Mathematics @ Dinnington

KIRFs

Key Instant Recall Facts

To help develop children's fluency in Mathematics, we have identified some Key Instant Recall Facts that should be learnt off by heart each half term.

Children will practice these facts in class, but would benefit from regular practice at home 3 time a week as well. At the end of each half term they will be assessed on how well they achieve each fact.

Please see attached lists of KIRFs which are aligned to the Maths curriculum we deliver.

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.

Year 1 Block 1 KIRFs

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

Numbers 1 to 10 in numerals and words

1 = one
2 = two
3 = three
4 = four
5 = five
6 = six
7 = seven
8 = eight
9 = nine
10 = ten

Possible learning activities

- Match numerals to words like pairs or dominoes cards.
- Complete the blanks eg 8 = e_ g_ _

Year 1 Block 2 KIRFs

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

Number bonds for each number to 6

0 + 1 = 1	0 + 4 = 4	0 + 6 = 6
1 + 0 = 1	1 + 3 = 4	1 + 5 = 6
	2 + 2 = 4	2 + 4 = 6
0 + 2 = 2	3 + 1 = 4	3 + 3 = 6
1 + 1 = 2	4 + 0 = 4	4 + 2 = 6
2 + 0 = 2		5 + 1 = 6
	0 + 5 = 5	6 + 0 = 6
0 + 3 = 3	1 + 4 = 5	
1 + 2 = 3	2 + 3 = 5	
2 + 1 = 3	3 + 2 = 5	
3 + 0 = 3	4 + 1 = 5	
	5 + 0 = 5	

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. 3 + ◯ = 5 or 4 – ◯ = 2.

Possible Learning Activities

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

Make the number – Pick a target number eg 6. Hold up a random number of fingers on one hand – how quickly can the child hold up the required number of fingers to make the target number?

Play games – You can work on number facts using number cards or playing cards.

Year 1 Block 3 KIRFs

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

Doubles and halves of numbers to 10

0 + 0 = 0	½ of 0 = 0
1 + 1 = 1	½ of 2 = 1
2 + 2 = 4	½ of 4 = 2
3 + 3 = 6	½ of 6 = 3
4 + 4 = 8	½ of 8 = 4
5 + 5 = 10	½ of 10 = 5
6 + 6 = 12	
7 + 7 = 14	
8 + 8 = 16	
9 + 9 = 18	
10 + 10 = 20	

Key Vocabulary

What is **double** 9?

What is **half** of 6?

Possible Learning Activities

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.

Year 1 Block 4 KIRFs

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

Number bonds to 10 and each number 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 + 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?

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

Possible Learning Activities

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?

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. You can also practice number bonds on Numbots.

Year 1 Block 5 KIRFs

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

Numbers 1 to 20 in numerals and words

11 = eleven
12 = twelve
13 = thirteen
14 = fourteen
15= fifteen
16=sixteen
17=seventeen
18=eighteen
19=nineteen
20=twenty

Possible learning activities

- Match numerals to words like pairs or dominoes cards.
- Complete the blanks eg 18 = e_ g_ _ee_

Year 1 Block 6 KIRFs

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

Numbers bonds to 20

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

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

What do I **add** to 5 to make 20?

What is 20 **take away** 6?

What is 3 **less than** 20?

How many more than 16 is 20?

Possible learning activities

- 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?”
- Tell me but don’t tell me – pupils must tell you the answer without saying the actual number eg I have 17, how many more to 20? You need one more than 2.
- 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. You can also practice number bonds on Numbots.