## Key Instant Recall Facts

## Year 1 - Autumn 1

## I know number bonds for each number to 6 .

By the end of this term, children should know these facts: the aim is for them to recall each fact instantly

| $0+1=1$ | $1-0=1$ | $0+4=4$ | $4-0=4$ | $0+6=6$ | $6-0=6$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $1+0=1$ | $1-1=0$ | $1+3=4$ | $4-1=3$ | $1+5=6$ | $6-1=5$ |
|  | $2+2=4$ | $4-2=2$ | $2+4=6$ | $6-2=4$ |  |
| $0+2=2$ | $2-1=1$ | $3+1=4$ | $4-3=1$ | $3+3=6$ | $6-3=3$ |
| $1+1=2$ | $2-0=2$ | $4+0=4$ | $4-4=0$ | $4+2=6$ | $6-4=2$ |
| $2+0=2$ | $2-2=0$ |  | $5+1=6$ | $6-5=1$ |  |
|  |  | $0+5=5$ | $5-0=5$ | $6+0=6$ | $6-6=0$ |
| $0+3=3$ | $3-0=3$ | $1+4=5$ | $5-1=4$ |  |  |
| $1+2=3$ | $3-2=1$ | $2+3=5$ | $5-2=3$ |  |  |
| $2+1=3$ | $3-1=2$ | $3+4=5$ | $5-3=2$ |  |  |
| $3+0=3$ | $3-3=0$ | $4+1=5$ | $5-4=1$ |  |  |
|  |  | $5+0=5$ | $5-5=0$ |  |  |

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,

## Useful Questions

What is 3 add 2?
What is 2 plus 3 ?
What is 1 less than 4 ?
How many different ways can you make 5?
If you had 3 apples and ate 2, how many would you have left?
How many are there altogether?
e.g. $6-5=1 \quad 6=5+1 \quad 5+=6 \quad 5=6-$

## 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?

There may seem to be a lot of facts but looking for the patterns and relationships makes it a lot easier (If I know $1+2=3$, then $I$ know $2+1=3$ and $3-2=1$ and $3-1=2$ )

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 one potato on their plate and you give them three 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 '2' and they reply '4' (for number bonds to 6)
> What's hidden? There are 5 beans on this plate, I hide some under a beaker - how many have I hidden?
> Make a set of cards and play snap by matching the number bonds.
> Play a '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 greenbottles
> http://www.ictgames.com/save_the whale_v4.html Select bonds to 5 or 6
> 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 5 ladybirds on the leaf. Two fly away, how many are left? 3 ladybirds! How do you know? Can you explain it?
> I have 2 p in my purse. How much more do I need to make 6p? Why?
> I have 5 cm of ribbon, I cut off 2 cm . How much ribbon is left? Are you sure? How do you know?
> How many ways can you make 6 using 3 numbers? (example: $1+1+4$ )
> $6-\square=\square$ How many ways can you make this true?
> $\square+\square=\square+\square$ What numbers could you put in here to make the sentences true?
> http://nrich.maths.org/6227 Find the Difference problem
> http://nrich.maths.org/37 Homes problem
> http://www.conkermaths.org/cmweb.nsf/products/conkerkirfs.html Choose game 1 (needs Flash)

## Key Instant Recall Facts

## Year 1 - Autumn 2

## I know number bonds for each number to 9 .

By the end of this term, children should know these facts: the aim is for them to recall each fact instantly.

| $0+7=7$ | $7=7-0$ | $0+8=8$ | $8=8-0$ | $0+9=9$ | $9=9-0$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $1+6=7$ | $6=7-1$ | $1+7=8$ | $7=8-1$ | $1+8=9$ | $8=9-1$ |
| $2+5=7$ | $5=7-2$ | $2+6=8$ | $6=8-2$ | $2+7=9$ | $7=9-2$ |
| $3+4=7$ | $4=7-3$ | $3+5=8$ | $5=8-3$ | $3+6=9$ | $6=9-3$ |
| $4+3=7$ | $3=7-4$ | $4+4=8$ | $4=8-4$ | $4+5=9$ | $5=9-4$ |
| $5+2=7$ | $2=7-5$ | $5+3=8$ | $3=8=5$ | $5+4=9$ | $4=9-5$ |
| $6+1=7$ | $1=7-6$ | $6+2=8$ | $2=8-6$ | $6+3=9$ | $3=9-6$ |
| $7+0=7$ | $0=7-7$ | $7+1=8$ | $1=8-7$ | $7+2=9$ | $2=9-7$ |
|  | $8+0=8$ | $0=8-8$ | $8+1=9$ | $1=9-8$ |  |
|  |  |  |  |  |  |

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,
$\square$

## Useful Questions

What do I add to 5 to make 9?
What is 7 take away 4?
How many more than 4 is 8 ?
If you had 3 apples, how many more would you need to make 7 ?
e.g. $8-1=7 \quad 8=7+1 \quad 7+=8 \quad 7=8-$

## 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?

There may seem to be a lot of facts but looking for the patterns and relationships makes it a lot easier (If I know 5+2=7, then I know $2+5=7$ and $7-2=5$ and $7-5=2$ )

You don't need to practise them all at once - perhaps have a fact of the day.
Keep practising the number bonds from previous terms as well.

## Make it fun!

> Use practical resources - show 9 items, remove some and ask your child how many you must have in your hand by looking at the number of items left.
> 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 ' 7 ' (for number bonds to 9 ). This can be done for any number bonds.
> What's hidden? There are 8 beans on this plate, I hide some under a beaker - how many have I hidden?
> Play a 'memory game' to find matching number bonds.
> Dominoes: Connect two dominoes to make the bond.
> http://www.ictgames.com/save_the whale_v4.html Select bonds for ary number up to 9 .
> https://www.ictgames.com/mobilePage/funkyMummy/index.html + up to 10; missing number all one digit
> 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

> We have eaten 3 ice lollies and there are 5 left in the box. How many were in the box to start with? How do you know?
> I have 7 p in my purse. How much more do I need to make 10p? How do you know?
> Which is longer $3 \mathrm{~cm}+6 \mathrm{~cm}$ or $9 \mathrm{~cm}-1 \mathrm{~cm}$ ? How do you know?
> How many ways can you make 10 using 4 numbers? ( example; $1+3+2+4$ )
> $9-\square=\square$ How many ways can you make this true?
> $\square+\square=\square-\square$ Which numbers could you put in here to make the sentences true?
> http://nrich.maths.org/1257 Flip Flop Match
> http://www.topmarks.co.uk/maths-games/hit-the-button Addition within 10
> http://www.conkermaths.org/cmweb.nsf/products/conkerkirfs.html Choose game 7 (needs Flash)

Key Instant Recall Facts
Year 1 - Spring 1

## I know number bonds to 10 .

By the end of this term, children should know these facts: the aim is for them to recall each fact instantly.
$0+10=10$
$2+8=10$
$4+6=10$
$10+0=10$
$8+2=10$
$6+4=10$
$10-10=0$
10-8 = 2
$10-6=4$
$10-0=10$
$10-2=8$
$10-4=6$
$1+9=10$
$3+7=10$
$5+5=10$
$9+1=10$
$7+3=10$
$10-5=5$
$10-9=1$
$10-7=3$
10-1 = 9
$10-3=7$

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,

## Useful Questions

What do I add to 5 to make 10?
What is 10 take away 4 ?
How many more than 4 is 10 ?
If you had 10 apples, how many would you need to take away to leave 7 ?
e.g. $10-3=7$
$10=7+1$
$7+\quad=10$
$7=10-$

## 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?

There may seem to be a lot of facts but looking for the patterns and relationships makes it a lot easier (If I know $8+2=10$, then $I$ know $2+8=10$ and $10-2=8$ and 10-8=2)

You don't need to practise them all at once - perhaps have a fact of the day.
Keep practising the number bonds from previous terms as well.

## Make it fun!

$>$ Use practical resources - arrange items in a tens frame (2 rows of 5 or 5 rows of 2 ) with some spaces - how many more do I need to make ten?
$>$ 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.'
> What's hidden? There are 10 beans on this plate, I hide some under a beaker - how many have I hidden?
> Play a 'memory game' to find matching number bonds.
$>$ Songs and rhymes (e.g. 10 green bottles)
> Dominoes: Connect two dominoes to make the bond.
$>$ http://www.ictgames.com/save_the_whale_v4.html Select bonds to 10.
> https://www.ictgames.com/mobilePage/funkyMummy/index.html bonds to 10
> 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 10 children at the park. Two go away, how many are left? How do you know?
> I have 6 p in my purse. How much more do I need to make 10p? Why?
$>$ I have 10 cm of ribbon, I cut off 7 cm . How much ribbon is left? How do you know?
$>$ How many ways can you make 10 using 3 numbers? (example; $3+3+4$ ) $10-\square=$ How many ways can you make this true?
$>\square+\square=\square+\square$ What numbers could you put in here to make the sentences true?
> http://nrich.maths.org/7233 Pairs of numbers problem
> http://nrich.maths.org/1216 Totality
$>$ http://nrich.maths.org/6589 Strike it out
> http://www.conkermaths.org/cmweb.nsf/products/conkerkirfs.html Bonds to 20

Key Instant Recall Facts
Year 1 - Spring 2
I know doubles and halves of numbers to 10 .
By the end of this term, children should know these facts: the aim is for them to recall each fact instantly.

| $0+0=0$ | $0-0=0$ | Double $0=0$ | half of $0=0$ |
| :--- | :--- | :--- | :--- |
| $1+1=2$ | $2-1=1$ | Double $1=2$ | half of $2=1$ |
| $2+2=4$ | $4-2=2$ | Double $2=4$ | half of $4=2$ |
| $3+3=6$ | $6-3=3$ | Double $3=6$ | half of $6=3$ |
| $4+4=8$ | $8-4=4$ | Double $4=8$ | half of $8=4$ |
| $5+5=10$ | $10-5=5$ | Double $5=10$ | half of $10=5$ |
| $6+6=12$ | $12-6=6$ | Double $6=12$ | half of $12=6$ |
| $7+7=14$ | $14-7=7$ | Double $7=14$ | half of $14=7$ |
| $8+8=16$ | $16-8=8$ | Double $8=16$ | half of $16=8$ |
| $9+9=18$ | $18-9=9$ | Double $9=18$ | half of $18=9$ |
| $10+10=20$ | $20-10=10$ | Double $10=20$ | half of $20=10$ |

## Useful Questions

What is double 9?
What is half of 10 ?
If I have 8, what have I doubled?

What is two lots of 6?
What is 7 add 7 ?
What is 18 take away 9 ?

## 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.
There may seem to be a lot of facts but looking for the patterns and relationships makes it a lot easier:

If I know that double 8 is 16 , then $I$ know that half of 16 is 8 and $8+8=16$ and $16-8=8$ Keep practising the number bonds from previous terms as well.

## Make it fun!

$>$ 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 '4' (doubles)
$>$ 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 '3' (halves)
> Make a set of cards and play snap by matching the doubles and halves.
$>$ http://www.conkermaths.org/cmweb.nsf/products/conkerkirfs.html
> https://www.topmarks.co.uk/maths-games/hit-the-button Doubles or 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/mobilePage/archeryDoubles/index.html

## Deepen and apply

$>$ If there are 10 sweets, how many children can have two sweets each? How do you know? What would happen if there were 11 sweets instead?
> Double $\square=\square$ How many ways can you complete this? What do you notice?
$>$ A plant is 1 cm tall. Each day it doubles in height. How tall will it be on the 3rd day?

## Key Instant Recall Facts

## Year 1 - Summer 1

## I know facts for adding single digits to 10

By the end of this term, children should know these facts: the aim is for them to recall each fact instantly.

| $10+1=11$ | $10+4=14$ | $10+7=17$ |
| :--- | :--- | :--- |
| $1+10=11$ | $4+10=14$ | $7+10=17$ |
| $11-1=10$ | $14-4=10$ | $17-7=10$ |
| $11-10=1$ | $14-10=4$ | $17-10=7$ |
| $10+2=12$ | $10+5=15$ | $10+8=18$ |
| $2+10=12$ | $5+10=15$ | $8+10=18$ |
| $12-2=10$ | $15-5=10$ | $18-8=10$ |
| $12-10=2$ | $15-10=5$ | $18-10=8$ |
| $10+3=13$ | $10+6=16$ | $10+9=19$ |
| $3+10=13$ | $6+10=16$ | $9+10=19$ |
| $13-3=10$ | $16-6=10$ | $19-9=10$ |
| $13-10=3$ | $16-10=6$ | $19-10=9$ |

## Useful Questions

What do I add to 3 to make 13?
What is 6 more than 10?
What is 14 take away 4 ?
What is 10 less than 15 ?
How many more than 10 is 18 ?
If you had 10 apples, how many more would you need to make 17?

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. $18-8=10$
$18=10+8$
$8+\square=18$
$\square-8=8$

## 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.
Keep practising the number bonds from previous terms as well.

## Make it fun!

> Use practical resources - show 17 items, "If I remove ten, how many would there be left? Show 10 items, "How many more would I need to make 18?"
$>$ 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 '8' (adding to 10)
$>$ What's hidden? There are 14 beans on this plate, I hide some (4 or 10) under a beaker how many have I hidden?
> 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

> We have eaten 3 ice lollies and there are 10 left in the box. How many were in the box to start with? How do you know?
$>$ I have 8 p in my purse. How much more do I need to make 18p? How do you know?
$>$ Which is longer $9 \mathrm{~cm}+9 \mathrm{~cm}$ or $10 \mathrm{~cm}+7 \mathrm{~cm}$ ? How do you know?
$>\square-\square=\square$ How many ways can you make this true, if one of the numbers is 10 ?
$>\square+\square=\square-\square$ Which numbers could you put in here to make the sentences true, if at least one of the numbers is 10?
$>18=10+\square+\square$ How many ways can you make this true? Which other facts have you used to help you?

## Key Instant Recall Facts <br> Year 1 - Summer 2

## I can count forward and backwards in steps of 2 from any given number.

Children should be able to count in 2's, forwards or backwards, from any number eg:
2, 4, 6, 8, $\qquad$
$\qquad$
$\qquad$
32, 34, 36, $\qquad$
68, 66, 64, $\qquad$
$\qquad$
$\qquad$
23, 25, 27. $\qquad$
$\qquad$
$\qquad$
55, 57, 59. $\qquad$
$\qquad$ , $\qquad$
88, 86, 84, $\qquad$

## Useful Questions

What is 2 more than ......?
Count backwards in $2 s$ starting from ......?
Count forward in 2 s from ......?

49, 47, 45, $\qquad$
$\qquad$
$\qquad$

## 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?

Keep practising the number facts from previous terms as well.

## Make it fun!

$>$ Use the number square on the reverse to help - see what patterns you can spot
$>$ Try chanting the numbers and marching
$>$ Count and beat along on a drum
> Clap while you count
> Count practical objects like eyes on teddies
> Draw pictures to count with - hands / feet
$>$ Use a puppet or teddy to count in 2's, making a mistake. Can your child spot the mistake and explain what is wrong - then count along correctly with you?

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
| 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 |
| 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |

## Deepen and apply

$\Rightarrow$ Place a counter on one of the numbers on the number square. If I count in $2 s$ from this number, will I land on 46 (repeat with other numbers)?
> https://nrich.maths.org/7190
> https://nrich.maths.org/5572

