



Highfield Primary School

## 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. For your child to become more efficient in recalling them easily, they need to be practised frequently and for short periods of time.

Each half term, children will focus on a Key Instant Recall Fact (KIRF) to practise and learn at home for the half term. They will also be available on our school website under the maths section and each child will receive a copy to keep at home. The KIRFs include practical ideas to assist your child in grasping the key facts and contain helpful suggestions of ways in which you could make this learning interesting and relevant. 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.

Over their time at primary school, we believe that - if the KIRFs are developed fully - children will be more confident with number work, understand its relevance, and be able to access the curriculum much more easily. They will be able to apply what they have learnt to a wide range of problems that confront us regularly.



Highfield Primary School

# Key Instant Recall Facts

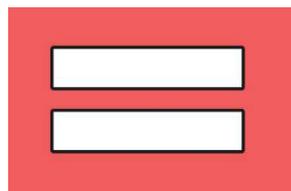
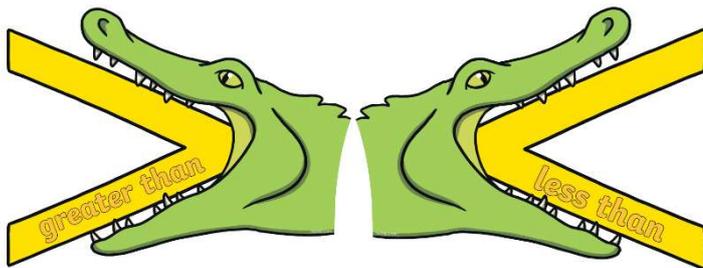
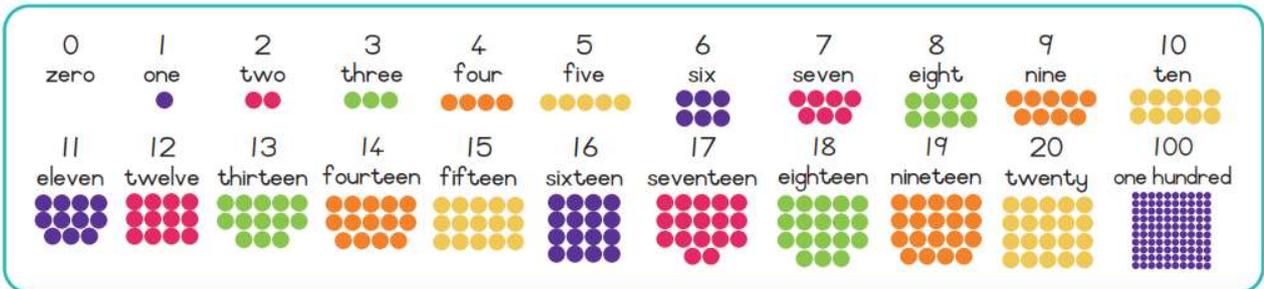
## Year 1 - Autumn 1

I can recite number names in order to 20 and beyond.

I can count forwards and backwards.

Recognise the symbols for greater than, less than and equal to.

By the end of this half term, children should be able to read and write numbers to 20. They should be able to count forwards and backwards from any given number.



- Key Vocabulary**
- count
  - forwards
  - backwards
  - greater than
  - less than
  - equal to

### Top Tips...

Practice these little and often:

<https://www.youtube.com/watch?v=M6Efzu2slaI>

<https://www.youtube.com/watch?v=MVzXKfr6e8>

<https://www.topmarks.co.uk/learning-to-count/todays-number-up-to-20>

<https://www.topmarks.co.uk/ordering-and-sequencing/caterpillar-ordering>



Highfield Primary School

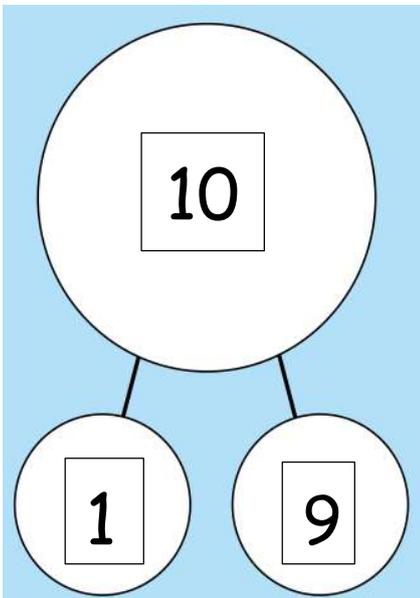
# Key Instant Recall Facts

## Year 1 - Autumn 2

I know all pairs of numbers that add to make 10.  
I can use a systematic approach when recording number pairs to 10.

By the end of this half term, children should be able to say which two numbers can be added to ten with rapid recall. Children should be able to use a systematic approach when recalling and recording all number bonds to 10.

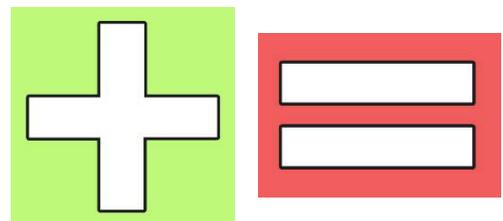
### Number Bond to 10 Place Mat



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

**Key Vocabulary**

add	addition	plus
equals	altogether	pair
number bond	part-whole model	



**Top Tips...**  
Practice these little and often:

<https://www.youtube.com/watch?v=ID9tjBUiXs0&t=65s>  
<https://www.youtube.com/watch?v=ch7KzI3n2Zk&t=75s>  
<https://www.topmarks.co.uk/maths-games/mental-maths-train>



Highfield Primary School

# Key Instant Recall Facts

## Year 1 - Spring 1

I can add or subtract numbers using a number line.

I can understand the relationship between addition and subtraction number families.

By the end of this half term, children should be able to understand that addition and subtraction are the inverse of each other. Children should be able to read and write fact family number sentences.

### Fact Families

$$6 + 4 = 10$$

$$4 + 6 = 10$$

$$10 - 4 = 6$$

$$10 - 6 = 4$$

$$9 + 1 = 10$$

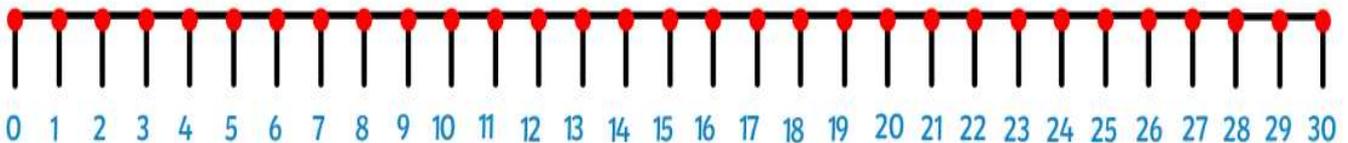
$$1 + 9 = 10$$

$$10 - 9 = 1$$

$$10 - 1 = 9$$

### Key Vocabulary

- add
- addition
- plus
- subtract
- minus
- subtraction
- take away



### Top Tips...

Practice these little and often:

<https://www.youtube.com/watch?v=JoZ3wwdye7w>

<https://www.youtube.com/watch?v=Pjvd7KziiVo>

Top Tip: Remember to jump forwards on the number line when adding and backwards when subtracting.



Highfield Primary School

# Key Instant Recall Facts

## Year 1 - Spring 2

I can count forwards & backwards in steps of 2, 5 & 10.

By the end of this half term, children should be able to count in these three counting patterns. The aim is for them to say these off by heart - forwards and backwards.

**Key Vocabulary**

- twos
- tens
- forwards
- more than
- fives
- lots of
- backwards
- less than

Children should be able count on/back: 2s to 20, 5s to 50 and 10s to 100.

0 2 4 6 8 10 12 14 16 18 20

0 5 10 15 20 25 30 35 40 45 50

0 10 20 30 40 50 60 70 80 90 100

They should be able to count in these patterns and may be able to say if a number will be in the counting in twos, fives or tens pattern.

### 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 week where you practise each pattern. When the children are confident with these facts can they count in 2s beyond 20 or in 5s beyond 50?

You can use coins to help you count forwards and backwards in 2s, 5s and 10s.

Counting games: <https://www.topmarks.co.uk/learning-to-count/paint-the-squares>

Practise looking for number patterns with <https://www.primarygames.co.uk/pg2/splat/splatsq100.html>





Highfield Primary School

# Key Instant Recall Facts

## Year 1 - Summer 1

I can double and make equal groups.

By the end of this half term, children should be able to make equal groups as well as doubling a number by itself.

3

3

6

8

8

16

### Key Vocabulary

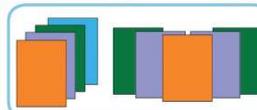
- equal groups
- double
- halves
- quarters
- fractions

#### Make Equal Groups

Match the labels with the groups.

equal

unequal



True or false?

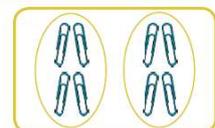
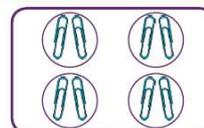


Here are 2 groups of 3 pencil cases.



Here are 3 groups of 3 pens.

What can you say about these groups?



### Top Tips...

Practise these little and often:

<https://www.youtube.com/watch?v=NDqbCfplYrg>

<https://www.youtube.com/watch?v=gzFbUZ8VjEg>

<https://www.youtube.com/watch?v=MqENzPMIjRc>



Highfield Primary School

# Key Instant Recall Facts

## Year 1 - Summer 2

I can halve and quarter amounts and numbers.

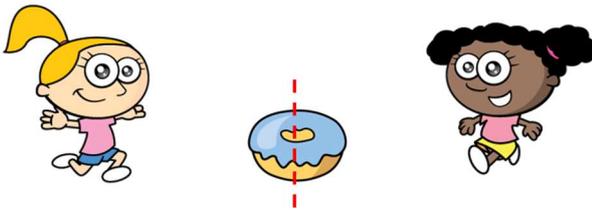
By the end of this half term, children should be able to recognise and find a half or quarter of an amount or number.

They should be able to use key vocabulary to solve reasoning challenges.

### Key Vocabulary

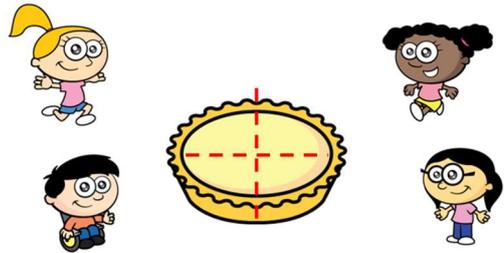
- half
- halve
- whole
- quarter
- share
- group
- amount
- equal

Making a half means sharing equally.



One donut can be cut into 2 equal pieces.

We can make a quarter by sharing equally between 4 people.



One tart can be cut into 4 equal pieces.  
Each piece is **one quarter**.

### Top Tips...

Practise these little and often:

[https://www.youtube.com/watch?v=6YGqtK6BN\\_Y](https://www.youtube.com/watch?v=6YGqtK6BN_Y)

<https://www.youtube.com/watch?v=ryGvCND0ARO>

Listen to a story:

<https://www.youtube.com/watch?v=hVaxiJB6Fls&t=63s>