## Key Instant Recall Facts

These KIRFs are designed to help develop children's fluency in mathematics. They align with the new curriculum and are intended to be challenging. They are designed to be sent home for children to practice with their parents around 3 times per week.

## Key Instant Recall Facts Year 1 - Autumn 1

## Recite the number names in order to 50.

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

## $0-50$.

They should be able to count forwards to 50 and backwards from 50 or from any number between $0-50$. for example:

50, 49, 48, 47, 46.....
$38,39,40,41,42 \ldots$.

## 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. If you would like more ideas, please speak to your child's teacher.

Use practical resources - Your child has some sweets, can they count how many? Can they carry on counting to 50 ?

Play games or watch videos. - there are loads of fun games and videos online for counting to 50. Here are some fun ordering games: https://www.topmarks.co.uk/maths-games/5-7years/ordering.

## Key Instant Recall Facts Year 1 - Autumn 1

## Add 0 or 1 to a number.

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

| $0+0=0$ | $0+1=1$ |
| :--- | :--- |
| $1+0=1$ | $1+1=2$ |
| $2+0=2$ | $2+1=3$ |
| $3+0=3$ | $3+1=4$ |
| $4+0=4$ | $4+1=5$ |
| $5+0=5$ | $5+1=6$ |
| $6+0=6$ | $6+1=7$ |
| $7+0=7$ | $7+1=8$ |
| $8+0=8$ | $8+1=9$ |
| $9+0=9$ | $9+1=10$ |
| $10+0=10$ | $10+1=11$ |



They should be able to add 1 or 0 to any number up to 50 . They should be able to explain that when you add 0 , the number doesn't change.

## 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. If you would like more ideas, please speak to your child's teacher.

Use practical resources - Use toys. If I add a toy, how many do I have now? If I add nothing, do I still have the same?

Play games or watch videos. - https://www.topmarks.co.uk/maths-games/daily10 one more.

## Key Instant Recall Facts

## Year 1 - Autumn 2

## I know doubles of numbers to 5 .

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

| $1+1=2$ | Double 1 is 2 |
| :--- | :--- |
| $2+2=4$ | Double 2 is 4 |
| $3+3=6$ | Double 3 is 6 |
| $4+4=8$ | Double 4 is 8 |
| $5+5+10$ | Double 5 is 10 |



Double 2 is 4

## Key Vocabulary

Add
One
Zero
One more
No more
What is one more than ?

Children should be aware that doubling is "two lots of that number'

## 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. If you would like more ideas, please speak to your child's teacher.

Use practical resources - You could use playing cards with numbers 1-5. Play snap or matching games to find the same number twice. What are the two numbers added together?

## Key Instant Recall Facts <br> Year 1 - Spring 1

## I can add 2 to any number and I can count in 2s 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.

$$
\begin{aligned}
& 0+2=2 \\
& 1+2=3 \\
& 2+2=4 \\
& 3+2=5 \\
& 4+2=6 \\
& 5+2=7 \\
& 6+2=8 \\
& 7+2=9 \\
& 8+2=10 \\
& 9+2=11 \\
& 10+2=12
\end{aligned}
$$

## Key Vocabulary

Add
Two more
What is two more than $\qquad$
Steps of 2
Forward backwards.

Children should be able to count in steps of 2 from any multiple of 2, forwards and backwards.
$0,2,4,6,7,10,12,14,16,18,20$
$6,8,10,12 \ldots$
$20,18,16,14,12,10 \ldots$

## 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. If you would like more ideas, please speak to your child's teacher.

Use practical resources - Use toys. If I add two toys, how many do I have now? If I add nothing, do I still have the same?
Group toys into 2 s , count them in twos.

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

## I know number bonds to 10.

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

| $0+10=10$ | $2+8=10$ | $4+6=10$ |
| :--- | :--- | :--- |
| $10+0=10$ | $8+2=10$ | $6+4=10$ |
| $10-10=0$ | $10-8=2$ | $10-6=4$ |
| $10-0=10$ | $10-2=8$ | $10-4=6$ |
|  |  |  |
| $1+9=10$ | $3+7=10$ | $5+5=10$ |
| $9+1=10$ | $7+3=10$ | $10-5=5$ |
| $10-9=1$ | $10-7=3$ |  |
| $10-1=9$ | $10-3=7$ |  |

## Key Vocabulary

What is 3 add 2?
What is 2 plus 2?
What is 5 take away 2 ?
What is 1 less than 4 ?

They should be able to answer these questions in any order, including missing number questions e.g. $6+\bigcirc=10$ or $10-\bigcirc=3$.

## 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. If you would like more ideas, please speak to your child's teacher.

Use practical resources - Your child has one potato on their plate and you give them two more. Can they predict how many they will have now?

Make a poster - We use Numicon at school. You can find pictures of the Numicon shapes here: bit.ly/NumiconPictures - your child could make a poster showing the different ways of making 5 .

Play games - You can play number bond pairs online at www.conkermaths.com and then see how many questions you can answer in just one minute.

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

## I can tell the time.

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 target can be broken down into several steps.

- I can tell the time to the nearest hour.


## Key Vocabulary

Twelve o'clock
Half past two

## Top Tips

The secret to success is practising little and often. If you would like more ideas, please speak to your child's teacher.

Talk about time - Discuss what time things happen. When does your child wake up? What time do they eat breakfast? Make sure that you have an analogue clock visible in your house or that your child wears a watch with hands.

Play "What's the time Mr Wolf?"- You could also give your child some responsibility for watching the clock:

Read books about time

## Key Instant Recall Facts Year 1 - Summer 1

## I know number bonds for each number to 10 and $I$ can count in 5 s and 10s.

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

| $0+7=7$ | $0+8=8$ | $0+9=9$ | $0+10=10$ |
| :--- | :--- | :--- | :--- |
| $1+6=7$ | $1+7=8$ | $1+8=9$ | $1+9=10$ |
| $2+5=7$ | $2+6=8$ | $2+7=9$ | $2+8=10$ |
| $3+4=7$ | $3+5=8$ | $3+6=9$ | $3+7=10$ |
| $4+3=7$ | $4+4=8$ | $4+5=9$ | $4+6=10$ |
| $5+2=7$ | $5+3=8$ | $5+4=9$ | $5+5=10$ |
| $6+2=8$ | $6+2=8$ | $6+3=9$ | $6+4=10$ |
| $7+1=8$ | $7+1=8$ | $7+2=9$ | $7+3=10$ |
| $8+0=8$ | $8+0=8$ | $8+1=9$ | $8+2=10$ |
|  |  | $9+0=9$ | $9+1=10$ |
|  |  |  | $10+0=10$ |


| Key Vocabulary |
| :--- |
| What do I add to 5 to make 10 ? |
| What is 10 take away 6 ? |
| What is 3 less than 10 ? |
| How many more than 2 is 10 ? |

How many more than 2 is 10 ?

They should be able to answer these questions in any order, including missing number questions e.g. $1+\bigcirc=10$ or $9-\bigcirc=8$.

Children should be able to count in 5 s to 50 and 10 s to 100 . They should be able to do this forwards and backwards.

## 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. If you would like more ideas, please speak to your child's teacher.

## Key Instant Recall Facts Year 1 - Summer 2

## I know doubles and halves of numbers to 10 and I know near doubles to 5.

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

| $0+0=0$ | $1 / 2$ of $0=0$ | Near Doubles |  |
| ---: | :--- | ---: | :--- |
| $1+1=1$ | $1 / 2$ of $2=1$ | $1+2=3$ | $2+1=3$ |
| $2+2=4$ | $1 / 2$ of $4=2$ | $2+3=5$ | $3+2=5$ |
| $3+3=6$ | $1 / 2$ of $6=3$ | $3+4=7$ | $4+3=7$ |
| $4+4=8$ | $1 / 2$ of $8=4$ | $4+5=9$ | $5+4=9$ |
| $5+5=10$ | $1 / 2$ of $10=5$ | $5+6=11$ | $6+5=11$ |
| $6+6=12$ |  |  |  |
| $7+7=14$ |  | Key Vocabulary |  |
| $8+8=16$ |  | What is double $9 ?$ |  |
| $9+9=18$ |  |  |  |
| $10+10=20$ |  |  |  |

Children should know that they can work out near doubles, by doubling the first number and adding or subtracting 1. e.g. $4+5$ can be done by doubling 4 and adding 1.

## 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. If you would like more ideas, please speak to your child's teacher.

Ping Pong - In this game, the parent says, "Ping," and the child replies, "Pong." Then the parent says a number and the child doubles it. For a harder version, the adult can say, "Pong." The child replies, "Ping," and then halves the next number given.

Practise online - Go to www.conkermaths.com and see how many questions you can answer in just 90 seconds.

## Key Instant Recall Facts Year 2 - Autumn 1

## I know number bonds 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.

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

## Key Vocabulary <br> What do I add to 5 to make 20? <br> What is 20 take away 6? <br> What is 3 less than 20? <br> How many more than 16 is 20 ?

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

## 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. If you would like more ideas, please speak to your child's teacher.

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. $17+3=20$ ).

Use practical resources - Make collections of 20 objects. Ask questions such as, "How many more conkers would I need to make 20?"

Make a poster - We use Numicon at school. You can find pictures of the Numicon shapes here: bit.ly/NumiconPictures - your child could make a poster showing the different ways of making 20.

Play games - You can play number bond pairs online at www.conkermaths.com and then see how many questions you can answer in just one minute.

## Key Instant Recall Facts

## Year 2 - Autumn 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.

| $0+0=0$ | $1 / 2$ of $0=0$ |  |
| :---: | :---: | :---: |
| $1+1=1$ | $1 / 2$ of $2=1$ | $11+11=22$ |
| $2+2=4$ | $1 / 2$ of $4=2$ | $12+12=24$ |
| $3+3=6$ | $1 / 2$ of $6=3$ | $13+13=26$ |
| $4+4=8$ | $1 / 2$ of $8=4$ | $14+14=28$ |
| $5+5=10$ | $1 / 2$ of $10=5$ | $15+15=30$ |
| $6+6=12$ | $1 / 2$ of $12=6$ | $16+16=32$ |
| $7+7=14$ | $1 / 2$ of $14=7$ | $17+17=34$ |
| $8+8=16$ | $1 / 2$ of $16=8$ | $18+18=36$ |
| $9+9=18$ | $1 / 2$ of $18=9$ | $19+19=38$ |
| $10+10=20$ | $1 / 2$ 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. If you would like more ideas, please speak to your child's teacher.

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

Ping Pong - In this game, the parent says, "Ping," and the child replies, "Pong." Then the parent says a number and the child doubles it. For a harder version, the adult can say, "Pong." The child replies, "Ping," and then halves the next number given.

Practise online - Go to www.conkermaths.com and see how many questions you can answer in just 90 seconds.

## Key Instant Recall Facts Year 2 - Spring 1

## I know the multiplication and division facts for the $\mathbf{2}$ 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.

| $2 \times 1=2$ | $2 \div 2=1$ |
| :---: | :---: |
| $2 \times 2=4$ | $4 \div 2=2$ |
| $2 \times 3=6$ | $6 \div 2=3$ |
| $2 \times 4=8$ | $8 \div 2=4$ |
| $2 \times 5=10$ | $10 \div 2=5$ |
| $2 \times 6=12$ | $12 \div 2=6$ |
| $2 \times 7=14$ | $14 \div 2=7$ |
| $2 \times 8=16$ | $16 \div 2=8$ |
| $2 \times 9=18$ | $18 \div 2=9$ |
| $2 \times 10=20$ | $20 \div 2=10$ |
| $2 \times 11=22$ | $22 \div 2=11$ |
| $2 \times 12=24$ | $24 \div 2=12$ |

## 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. $2 \times \bigcirc=8$ or $\bigcirc \div 2=6$.

## 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. If you would like more ideas, please speak to your child's teacher.

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.

Use what you already know - If your child knows that $2 \times 5=10$, they can use this fact to work out that $2 \times 6=12$.

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.

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

## Key Instant Recall Facts Year 2 - Spring 2

## I know the multiplication and division facts for the $\mathbf{1 0}$ 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.

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

## 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 $\bigcirc \div 10=6$.

## 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. If you would like more ideas, please speak to your child's teacher.

Pronunciation - Make sure that your child is pronouncing the numbers correctly and not getting confused between thirteen and thirty.

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.

Test the Parent - Your child can make up their own tricky division questions for you e.g. What is 70 divided by 7? They need to be able to multiply to create these questions.

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?

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

## I can tell the time.

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 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. If you would like more ideas, please speak to your child's teacher.

Talk about time - Discuss what time things happen. When does your child wake up? What time do they eat breakfast? Make sure that you have an analogue clock 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."

## Key Instant Recall Facts <br> 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.

$$
\begin{array}{lc}
5 \times 1=5 & 5 \div 5=1 \\
5 \times 2=10 & 10 \div 5=2 \\
5 \times 3=15 & 15 \div 5=3 \\
5 \times 4=20 & 20 \div 5=4 \\
5 \times 5=25 & 25 \div 5=5 \\
5 \times 6=30 & 30 \div 5=6 \\
5 \times 7=35 & 35 \div 5=7 \\
5 \times 8=40 & 40 \div 5=8 \\
5 \times 9=45 & 45 \div 5=9 \\
5 \times 10=50 & 50 \div 5=10 \\
5 \times 11=55 & 55 \div 5=11 \\
5 \times 12=60 & 60 \div 5=12
\end{array}
$$


questions e.g. $5 \times \bigcirc=40$ or $\bigcirc \div 5=9$.

## 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. If you would like more ideas, please speak to your child's teacher.

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.

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

Test the Parent - Your child can make up their own tricky division questions for you e.g. What is 45 divided by 5? They need to be able to multiply to create these questions.

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

## Key Instant Recall Facts Year 3 - Autumn 1

## I know number bonds for all 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.

| $2+9=11$ | $5+9=14$ | Example of a fact family |
| :--- | :--- | :---: |
| $3+8=11$ | $6+8=14$ | $6+9=15$ |
| $4+7=11$ | $7+7=14$ | $9+6=15$ |
| $5+6=11$ | $6+9=15$ | $15-9=6$ |
| $3+9=12$ | $7+8=15$ | $15-9=6$ |
| $4+8=12$ | $7+9=16$ |  |
| $5+7=12$ | $8+8=16$ | Examples of other facts |
| $6+6=12$ | $8+9=17$ | $4+5=9$ |
| $4+9=13$ | $9+9=18$ | $13+5=18$ |
| $5+8=13$ |  | $19-7=12$ |
| $6+7=13$ |  | $10-6=4$ |


| 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 learn all number bonds for each number to 20 (e.g. $15+2=17$ ). This includes related subtraction facts (e.g. $17-2=15$ ).

## 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. If you would like more ideas, please speak to your child's teacher.

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

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

Play games - There are missing number questions at www.conkermaths.com. See how many questions you can answer in just one minute.

## Key Instant Recall Facts

 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.

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



They should be able to answer these questions in any order, including missing number questions e.g. $3 \times \bigcirc=18$ or $\bigcirc \div 3=11$.

## 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 family of the day. If you would like more ideas, please speak to your child's teacher.

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.

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

Warning! - When creating fact families, children sometimes get confused by the order of the numbers in the division number sentence. It is tempting to say that the biggest number goes first, but it is more helpful to say that the answer to the multiplication goes first, as this will help your child more in later years when they study fractions, decimals and algebra.
E.g. $3 \times 12=36$. The answer to the multiplication is 36 , so $36 \div 3=12$ and $36 \div 12=3$

## Key Instant Recall Facts Year 3 - Spring 1

## I can recall facts about durations 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.

## Number of days in each month

There are 60 seconds in a minute.
There are 60 minutes in an hour.
There are 24 hours in a day.
There are 7 days in a week.
There are 12 months in a year.
There are 365 days in a year.
There are 366 days in a leap year.

| January | 31 | July | 31 |
| :--- | :--- | :--- | :--- |
| February | $28 / 29$ | August | 31 |
| March | 31 | September | 30 |
| April | 30 | October | 31 |
| May | 31 | November | 30 |
| June | 30 | December | 31 |

Children also need to know the order of the months in a year. They should be able to apply these facts to answer questions, such as:
What day comes after $30^{\text {th }}$ April?
What day comes before $1^{\text {st }}$ February?

## 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. If you would like more ideas, please speak to your child's teacher.

Use rhymes and memory games- The rhyme, Thirty days hath September, can help children remember which months have 30 days. There are poems describing the months of the year in order.

Use calendars - If you have a calendar for the new year, your child could be responsible for recording the birthdays of friends and family members in it. Your child could even make their own calendar.

How long is a minute? - Ask your child to sit with their eyes closed for exactly one minute while you time them. Can they guess the length of a minute? Carry out different activities for one minute. How many times can they jump in sixty seconds?

## Key Instant Recall Facts Year 3 - Spring 2

## 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 $6 ?$ |
| What is 8 times $4 ?$ |
| What is 24 divided by $4 ?$ |

They should be able to answer these questions in any order, including missing number questions e.g. $4 \times \bigcirc=16$ or $\bigcirc \div 4=7$.

## 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 family of the day. If you would like more ideas, please speak to your child's teacher.

What do you already know? - Your child will already know many of these facts from the 2, 3,5 and 10 times tables.

Double and double again - Multiplying a number by 4 is the same as doubling and doubling again. Double 6 is 12 and double 12 is 24 , so $6 \times 4=24$.

Buy one get three free - If your child knows one fact (e.g. $12 \times 4=48$ ), can they tell you the other three facts in the same fact family?

## Key Instant Recall Facts Year 3 - Summer 1

## I can tell the time.

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 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.
- I can tell the time to the nearest minute.

| 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. Use time wisely. If you would like more ideas, please speak to your child's teacher.

Talk about time - Discuss what time things happen. When does your child wake up? What time do they eat breakfast? Make sure that you have an analogue clock visible in your house or that your child wears a watch with hands. Once your child is confident telling the time, see if you can find more challenging clocks e.g. with Roman numerals or no numbers marked.

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 twenty-two minutes past four exactly."
"We need to leave the house at twenty-five to nine."

## Key Instant Recall Facts <br> 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 24 divided by $8 ?$ |

They should be able to answer these questions in any order, including missing number questions e.g. $8 \times \bigcirc=16$ or $\bigcirc \div 8=7$.

## 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 family of the day. If you would like more ideas, please speak to your child's teacher.

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.

Double your fours - Multiplying a number by 8 is the same as multiply by 4 and then doubling the answer. $8 \times 4=32$ and double 32 is 64 , so $8 \times 8=64$.

Five six seven eight - fifty-six is seven times eight ( $56=7 \times 8$ ).

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

## Key Instant Recall Facts Year 4 - Autumn 1

## I know number bonds to 100.

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

Some examples:

| $60+40=100$ | $37+63=100$ |
| :--- | :--- |
| $40+60=100$ | $63+37=100$ |
| $100-40=60$ | $100-63=37$ |
| $100-60=40$ | $100-37=63$ |
|  |  |
| $75+25=100$ | $48+52=100$ |
| $25+75=100$ | $52+48=100$ |
| $100-25=75$ | $100-52=48$ |
| $100-75=25$ | $100-48=52$ |

## Key Vocabulary

What do I add to 65 to make 100?

What is 100 take away 6?
What is 13 less than 100 ?
How many more than 98 is 100?

What is the difference between 89 and 100 ?

This list includes some examples of facts that children should know. They should be able to answer questions including missing number questions e.g. $49+\bigcirc=100$ or $100-\bigcirc=72$.

## 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. If you would like more ideas, please speak to your child's teacher.

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

Use number bonds to 10 - How can number bonds to 10 help you work out number bonds to 100 ?

Play games - There are missing number questions at www.conkermaths.com. See how many questions you can answer in just 90 seconds. There is also a number bond pair game to play.

## Key Instant Recall Facts

 Year 4 - Autumn 2
## I know the multiplication and division facts for the 6 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.

| $6 \times 1=6$ | $1 \times 6=6$ | $6 \div 6=1$ | $6 \div 1=6$ |
| :--- | :--- | :--- | :--- |
| $6 \times 2=12$ | $2 \times 6=12$ | $12 \div 6=2$ | $12 \div 2=6$ |
| $6 \times 3=18$ | $3 \times 6=18$ | $18 \div 6=3$ | $18 \div 3=6$ |
| $6 \times 4=24$ | $4 \times 6=24$ | $24 \div 6=4$ | $24 \div 4=6$ |
| $6 \times 5=30$ | $5 \times 6=30$ | $30 \div 6=5$ | $30 \div 5=6$ |
| $6 \times 6=36$ | $6 \times 6=36$ | $36 \div 6=6$ | $36 \div 6=6$ |
| $6 \times 7=42$ | $7 \times 6=42$ | $42 \div 6=7$ | $42 \div 7=6$ |
| $6 \times 8=48$ | $8 \times 6=48$ | $48 \div 6=8$ | $48 \div 8=6$ |
| $6 \times 9=54$ | $9 \times 6=54$ | $54 \div 6=9$ | $54 \div 9=6$ |
| $6 \times 10=60$ | $10 \times 6=60$ | $60 \div 6=10$ | $60 \div 10=6$ |
| $6 \times 11=66$ | $11 \times 6=66$ | $66 \div 6=11$ | $66 \div 11=6$ |
| $6 \times 12=72$ | $12 \times 6=72$ | $72 \div 6=12$ | $72 \div 12=6$ |


| Key Vocabulary |
| :---: |
| What is 8 multiplied by $6 ?$ |
| What is 6 times $8 ?$ |
| What is 24 divided by $6 ?$ |

They should be able to answer these questions in any order, including missing number questions e.g. $6 \times \bigcirc=72$ or $\bigcirc \div 6=7$.

## 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 family of the day. If you would like more ideas, please speak to your child's teacher.

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.

Double your threes - Multiplying a number by 6 is the same as multiplying by 3 and then doubling the answer. $7 \times 3=21$ and double 21 is 42 , so $7 \times 6=42$.

Buy one get three free - If your child knows one fact (e.g. $3 \times 6=18$ ), can they tell you the other three facts in the same fact family?

Warning! - When creating fact families, children sometimes get confused by the order of the numbers in the division number sentence. It is tempting to say that the biggest number goes first, but it is more helpful to say that the answer to the multiplication goes first, as this will help your child more in later years when they study fractions, decimals and algebra.
E.g. $6 \times 12=72$. The answer to the multiplication is 72 , so $72 \div 6=12$ and $72 \div 12=6$

## Key Instant Recall Facts Year 4 - Spring 1

## I know the multiplication and division facts for the 9 and 11 times tables.

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

| $9 \times 1=9$ | $9 \div 9=1$ | $11 \times 1=11$ | $11 \div 11=1$ |
| :---: | :---: | :---: | :---: |
| $9 \times 2=18$ | $18 \div 9=2$ | $11 \times 2=22$ | $22 \div 11=2$ |
| $9 \times 3=27$ | $27 \div 9=3$ | $11 \times 3=33$ | $33 \div 11=3$ |
| $9 \times 4=36$ | $36 \div 9=4$ | $11 \times 4=44$ | $44 \div 11=4$ |
| $9 \times 5=45$ | $45 \div 9=5$ | $11 \times 5=55$ | $55 \div 11=5$ |
| $9 \times 6=54$ | $54 \div 9=6$ | $11 \times 6=66$ | $66 \div 11=6$ |
| $9 \times 7=63$ | $63 \div 9=7$ | $11 \times 7=77$ | $77 \div 11=7$ |
| $9 \times 8=72$ | $72 \div 9=8$ | $11 \times 8=88$ | $88 \div 11=8$ |
| $9 \times 9=81$ | $81 \div 9=9$ | $11 \times 9=99$ | $99 \div 11=9$ |
| $9 \times 10=90$ | $90 \div 9=10$ | $11 \times 10=110$ | $110 \div 11=10$ |
| $9 \times 11=99$ | $99 \div 9=11$ | $11 \times 11=121$ | $121 \div 11=11$ |
| $9 \times 12=108$ | $108 \div 9=12$ | $11 \times 12=132$ | $132 \div 11=12$ |


| Key Vocabulary |
| :---: |
| What is 8 multiplied by $6 ?$ |
| What is 6 times $8 ?$ |
| What is 24 divided by $6 ?$ |

They should be able to answer these questions in any order, including missing number questions e.g. $9 \times \bigcirc=54$ or $\bigcirc \div 9=11$.

## 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 family of the day. If you would like more ideas, please speak to your child's teacher.

Look for patterns - These times tables are full of patterns for your child to find. How many can they spot?

Use your ten times table - Multiply a number by 10 and subtract the original number (e.g. $7 \times 10-7=70-7=63$ ). What do you notice?

What happens if you add your original number instead?
(e.g. $7 \times 10+7=70+7=77$ )

What do you already know? - Your child will already know many of these facts from the 2, $3,4,5,6,8$ and 10 times tables. It might be worth practising these again!

## Key Instant Recall Facts Year 4 - Spring 2

## I know the multiplication and division facts for the 7 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.

| $7 \times 1=7$ | $1 \times 7=7$ | $7 \div 7=1$ | $7 \div 1=7$ |
| :---: | :---: | :---: | :---: |
| $7 \times 2=14$ | $2 \times 7=14$ | $14 \div 7=2$ | $14 \div 2=7$ |
| $7 \times 3=21$ | $3 \times 7=21$ | $21 \div 7=3$ | $21 \div 3=7$ |
| $7 \times 4=28$ | $4 \times 7=28$ | $28 \div 7=4$ | $28 \div 4=7$ |
| $7 \times 5=35$ | $5 \times 7=35$ | $35 \div 7=5$ | $35 \div 5=7$ |
| $7 \times 6=42$ | $6 \times 7=42$ | $42 \div 7=6$ | $42 \div 6=7$ |
| $7 \times 7=49$ | $7 \times 7=49$ | $49 \div 7=7$ | $49 \div 7=7$ |
| $7 \times 8=56$ | $8 \times 7=56$ | $56 \div 7=8$ | $56 \div 8=7$ |
| $7 \times 9=63$ | $9 \times 7=63$ | $63 \div 7=9$ | $63 \div 9=7$ |
| $7 \times 10=70$ | $10 \times 7=70$ | $70 \div 7=10$ | $70 \div 10=7$ |
| $7 \times 11=77$ | $11 \times 7=77$ | $77 \div 7=11$ | $77 \div 11=7$ |
| $7 \times 12=84$ | $12 \times 7=84$ | $84 \div 7=12$ | $84 \div 12=7$ |


| Key Vocabulary |
| :---: |
| What is 7 multiplied by $6 ?$ |
| What is 7 times $8 ?$ |
| What is 84 divided by $7 ?$ |

They should be able to answer these questions in any order, including missing number questions e.g. $7 \times \bigcirc=28$ or $\bigcirc \div 6=7$.

## 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 family of the day. If you would like more ideas, please speak to your child's teacher.

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.

Order of difficulty - Ask your child to order these facts from the easiest to the most challenging. Can they explain why some facts are easier to remember? Then focus on practising the most challenging facts.

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

## Key Instant Recall Facts <br> Year 4 - Summer 1

## I can recognise decimal equivalents of fractions.

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

$$
\begin{array}{ccc}
\frac{1}{2}=0.5 & \frac{1}{10}=0.1 & \frac{1}{100}=0.01 \\
\frac{1}{4}=0.25 & \frac{2}{10}=0.2 & \frac{7}{100}=0.07 \\
\frac{3}{4}=0.75 & \frac{5}{10}=0.5 & \frac{21}{100}=0.21 \\
& \frac{6}{10}=0.6 & \frac{75}{100}=0.75 \\
& \frac{9}{10}=0.9 & \frac{99}{100}=0.99
\end{array}
$$

$\quad$ Key Vocabulary
How many tenths is 0.8 ?
How many hundredths is
0.12 ?
Write 0.75 as a fraction?
Write $1 / 4$ as a decimal?

Children should be able to convert between decimals and fractions for $1 / 2,1 / 4,3 / 4$ and any number of tenths and hundredths.

## 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: start with tenths before moving on to hundredths. If you would like more ideas, please speak to your child's teacher.

Play games - Make some cards with pairs of equivalent fractions and decimals. Use these to play the memory game or snap. Or make your own dominoes with fractions on one side and decimals on the other.

## Key Instant Recall Facts Year 4 - Summer 2

## I can multiply and divide single-digit numbers by 10 and 100.

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

| $7 \times 10=70$ | $30 \times 10=300$ | $0.8 \times 10=8$ |
| :--- | :--- | :--- |
| $10 \times 7=70$ | $10 \times 30=300$ | $10 \times 0.8=8$ |
| $70 \div 7=10$ | $300 \div 30=10$ | $8 \div 0.8=10$ |
| $70 \div 10=7$ | $300 \div 10=30$ | $8 \div 10=0.8$ |
|  |  |  |
| $6 \times 100=600$ | $40 \times 100=4000$ | $0.2 \times 10=2$ |
| $100 \times 6=600$ | $100 \times 40=4000$ | $10 \times 0.2=2$ |
| $600 \div 6=100$ | $4000 \div 40=100$ | $2 \div 0.2=10$ |
| $600 \div 100=6$ | $4000 \div 100=40$ | $2 \div 10=0.2$ |

Key Vocabulary<br>What is 5 multiplied by 10 ?<br>What is 10 times 0.9?<br>What is 700 divided by 70 ?<br>hundreds, tens, units<br>tenths, hundredths

These are just examples of the facts for this term. Children should be able to answer these questions in any order, including missing number questions e.g. $10 \times \bigcirc=5$ or $\bigcirc \div 10=60$.

## 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 family of the day. If you would like more ideas, please speak to your child's teacher.

