



Key Instant Recall Facts

KIRFs

To develop your child's fluency and mental maths skills, we are introducing KIRFs throughout school. **KIRFS are a way of helping your child to learn by heart, key facts and information which they need to have instant recall of.**

KIRFs are designed to support the development of mental maths skills that underpin much of the maths work in our school. They are particularly useful when calculating, adding, subtracting, multiplying or dividing. They contain number facts such as number bonds and times tables that need constant practise and rehearsal, so children can recall them quickly and accurately.

Instant recall of facts helps enormously with mental agility in maths lessons. When children move onto written calculations, knowing these key facts is very beneficial and if these facts can be recalled mentally, it frees up the working memory for them to unpick and solve more complex reasoning and problem solving questions. For your child to become more efficient in recalling facts easily, they need to be practised frequently and for short periods of time.

Each half term, children will focus on 1 or 2 Key Instant Recall Facts (KIRFs) to practise and learn at home for the half term. They will also be available on our school website under the maths section and will be sent to parents and carers alongside the curriculum newsletter each term. The KIRFs include links to online games, videos and resources that you may find useful when practising these KIRFs with your child at home. They are not designed to be a time-consuming task and can be practised anywhere – in the car, walking to school, etc. Regular practice - little and often – helps children to retain these facts and keep their skills sharp.

Throughout the half term, the KIRFs will also be practised in school and your child's teacher will assess whether they have been retained.

**Maths is a journey
not a destination**



Key Instant Recall Facts

Year 1 Autumn A

Know 1 more and 1 less of numbers up to 20.

Count to and across 100 forwards and backwards from any number

By the end of this half term, children should be able to mentally recall 1 more and 1 less than any number up to 20. The aim is for this to be a known fact without the need to count on or back.

Strategies—lots of looking at numbers in order, counting back and forth will help the numbers become more ingrained. **Use practical methods**, count food on a plate, if I add one more sausage, how many will you have? If I take one chip away, how many left? **Ensure children understand the vocabulary of more and less.**

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 do not need to practise them all at once; perhaps you could have a fact of the day. Play 'ping pong'. You say a number, your child says the number back to you that is one more or less.

By the end of this half term, children should also be able to count to and beyond 100 forwards and backwards from any number.

Keep this practical—count out loud at every opportunity. Play games whilst walking, what number can we count to before we arrive at school/shops/ grandparents house etc. It is really important that you do not always start counting from 1.

- **Online games**
- [Count Backwards from 100 by 1's | Exercise and Count | Jack Hartmann](#)
[Countdown From 100 - YouTube](#)

White Rose Maths—One Minute Maths App





Key Instant Recall Facts

Year 1 Autumn B

Know number bonds of all numbers to 6.

By the end of this half term, children should be able to mentally recall all pairs of numbers that add together to total any number to 6. For example

$$1+1=2 \quad 0+2=2 \quad 1+2=3 \quad 2+1=3 \quad 0+3=3 \quad 3+0=3 \quad 1+3=4 \quad 2+2=4 \quad 3+1=4$$

$$4+0=4 \quad 0+4=4 \quad 1+4=5 \quad 2+3=5 \quad 3+2=5 \quad 4+1=5 \quad 5+0=5 \quad 0+5=5 \quad 1+5=6$$

$$2+4=6 \quad 3+3=6 \quad 3+2=6 \quad 4+2=6 \quad 5+1=6 \quad 6+0=6 \quad 0+6=6$$

Possible Methods. - Use fingers to add single amounts together. Count out objects up to 6 then partition them into 2 different groups to find all the possible pairs to make that amount. Write the pairs out in order, can you spot that the numbers can be reversed. The aim is after lots of practical work, children automatically remember these simple number 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 do not need to practise them all at once; perhaps you could have a fact of the day. Play 'ping pong'. You say a number, your child says the number back that is added to it to total 2, 3, 4, 5 or 6.

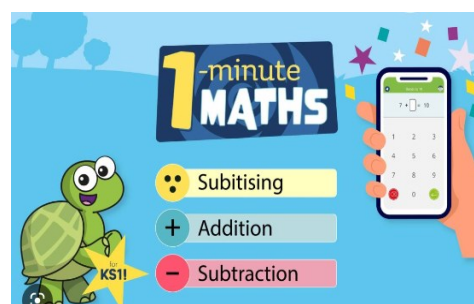
Use practical resources

- Using items around the house put into 2 groups that total amounts up to 6.
- Play snap games with numbers 0-6 turn over pairs of cards, if the numbers add together to total the number you are focussing on, shop SNAP!
- Make up stories or talk about everyday objects. There are 3 birds in the garden, how many more to make 6?

Online games

- [Hit the Button - Quick fire maths practise for 6-11 year olds \(topmarks.co.uk\)](https://www.topmarks.co.uk) (click on number bonds)
- [Save The Whale: Learn bonds of 10, 9, 8, 7, 6 or 5 \(ictgames.com\)](https://www.ictgames.com)

White Rose Maths—One Minute Maths App





Key Instant Recall Facts

Year 1 Autumn B

Know number bonds of all numbers to 10.

By the end of this half term, children should be able to mentally recall all pairs of numbers that add together to total 10.

0+0 1+9 2+8 3+7 4+6 5+5 6+4 7+3 8+2 9+1 10+0

Possible Methods. - Use fingers to find pairs that total 10, how many up, how many down? Count out objects up to 10 then partition them into 2 different groups to find all the possible pairs to make that amount. Write the pairs out in order, can you spot that the numbers can be reversed. The aim is after lots of practical work, children automatically remember these simple number 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 do not need to practise them all at once; perhaps you could have a fact of the day. Play 'ping pong'. You say a number, your child says the number back to you that is needed to make 10. Encourage your child to use their fingers.

Use practical resources

- Using items around the house to find different ways of making 10, e.g one blue teddy and nine red teddies. 1 and 9 make 10.
- Making up stories with items around the home, e.g there are 2 cars in the car park and 8 more cars arrive, how many cars altogether? 2 and 8 make 10.
- Asking questions during daily routines, e.g you have 4 sausages on your plate and I have 6 sausages. How many sausages altogether? 4 and 6 make 10.

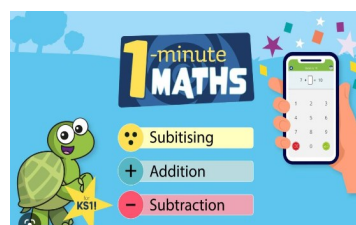
Online games

Jack Hartmann Number bonds to 10 singing and moving you tube clips!

[I Know My Number Bonds 10](#) | [Number Bonds to 10](#) | [Addition Song for Kids](#) | [Jack Hartmann - YouTube](#)

[Hit the Button - Quick fire maths practise for 6-11 year olds \(topmarks.co.uk\)](#) (number bonds)

White Rose Maths—One Minute Maths App





Key Instant Recall Facts

Year 1 Spring A

Know doubles to 10 and halves of even numbers to 10.

Children should already know what it means to double a number. By the end of this half term, children should be able to automatically recall what double any number to 10 equals. They should also be able to relate this to halving a number and recognise half of all even numbers to 10.

Possible methods: Ask your child to tell you what double...is. Can they tell you what number they would need to add to 4 if they want to find out what double 4 equals? Your child might find it easier to use their fingers to help count how many they have altogether if they are struggling. You could also have a go at writing this as a number sentence together. Use objects to begin with and then gradually children will begin to memorise these facts. Objects are an important first step to help them visualise the number later on when working abstractly.

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 do not need to practise them all at once; perhaps you could have a fact of the day. Use objects around your house and think of ways of applying the KIRFs in everyday life. For example, if they are eating sweets, can they count how many they have at the start and show you how many they would have left if they ate half of them?

Use practical resources:

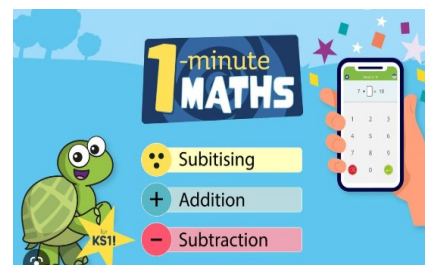
- Use everyday objects in real life contexts, for example I have 6 teddy bears, if I wanted to half this amount what would I do? How many would I have now?
- Make up games when completing everyday tasks, e.g. when baking you could double or half your ingredients depending on the recipe. You could count red cars on a walk, ask your child how many more red cars they would need to see if they wanted to see double this? How many red cars would they have seen then?

Online games:

[Daily 10 - Mental Maths Challenge - Topmarks](#)

[Archery Doubles - mobile friendly \(ictgames.com\)](#)

White Rose Maths – One Minute Maths App:





Key Instant Recall Facts

Year 1 Spring B

Add and Subtract Numbers up to total of 20.

By the end of this half term, children should be able to use a variety of mental methods and strategies in order to add and subtract numbers up to a total of 20.

Possible Methods. - Put the largest number in our head and count on or back.

Use known doubles and halves and near doubles and halves.

Use bonds to 10 and 20 where appropriate.

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 do not need to practise them all at once; perhaps you could have a fact of the day. Play 'ping pong'. You say a number, your child says the number back to you that is needed to add/subtract to make your chosen number.

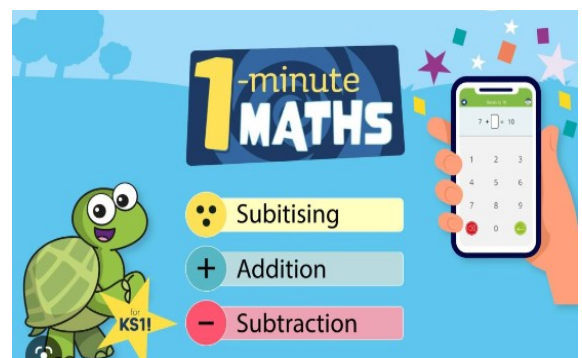
Use practical resources

- Using items around the house to find different ways of making a given total e.g 5 blue teddies and nine red teddies. 5 add 9 equals 14.
- Making up stories with items around the home, e.g there are 12 cars in the car park and 8 more cars arrive, how many cars altogether? 12 add 8 equals 20.
- Make collections of 20 objects. Ask questions such as, "How many more conkers would I need to make 20?"

Online games

- [ks1 addition and subtraction to 20 - Topmarks Search](#)
- [Hit the Button - Quick fire maths practise for 6-11 year olds \(topmarks.co.uk\)](#)
- [KS1 Maths - England - BBC Bitesize](#)

White Rose Maths—One Minute Maths App





Key Instant Recall Facts

Year 1 Spring B

Recognise odd and even numbers up to 20.

By the end of this half term, children should be able to say whether a number is odd or even.

Possible Methods. - Think about even numbers being in a pair. Odd will have an 'odd one out' when pairing up. Count in 2s to recognise odd numbers. Repetition of the pattern of numbers ending in 0, 2, 4, 6, 8 will always be even.

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 do not need to practise them all at once; perhaps you could have a number of the day. Look at house numbers while walking to school are they odd or even?

Use practical resources

- Using items around the house pair them up to work out if the amount is odd or even. Use the language of odd and even around the home. E.g. how many odd socks do we have in the washing?
- Making up stories linked to home life, we have 5 people coming round for dinner, is that odd or even? Will everyone have a partner etc?.

• **Online games**

- [Coconut Odd or Even - Topmarks](#)
- [Number Ninja - Odd or Even • ABCya!](#)
- [Catch A Star || Odd or Even Numbers - mobile friendly \(ictgames.com\)](#)



Key Instant Recall Facts

Year 1, Summer A

Count forwards in steps of 2, 5 and 10.

By the end of this half term, children should be able to use a variety of mental methods and strategies to count forwards in steps of 2, 5 and 10.

Possible Methods: Use skip counting when counting in 2s. Look at a 100 square, can children spot any patterns, are there any similarities when they count forwards in steps of 2, 5 or 10?

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 do not need to practise them all at once; perhaps you could have a fact of the day. Play 'ping pong', you say a number and then your child says the number that is 2, 5 or 10 steps on from your number. Keep repeating and see how high can you go!

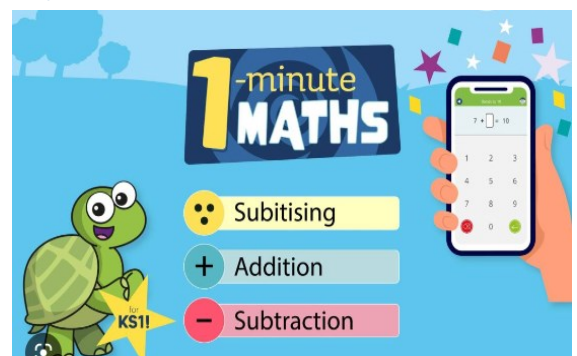
Use practical resources:

- Ask your child to put their socks into pairs and practice counting how many socks you have by counting up in 2s.
- Ask your child to count up in 5s or 10s how many fingers and toes they have, how many are in your family?
- Practice reciting counting up in steps of 2, 5 or 10 on your fingers.

Online games:

- [Hit the Button - Quick fire maths practise for 6-11 year olds \(topmarks.co.uk\)](https://www.topmarks.co.uk/Hit-the-Button)
- [Whack A Mole || Counting in steps of 1, 2, 3....12 \(ictgames.com\)](https://www.ictgames.com/Whack-A-Mole)
- [Saucer Sorter \(ictgames.com\)](https://www.ictgames.com/Saucer-Sorter)
- TT Rockstars - children have individual log ins.

White Rose Maths – One Minute Maths App:





Key Instant Recall Facts

Year 1, Summer B

Count backwards in steps of 2, 5 and 10.

By the end of this half term, children should be able to use a variety of mental methods and strategies to count backwards in steps of 2, 5 and 10.

Possible Methods: Use skip counting when counting backwards in 2s. Look at a 100 square, can children spot any patterns, are there any similarities when they count backwards in steps of 2, 5 or 10?

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 do not need to practise them all at once; perhaps you could have a fact of the day. Play 'ping pong', you say a number and then your child says the number that is 2, 5 or 10 steps back from your number. Keep repeating and see how many you can get!

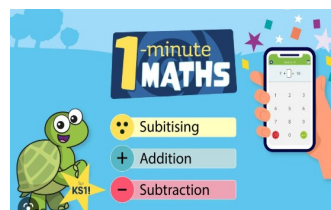
Use practical resources:

- Ask your child to put their socks into pairs, count up in 2's to find out how many pairs you have and remove a pair each time - your child can count backwards in 2's to say how many pairs they have left each time.
- Ask your child to count up in 5s or 10s how many fingers and toes they have, how many are in your family? Now count backwards until they get back to 0 fingers and toes.
- Practice reciting counting backwards in steps of 2, 5 or 10 on your fingers.

Online games:

- [Hit the Button - Quick fire maths practise for 6-11 year olds \(topmarks.co.uk\)](https://www.topmarks.co.uk/Hit-the-Button)
- [Whack A Mole || Counting in steps of 1, 2, 3....12 \(ictgames.com\)](https://www.ictgames.com/Whack-A-Mole-Counting)
- [Paint the Squares - Interactive Number Charts \(topmarks.co.uk\)](https://www.topmarks.co.uk/Paint-the-Squares)
- TT Rockstars - children have individual log ins.

White Rose Maths – One Minute Maths App:





Key Instant Recall Facts

Year 1, Summer B

Know the months of the year and the seasons in order.

By the end of this half term, children should be able to recite both the months of the year and the seasons in order.

Possible Methods: You could practice reciting these when completing daily activities, either verbally or in song form. Look at photographs of your child enjoying seasonal activities. Say a season, can your child splat the photograph taken during that season?

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 do not need to practise them all at once; perhaps you could have a fact of the day. Play 'ping pong', you say a month, your child tells you the previous and following month.

Use practical resources:

- Look at a calendar or make your own monthly or seasonal calendar using pictures or photographs.

Online games:

- [months of the year and seasons song - YouTube](#) There are lots of songs on YouTube to help your child learn these.
- [Learn Months of the Year • ABCya!](#)