by 5, 3, 6 or 9. Can they also give the associated division fact?



Playing cards:

Remove picture cards from the pack. Pick a card and state the multiplication and division fact that the child is working on.

e.g. Pick the '8' card; so

$5 \times 8 = 40$ and 40 divided by $5 = 8$

Dice:

Roll two die, find the total. The child multiplies the total by 5, 3, 6 or 9. Can they also say the associated division fact?

Songs and rhymes

There are lots of CDs available with musical tables. Great fun to sing along to on long car journeys!



Timed Games:

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