Maths

Key Instant Recall Facts

To help develop children's fluency in mathematics, we ask them to learn Key Instant Recall Facts each half term.

We expect children to practise their KIRFs at least 3 times a week.

These lists of KIRFs align with the new curriculum. They are intended to be challenging and it is intended that children will be taught the necessary maths in lessons beforehand.

Key Instant Recall Facts

Year 1 – Spring 1

I know doubles and halves of numbers 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 + 0 = 0	½ of 0 = 0
1 + 1 = 2	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?

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.

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.

Practise online – Go to www.conkermaths.com and see how many questions you can answer in just 90 seconds.

Key Instant Recall Facts

Year 2 - Spring 1

I know doubles and halves of numbers to 20.

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

0 + 0 = 0	½ of 0 = 0	
1 + 1 = 1	½ of 2 = 1	11 + 11 = 22
2 + 2 = 4	½ of 4 = 2	12 + 12 = 24
3 + 3 = 6	½ of 6 = 3	13 + 13 = 26
4 + 4 = 8	½ of 8 = 4	14 + 14 = 28
5 + 5 = 10	½ of 10 = 5	15 + 15 = 30
6 + 6 = 12	½ of 12 = 6	16 + 16 = 32
7 + 7 = 14	½ of 14 = 7	17 + 17 = 34
8 + 8 = 16	½ of 16 = 8	18 + 18 = 36
9 + 9 = 18	½ of 18 = 9	19 + 19 = 38
10 + 10 = 20	½ of 20 = 10	20 + 20 = 40

Key Vocabulary

What is **double** 9?

What is **half** of 14?

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.

Use what you already know – Encourage your child to find the connection between the 2 times table and double facts.

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.

Practise online – Go to www.conkermaths.com and see how many questions you can answer in just 90 seconds.

Key Instant Recall Facts

Year 3 - Spring 1

I can recall facts about durations of time.

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

There are 60 seconds in a minute. There are 60 minutes in an hour. There are 24 hours in a day. There are 7 days in a week. There are 12 months in a year. There are 365 days in a year. There are 366 days in a leap year.

Number of days in each month

January	31	July	31
February	28/29	August	31
March	31	September	30
April	30	October	31
May	31	November	30
June	30	December	31

Children also need to know the order of the months in a year. They should be able to apply these facts to answer questions, such as:

What day comes after 30th April? What day comes before 1st February?

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.

Use rhymes and memory games– The rhyme, *Thirty days hath September, April, June, and November. All the rest have 31, excepting February alone, which has 28 days clear, except in every Leap Year* can help children remember which months have 30 days. There are poems describing the months of the year in order.

Use calendars – If you have a calendar for the new year, your child could be responsible for recording the birthdays of friends and family members in it. Your child could even make their own calendar.

How long is a minute? – Ask your child to sit with their eyes closed for exactly one minute while you time them. Can they guess the length of a minute? Carry out different activities for one minute. How many times can they jump in sixty seconds?

Key Instant Recall Facts

Year 4 – Spring 1

I know the multiplication and division facts for the 9 and 11 times tables.

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

9 × 1 = 9	9 ÷ 9 = 1	11 × 1 = 11	11 ÷ 11 = 1
9 × 2 = 18	18 ÷ 9 = 2	11 × 2 = 22	22 ÷ 11 = 2
9 × 3 = 27	27 ÷ 9 = 3	11 × 3 = 33	33 ÷ 11 = 3
9 × 4 = 36	36 ÷ 9 = 4	11 × 4 = 44	44 ÷ 11 = 4
9 × 5 = 45	45 ÷ 9 = 5	11 × 5 = 55	55 ÷ 11 = 5
9 × 6 = 54	54 ÷ 9 = 6	11 × 6 = 66	66 ÷ 11 = 6
9 × 7 = 63	63 ÷ 9 = 7	11 × 7 = 77	77 ÷ 11 = 7
9 × 8 = 72	72 ÷ 9 = 8	11 × 8 = 88	88 ÷ 11 = 8
9 × 9 = 81	81 ÷ 9 = 9	11 × 9 = 99	99 ÷ 11 = 9
9 × 10 = 90	90 ÷ 9 = 10	11 × 10 = 110	110 ÷ 11 = 10
9 × 11 = 99	99 ÷ 9 = 11	11 × 11 = 121	121 ÷ 11 = 11
9 × 12 = 108	108 ÷ 9 = 12	11 x 12 = 132	132 ÷ 11 = 12

Key Vocabulary

What is 8 **multiplied by** 6?

What is 6 **times** 8?

What is 24 **divided by** 6?

They should be able to answer these questions in any order, including missing number Questions e.g. 9 x ( ) =54 ( ) ÷ 9 = 11

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 family of the day. If you would like more ideas, please speak to your child's teacher.

Look for patterns – These times tables are full of patterns for your child to find. How many can they spot?

Use your ten times table – Multiply a number by 10 and subtract the original number (e.g. 7 × 10 – 7 = 70 – 7 = 63). What do you notice? What happens if you add your original number instead? (e.g. 7 × 10 + 7 = 70 + 7 = 77)

What do you already know? – Your child will already know many of these facts from the 2, 3, 4, 5, 6, 8 and 10 times tables. It might be worth practising these again!

Key Instant Recall Facts

Year 5 – Spring 1

I can recall metric conversions.

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

1 kilogram = 1000 grams
1 kilometre = 1000 metres
1 metre = 100 centimetres
1 metre = 1000 millimetres
1 centimetre = 10 millimetres
1 litre = 1000 millilitres

They should also be able to apply these facts to answer questions.

e.g. How many metres in $1\frac{1}{2}$ km?

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.

Look at the prefixes – Can your child work out the meanings of *kilo-*, *centi-* and *milli-*?
What other words begin with these prefixes?

Be practical – Do some baking and convert the measurements in the recipe.

How far? – Calculate some distances using unusual measurements. How tall is your child in mm? How far away is London in metres?

Key Instant Recall Facts

Year 6 – Spring 1

I can convert between decimals, fractions and percentages.

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

1/2= 0.5

1/4 = 0.25

3/4 = 0.75

1/10 = 0.1

1/5 = 0.2

3/5 = 0.6

9/10 = 0.9

Key Vocabulary

How many **tenths** is 0.8?

How many **hundredths** is 0.12?

Write 0.75 as a **fraction**?

Write ¼ as a **decimal**?

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: start with tenths before moving on to hundredths. If you would like more ideas, please speak to your child's teacher.

Play games - Make some cards with pairs of equivalent fractions and decimals. Use these to play the memory game or snap. Or make your own dominoes with fractions on one side and decimals on the other.

Key Instant Recall Facts