Merlin's Maths
Instant Recall Facts

Pack 2

Name:

Dear Parents,

We have noticed that many children are having trouble remembering the maths facts they are learning in school, and even though some are managing to remember these facts during a lesson or for a certificate, they do not have them at their fingertips for any problem solving activities when they need to apply their skills more independently.

So, we have had a re-think about how we can help the children learn their maths instant recall facts and this booklet is part of this strategy.

This booklet contains some of the key maths facts and knowledge the children need to know BY HEART to help them tackle the work coming in the summer term as well as the SATs during May. Without knowing these facts the children will struggle to get the most from the planned activities.

The idea is that these facts are practised and learned at home whenever you like, to help reinforce what is being taught in school. You do not need to send the booklet back to school as it belongs to your child to keep and to use to help them develop their skills with you at home.

If you like this booklet and would like more advice about key maths skills to work on at home, please let us know!

Thank you for your support.

Don't forget to learn your Times Tables for your certificates too!

Revision: Instant Recall Facts

I know number bonds for 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. 1 + ◯ = 10 or 9 − ◯ = 8.

Top Tips

The secret to success is practising little and often. Use time wisely. Can you practise some of these while walking to school or during a car journey? You don't need to practise them all at once; perhaps your could have a fact of the day!

- **Use practical resources**: your child has 7 pennies in their purse. How many more do they need to make 10p. Can they predict which coins they will need?
- **Make a poster**: we use Numicon at our school. You can find pictures of the Numicon shapes by doing a google search or by seeing the Information and Policies page on the school website. Your child could make a poster showing the different ways of making 8, 9 or 10.
- **Play games**: you can play number bond pairs online at www.conkermaths.com and then see how many you can answer in just one minute!

Instant Recall Facts 1

I know number bonds 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 + 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?

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

Top Tips

The secret to success is practising little and often. Use time wisely. Can you practise some of these while walking to school or during a car journey? You don't need to practise them all at once; perhaps your could have a fact of the day!

- **Use what you already know**: Use number bonds to 10 (e.g. 7+3+10) to work out related number bonds (e.g. 17+3=20).
- **Use practical resources:** Make collections of 20 objects. Ask questions such as "how many more conkers do I need to make 20?"
- **Make a poster**: we use Numicon at our school. You can find pictures of the Numicon shapes by doing a google search or by seeing the Information and Policies page on the school website. Your child could make a poster showing the different ways of making 20.
- **Play games**: you can play number bond pairs online at www.conkermaths.com and then see how many you can answer in just one minute!

Instant Recall Facts 2

I know the multiplication and division facts for the 2 times table.

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

1 x 2 = 2	2 ÷ 2 = 1
2 x 2 = 4	4 ÷ 2 = 2
3 x 2 = 6	6 ÷ 2 = 3
4 x 2 = 8	8 ÷ 2 = 4
5 x 2 = 10	10 ÷ 2 = 5
6 x 2 = 12	12 ÷ 2 = 6
7 x 2 = 14	14 ÷ 2 = 7
8 x 2 = 16	16 ÷ 2 = 8
9 x 2 = 18	18 ÷ 2 = 9
10 x 2 = 20	20 ÷ 2 = 10

Key Vocabulary

What is 7 lots of 2?

What is 7 multiplied by 2?

What is 9 times 2?

What is 18 divided by 2?

They should be able to answer these questions in any order, including missing number questions e.g. ◯ X 2 = 8 or ◯ ÷2 = 6

Top Tips

The secret to success is practising little and often. Use time wisely. Can you practise some of these while walking to school or during a car journey? You don't need to practise them all at once; perhaps your could have a fact of the day!

- **Song and chants**: you can buy Times Tables CDs or find multiplication chants online. If your child creates their own song, this can make the times tables even more memorable!
- **Use what you already know**: if your child know that 5 x 2 = 10, they can use this fact to work out that 6 x 2 = 12.
- **Test the Parent**: Your child can make up their own tricky division questions for you e.g. What is 18 divided by 2? (They need to be able to multiply to create these questions).
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Instant Recall Facts 3

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 some of these while walking to school or during a car journey? You don't need to practise them all at once; perhaps your could have a fact of the day!

- **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 halves the next number given.
- **Play games**: you can play halves and doubles online at www.conkermaths.com and then see how many you can answer in just one minute!

Instant Recall Facts 4

I know the multiplication and division facts for the 10 times table.

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

1 x 10 = 10	10 ÷ 10 = 1
2 x 10= 20	20 ÷ 10 = 2
3 x 10 = 30	30 ÷ 10 = 3
4 x 10 = 40	40 ÷ 10 = 4
5 x 10 = 50	50 ÷ 10 = 5
6 x 10 = 60	60 ÷ 10 = 6
7 x 10 = 70	70 ÷ 10 = 7
8 x 10 = 80	80 ÷ 10 = 8
9 x 10 = 90	90 ÷ 10 = 9
10 x 10 = 100	100 ÷ 10 = 10

Key Vocabulary

What is 7 lots of 10?

What is 7 multiplied by 10?

What is 7 times 10?

What is 70 divided by 10?

They should be able to answer these questions in any order, including missing number questions e.g. ◯ X 10 = 80 or ◯ ÷ 10 = 6

Top Tips

The secret to success is practising little and often. Use time wisely. Can you practise some of these while walking to school or during a car journey? You don't need to practise them all at once; perhaps your could have a fact of the day!

- **Pronunciation**: Make sure that your child is pronouncing the numbers correctly and not getting confused between thir**teen** and thir-**ty**.
- **Song and chants**: you can buy Times Tables CDs or find multiplication chants online. If your child creates their own song, this can make the times tables even more memorable!
- **Test the Parent**: Your child can make up their own tricky division questions for you e.g. What is 70 divided by 7? (They need to be able to multiply to create these questions).
- **Apply these facts to real life:** how many toes are in your house? What other multiplication and division questions can your child make?

Instant Recall Facts 5

I can tell the time.

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

Children need to be able to tell the time using a clock with hands. This target can be broken down into several steps.

▸ I can tell the time to the nearest hour.

▸ I can tell the time to the nearest half hour.

▸ I can tell the time to the nearest quarter hour.

▸ I can tell the time to the nearest five minutes.

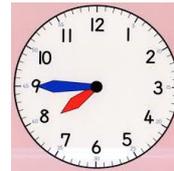| **Key Vocabulary** |
| --- |
| Twelve **o'clock** |
| **Half past** two |
| **Quarter past** three |
| **Quarter to** nine |
| Five **past** one |
| Twenty-five **to** ten |

Top Tips

The secret to success is practising little and often. Use time wisely. Can you practise some of these while walking to school or during a car journey? You don't need to practise them all at once; perhaps your could have a fact of the day!

- **Talk about time:** discuss what time things happen. When does your child wake up? What time do they have breakfast? Make sure that you have an analogue clock (with hands) visible in your house or that your child wears a watch with hands.

- **Ask your child the time regularly**: "You could also give your child the responsibility for watching the clock:
  "The cakes need to come out of the oven at a quarter past four."
  "We need to leave the house at half past eight."

Instant Recall Facts 6

I know the multiplication and division facts for the 5 times table.

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

1 x 5 = 5	5 ÷ 5 = 1
2 x 5= 10	10 ÷ 5 = 2
3 x 5 = 15	15 ÷ 5 = 3
4 x 5 = 20	20 ÷ 5 = 4
5 x 5 = 25	25 ÷ 5 = 5
6 x 5 = 30	30 ÷ 5 = 6
7 x 5 = 35	35 ÷ 5 = 7
8 x 5 = 40	40 ÷ 5 = 8
9 x 5 = 45	45 ÷ 5 = 9
10 x 5 = 50	50 ÷ 5 = 10

Key Vocabulary

What is 3 lots of 5?

What is 5 multiplied by 3?

What is 7 times 5?

What is 35 divided by 5?

They should be able to answer these questions in any order, including missing number questions e.g. ◯ X 5 = 40 or ◯ ÷ 5 = 9

Top Tips

The secret to success is practising little and often. Use time wisely. Can you practise some of these while walking to school or during a car journey? You don't need to practise them all at once; perhaps your could have a fact of the day!

- **Song and chants**: you can buy Times Tables CDs or find multiplication chants online. If your child creates their own song, this can make the times tables even more memorable!
- **Spot patterns**: what patterns can your child spot in the 5 times table? Are there any similarities with the 10 times table?
- **Test the Parent**: Your child can make up their own tricky division questions for you e.g. What is 45 divided by 5? (They need to be able to multiply to create these questions).

Advanced Recall Facts 1

I know the multiplication and division facts for the 3 times table.

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

$3 \times 1 = 3$	$1 \times 3 = 3$	$3 \div 3 = 1$	$3 \div 1 = 3$
$3 \times 2 = 6$	$2 \times 3 = 6$	$6 \div 3 = 2$	$6 \div 2 = 3$
$3 \times 3 = 9$	$3 \times 3 = 9$	$9 \div 3 = 3$	$9 \div 3 = 3$
$3 \times 4 = 12$	$4 \times 3 = 12$	$12 \div 3 = 4$	$12 \div 4 = 3$
$3 \times 5 = 15$	$5 \times 3 = 15$	$15 \div 3 = 5$	$15 \div 5 = 3$
$3 \times 6 = 18$	$6 \times 3 = 18$	$18 \div 3 = 6$	$18 \div 6 = 3$
$3 \times 7 = 21$	$7 \times 3 = 21$	$21 \div 3 = 7$	$21 \div 7 = 3$
$3 \times 8 = 24$	$8 \times 3 = 24$	$24 \div 3 = 8$	$24 \div 8 = 3$
$3 \times 9 = 27$	$9 \times 3 = 27$	$27 \div 3 = 9$	$27 \div 9 = 3$
$3 \times 10 = 30$	$10 \times 3 = 30$	$30 \div 3 = 10$	$30 \div 10 = 3$

Key Vocabulary

What is 3 lots of 8?

What is 3 multiplied by 8?

What is 8 times 3?

What is 24 divided by 3?

They should be able to answer these questions in any order, including missing number questions e.g. ◯ X 3 = 18 or ◯ ÷ 3 = 10

Top Tips

The secret to success is practising little and often. Use time wisely. Can you practise some of these while walking to school or during a car journey? You don't need to practise them all at once; perhaps your could have a fact of the day!

- **Song and chants**: you can buy Times Tables CDs or find multiplication chants online. If your child creates their own song, this can make the times tables even more memorable!
- **Buy one get three free**: if your child knows one fact (e.g. 3 x 5 = 15), can they tell you the other three facts in the same fact family?
- Warning! When creating fact families children sometimes get confused by the order of the numbers in the division calculation. It is tempting to say the biggest number goes first, but it is more helpful to say that the answer to the multiplication goes first. E.g. 9 x 3 = 27. The answer to the multiplication is 27 so 27 ÷ 3 = 9 and 27 ÷ 9 = 3

Advanced Recall Facts 2

I know number bonds for all 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**.

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

Example of a fact family

6 + 9 = 15

9 + 6 = 15

15 – 9 = 6

15 – 9 = 6

Examples of other facts

4 + 5 = 9

13 + 5 = 18

19 – 7 = 12

10 – 6 = 4

Key Vocabulary

What do I **add** to 5 to make 19?

What is 17 **take away** 6?

What is 13 **less than** 15?

How many more than 8 is 11?

What is the **difference** between 9 and 13?

Top Tips

The secret to success is practising little and often. Use time wisely. Can you practise some of these while walking to school or during a car journey? You don't need to practise them all at once; perhaps your could have a fact of the day!

- **Buy one get three free**: if your child knows one fact (e.g. 3 + 9 = 12), can they tell you the other three facts in the same fact family?
- **Use double and near doubles**: if you know that 6 + 6 = 12, how can you work out 6 + 7 = ?
- **Play games**: you can play missing number questions online at www.conkermaths.com and then see how many you can answer in just one minute!