



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.



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# Key Instant Recall Facts

## Year 3 – Autumn 1

Know number bonds for all numbers to 20.

Count in 50s and 100s.

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

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

### Key Vocabulary

- Number bond
- Plus
- More than
- Subtract
- Equals
- Add
- Difference
- Less than
- Take away
- Total

Example  
fact family:

6 + 9 = 15  
9 + 6 = 15  
15 - 9 = 6  
15 - 6 = 9

They should be able to  
answer these questions  
in any order, including  
missing number  
questions.

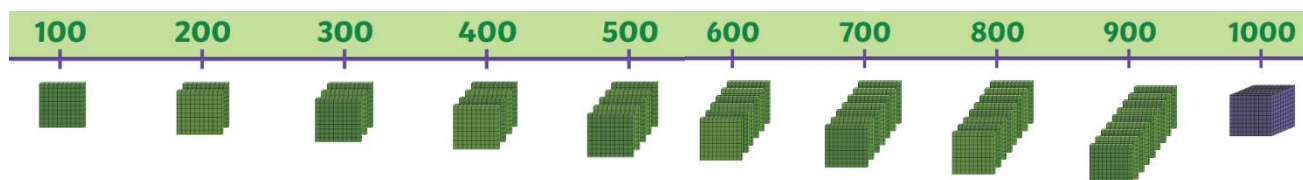
e.g.

11 + ○ = 15

○ + 1 = 13

14 - ○ = 12

0 50 100 150 200 250 300 350 400 450 500



### 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?

<https://www.topmarks.co.uk/maths-games/hit-the-button> - for number bonds to 20.

**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  $5 + 7$ ?