



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

Reception Autumn A

Say the number names in order forward and back to 5.

Subitise to 5.

By the end of this half term, children should be able to say the number names in order forwards and backwards to 5. They should also be able to subitise to 5 confidently.

What does subitising mean? Subitising is the ability to rapidly and automatically recognize a set of objects, without counting. When someone holds up 4 fingers, you don't have to count them. You just know that there are 4. When you see 6 dots on a die, you know it's 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 do not need to practise them all at once, make chanting numbers in order part of everyday life, counting whilst walking up steps, count cars going past etc.

Use practical resources

- Using items around the house to count up to 5.
- Sing counting songs that count both forwards and backwards such as 5 green bottles, 1,2,3,4, 5 once a caught a fish alive etc.

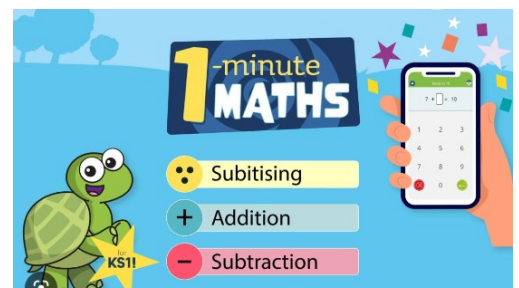
Online games and videos

[Subitize Up To 5 \(soo-bi-tize\) | Math Song for Kids | Jack Hartmann - YouTube](#)

[Numberblocks - See the Amount \(bbc.co.uk\)](#)

[Subitizing to 5 | Subitising for Kids - YouTube](#)

White Rose Maths—One Minute Maths App brilliant for subitising!





Key Instant Recall Facts

Reception Autumn B



Key Instant Recall Facts

Reception Spring A



Key Instant Recall Facts

Reception Spring B

Partition numbers to 10 into two groups.

By the end of this half term, children should explore the following facts, practically. The aim is for them to eventually be able to recall these facts instantly.

$0 + 10 = 10$

$1 + 9 = 10$

$2 + 8 = 10$

$3 + 7 = 10$

$4 + 6 = 10$

$5 + 5 = 10$

$6 + 4 = 10$

$7 + 3 = 10$

$8 + 2 = 10$

$9 + 1 = 10$

$10 + 0 = 10$

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.

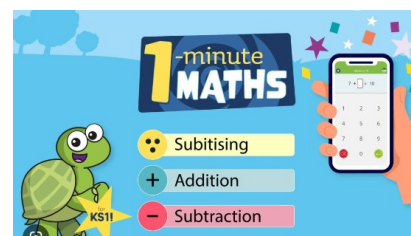
Online games

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](#)

[I Can Say My Number Pairs 10](#) | [Math Song for Kids](#) | [Number Bonds](#) | [Jack Hartmann - YouTube](#)

White Rose Maths—One Minute Maths App





Key Instant Recall Facts

Reception Summer A

Use physical objects to add and subtract single digits.

By the end of this half term, children should have explored how to add and subtract single digit numbers using physical objects. This will help them as they begin to try and recall addition and subtraction facts, and build their confidence around the composition of numbers.

Possible methods: Ask your child to count you out a set number of objects. Ask them to add / subtract...more / less objects. How many objects have you now got altogether?

You could also have a go at writing this as a number sentence together.

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 how many they have left after they've eaten some?

Use practical resources:

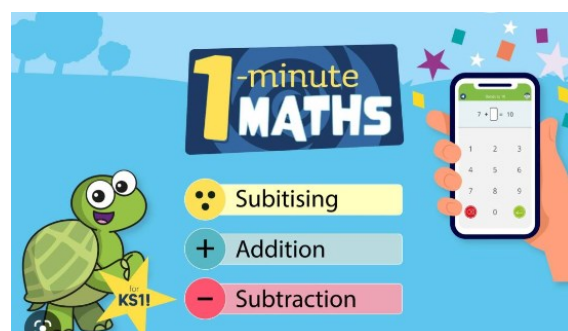
- Use items around the house to add and subtract up to 10, for example I have 3 teddy bears and 4 action figures, how many do I have altogether?
- Make up games when completing everyday tasks, e.g. count how many red cars you see and how many blue cars. How many cars did we see on our walk altogether?
- Asking questions during daily routines, for example there were 6 toys in the bath. I have hidden 2 of them, how many do you have left?

Online games:

[Addition To 10 \(topmarks.co.uk\)](https://www.topmarks.co.uk/1-minute-maths-addition)

[Subtraction To 10 \(topmarks.co.uk\)](https://www.topmarks.co.uk/1-minute-maths-subtraction)

White Rose Maths – One Minute Maths App:





Key Instant Recall Facts

Reception Summer B

Know doubles of numbers to 5 and use objects to find halves of 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 5 equals. They should also be able to use objects to represent half of any number 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.

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:

- Gather a group of items around the house and see if your child can double the amount of items and then half that amount, 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:

