Fluency Facts: Parent Guide
Year 4: Autumn 1

I can find any number bond to 100.

By the end of this half term, pupils should know the following facts. The aim is to be able to recall them instantly.

Examples:

34 + 66 = 100
66 + 34 = 100
100 - 66 = 34
100 - 34 = 66

100 - 17 = 83
100 - 83 = 17
17 + 83 = 100
83 + 17 = 100

45 + 55 = 100
55 + 45 = 100
100 - 45 = 55
100 - 55 = 45

100 - 29 = 71
100 - 71 = 29
29 + 71 = 100
71 + 29 = 100

This list includes some examples of facts that children should know. They should be able to answer questions including missing number questions.

E.g. 49 + □ = 100 or 100 – □ = 72.

Key Questions

What do I need to **add to** 36 to make 100?

What is 42 **less than** 100?

How **many more** than 67 is 100?

What is the **difference between** 8 and 100?

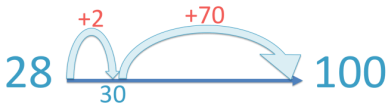
Top Tips

The secret to success is practising **little** and **often**. Use time wisely. Can you practise these Fluency Facts 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.

<u>Misconceptions</u> - Children often add an extra 10 when finding number bonds to 100 e.g. when solving 28 + □ = 100, they know that 20 + 80 = 100 and then add 2 to give an answer of 82. Encourage your child to think about the ones column first e.g. adding 2 will take you to 30 so then you need to add 70.

28 + 72 = 100

<u>Visualise</u> - Imagine jumping along a number line to find the answer.



<u>Buy one get three free</u> - If your child knows one fact (e.g. 16 + 84 = 100), can they tell you the other three facts in the same fact family?

Fluency Facts: Parent Guide

Year 4: Autumn 2

I know multiplication and division facts for the 6 times table.

By the end of this half term, pupils should know the following facts. The aim is to be able to recall them instantly.

6 x 0 = 0	0 ÷ 6 = 0
6 × 1 = 6	6 ÷ 6 = 1
6 × 2 = 12	12 ÷ 6 = 2
6 × 3 = 18	18 ÷ 6 = 3
6 × 4 = 24	24 ÷ 6 = 4
6 × 5 = 30	30 ÷ 6 = 5
6 × 6 = 36	36 ÷ 6 = 6
6 × 7 = 42	42 ÷ 6 = 7
6 × 8 = 48	48 ÷ 6 = 8
6 × 9 = 54	54 ÷ 6 = 9
6 × 10 = 60	60 ÷ 6 = 10
6 × 11 = 66	66 ÷ 6 = 11
6 × 12 = 72	72 ÷ 6 = 12

Pupils should understand the commutative property of multiplication e.g. that 6 x 2 is the same as 2 x 6.

They should also recognise the relationship between 54 ÷ 6 and 54 ÷ 9.

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

6 × □ = 42 or □ ÷ 6 = 12.

Key Questions

What is 6 **multiplied** by 7?

What is the **product** of 8 and 6?

What is 9 **times** 6?

What is 24 **divided by** 6?

What is 48 shared **into groups** of 6?

What is 66 shared **into 6 groups**?

Top Tips

The secret to success is practising **little** and **often**. Use time wisely. Can you practise these Fluency Facts while walking to school or during a car journey?

Times Tables RockStars–Practising for ten minutes a day on TTRS can really help pupils' recall. Focus on the 'Jamming' game to work specifically on the 6 times tables.

Songs and Chants - There are lots of multiplication songs and chants online. If your child creates their own song, this can make the times tables even more memorable.

Double your threes - Multiplying a number by 6 is the same as multiplying by 3 and then doubling the answer. 7 × 3 = 21 and double 21 is 42, so 7 × 6 = 42.

Rock, Paper, Scissors - Play in pairs. Instead of Rock, Paper, Scissors you need to multiply the number of fingers shown by 6. The first player to say the correct answer gets a point!

Fluency Facts: Parent Guide

Year 4: Spring 1

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

By the end of this half term, pupils should know the following facts. The aim is to be able to recall them instantly.

9 x 0 = 0	0 ÷ 9 = 0	11 x 0 = 0	0 ÷ 11 = 0
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 × 12 = 132	132 ÷ 11 = 12

Key Questions

What is 9 **multiplied** by 7?

What is the **product** of 11 and 6?

What is 9 **times** 11?

What is 63 **divided by** 9?

What is 121 shared **into groups** of 11?

What is 66 shared **into** 11 **groups**?

Top Tips

The secret to success is practising **little** and **often**. Use time wisely. Can you practise these Fluency Facts while walking to school or during a car journey?

Times Tables RockStars–Practising for ten minutes a day on TTRS can really help pupils' recall. Focus on the 'Jamming' game to work specifically on the 9 and 11 times tables.

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)

Hit the Button - Play Hit the Button online to practise these facts.

Fluency Facts: Parent Guide

Year 4: Spring 2

I know the multiplication and division facts for the 7 times table.

By the end of this half term, pupils should know the following facts. The aim is to be able to recall them instantly.

7 x 0 = 0	0 ÷ 7 = 0
7 × 1 = 7	7 ÷ 7 = 1
7 × 2 = 14	14 ÷ 7 = 2
7 × 3 = 21	21 ÷ 7 = 3
7 × 4 = 28	28 ÷ 7 = 4
7 × 5 = 35	35 ÷ 7 = 5
7 × 6 = 42	42 ÷ 7 = 6
7 × 7 = 49	49 ÷ 7 = 7
7 × 8 = 56	56 ÷ 7 = 8
7 × 9 = 63	63 ÷ 7 = 9
7 × 10 = 70	70 ÷ 7 = 10
7 × 11 = 77	77 ÷ 7 = 11
7 × 12 = 84	84 ÷ 7 = 12

Pupils should understand the commutative property of multiplication e.g. that 7 x 2 is the same as 2 x 7.

They should also recognise the relationship between 42 ÷ 7 and 42 ÷ 6.

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

7 × □ = 56 or □ ÷ 7 = 12.

Key Questions

What is 6 **multiplied** by 7?

What is the **product** of 7 and 12?

What is 7 **times** 8?

What is 28 **divided by** 7?

What is 77 shared **into groups** of 7?

What is 84 shared **into** 7 **groups**?

Top Tips

The secret to success is practising **little** and **often**. Use time wisely. Can you practise these Fluency Facts while walking to school or during a car journey?

Times Tables RockStars - Practising for ten minutes a day on TTRS can really help pupils' recall. Focus on the 'Jamming' game to work specifically on your 7 times tables.

Order of difficulty - Ask your child to order these facts from the easiest to the most challenging. Can they explain why some facts are easier to remember? Then focus on practising the most challenging facts.

True or False - State a number sentence e.g. "63 divided by 7 is 8." and ask your child to decide whether it is True or False.

Fluency Facts: Parent Guide
Year 4: Summer 1

I know the multiplication and division facts up to 12x12.

By the end of this half term, pupils should know the following facts. The aim is to be able to recall them instantly.

X	1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	3	4	5	6	7	8	9	10	11	12
2	2	4	6	8	10	12	14	16	18	20	22	24
3	3	6	9	12	15	18	21	24	27	30	33	36
4	4	8	12	16	20	24	28	32	36	40	44	48
5	5	10	15	20	25	30	35	40	45	50	55	60
6	6	12	18	24	30	36	42	48	54	60	66	72
7	7	14	21	28	35	42	49	56	63	70	77	84
8	8	16	24	32	40	48	56	64	72	80	88	96
9	9	18	27	36	45	54	63	72	81	90	99	108
10	10	20	30	40	50	60	70	80	90	100	110	120
11	11	22	33	44	55	66	77	88	99	110	121	132
12	12	24	36	48	60	72	84	96	108	120	132	144

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

E.g. 7 × □ = 28 or □ ÷ 12 = 8.

Key Questions

What is 6 **multiplied** by 7?

What is the **product** of 9 and 12?

What is 4 **times** 8?

What is 28 **divided by** 7?

What is 77 shared **into groups** of 11?

What is 84 shared **into** 12 **groups**?

Top Tips

The secret to success is practising **little** and **often**. Use time wisely. Can you practise these Fluency Facts while walking to school or during a car journey?

Note: For the Year 4 Multiplication Check, pupils are expected to be able to answer any multiplication question up to 12 x 12 in less than 6 seconds.

Times Tables RockStars–Practising for ten minutes a day on TTRS can really help pupils' recall. Focus on the 'Soundcheck' game to prepare for the Year 4 Multiplication Check.

Speed Challenge - Take two packs of playing cards and remove the kings. Turn over two cards and ask your child to multiply the numbers together (Ace = 1, Jack = 11, Queen = 12). How many questions can they answer correctly in 2 minutes? Practise regularly and see if they can beat their high score.

Fluency Facts: Parent Guide

Year 4: Summer 2

I can multiply and divide numbers by 10 and 100.

By the end of this half term, pupils should know the following facts. The aim is to be able to recall them instantly.

Examples:

When you **multiply** a number **by 10**, the digits move **one place to the left.**	When you **multiply** a number **by 100**, the digits move **two places to the left.**	When you **divide** a number **by 10,** the digits move **one place to the right.**	When you **divide** a number **by 100,** the digits move **two places to the right.**
4 x 10 = 40	3 x 100 = 300	4 ÷ 10 = 0.4	700 ÷ 100 = 7
8.2 x 10 = 82	5.8 x 100 = 580	9 ÷ 10 = 0.9	900 ÷ 100 = 9
53 x 10 = 530	19 x 100 = 1900	27 ÷ 10 = 2.7	450 ÷ 100 = 4.5
72 x 10 = 720	55 x 100 = 5500	73 ÷ 10 = 7.3	260 ÷ 100 = 2.6

Key Questions

What is 5 **multiplied by** 10?

What is 100 **times** 39?

What is 700 **divided by** 100?

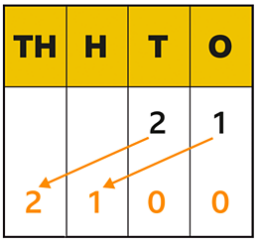
Keywords

Thousands, hundreds, tens, ones, tenths,

Top Tips

The secret to success is practising **little** and **often**. Use time wisely. Can you practise these Fluency Facts while walking to school or during a car journey?

Misconceptions - We avoid saying 'you just add a zero' when multiplying by 10 or "take away a zero" as this is mathematically incorrect. Adding or subtracting zero to a number will not change its value. This misconception can also cause confusion when working with decimal numbers. E.g. Using this 'trick' to do 6.4 x 10 would give an answer of 6.40 which is incorrect. Instead we teach children that the digits move along the place value chart. E.g. For 21 x 100, the number gets 100 times larger.



Pairs game - You could make your own pairs game with calculations on one set of cards and the answers on another.