Fluency Facts: Parent Guide
Year 3: Autumn 1

I can find number bonds to 100 using multiples of 5.

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

5 + 95 = 100	100 - 50 = 50
10 + 90 = 100	100 - 55 = 45
15 + 85 = 100	100 - 60 = 40
20 + 80 = 100	100 - 65 = 35
25 + 75 = 100	100 - 70 = 30
30 + 70 = 100	100 - 75 = 25
35 + 65 = 100	100 - 80 = 20
40 + 60 = 100	100 - 85 = 15
45 + 55 = 100	100 - 90 = 10
50 + 50 = 100	100 - 95 = 5

Pupils should be able to find fact families and use this to solve problems. E.g.

15 + 85 = 100

85 + 15 = 100

100 - 15 = 85

100 - 85 = 15

They should be able to answer questions including missing number questions. E.g. 45+ □ = 100 or

100 – □ = 75.

Key Questions

What do I need to **add to** 30 to make 100?

What is 45 **less than** 100?

How **many more** than 65 is 100?

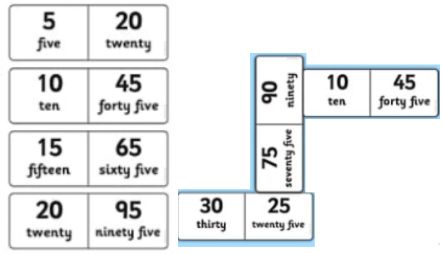
What is the **difference between** 85 and 100?

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>Buy one get three free</u> - If your child knows one fact (e.g. 5 + 95 = 100), can they tell you the other three facts in the same fact family?

<u>Use number bonds to 10</u> - How can number bonds to 10 help you work out number bonds to 100?



Fluency Facts: Parent Guide
Year 3: Autumn 2

I can find 10 or 100 more or less than a given number.

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

Examples:

Children should recognise that the tens digit changes when adding or subtracting 10 to a number:

65 + 10 = **7**5

38 - 10 = **2**8

1**7**6 + 10 = 1**8**6

8**4**5 - 10 = 8**3**5

They should be able to cross hundreds when adding or subtracting 10:

5**9**7 + 10 = **60**7

2**0**9 - 10 = **19**9

Children should recognise that the hundreds digit changes when adding or subtracting 100 to a number:

648 + 100 = **7**48

304 + 100 = **4**04

451 - 100 = **3**51

720 - 100 = **6**20

They should be able to find missing numbers. E.g.

☐ - 100 = 423

842 - ☐ = 832

Key Questions

What is 10 **more than** 386?

What is 100 **less than** 924?

Can you **add** 100 to 834?

What happens to the tens digit when you subtract 10 from 505?

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: break it down into smaller chunks.

Pictorial support - Use dienes blocks to make the number and show what happens when you add/ subtract 10 or 100
https://mathsbot.com/manipulatives/blocks

Money - Explore what happens to amounts when you add/ subtract 10p or 100p (£1).

Would you rather? - Give your child a choice to consider e.g. Would you rather have 100 less than 267 or 10 more than 261?

Fluency Facts: Parent Guide

Year 3: Spring 1

I can count in multiples of 25 and 50.

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

Examples:

Counting forwards in 50s

0, 50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800, 850, 900, 950, 1000

Counting backwards in 50s

1000, 950, 900, 850, 800, 750, 700, 650, 600, 550, 500, 450, 400, 350, 300, 250, 200, 150, 100, 50, 0

Counting forwards in 25s

0, 25, 50, 75, 100, 125, 150, 175, 200…

Counting backwards in 25s

1000, 975, 950, 925, 900, 875, 850...

Application to multiplication:

E.g. When asked to solve 4 x 50, counting in multiples of 50 (50,100,150,200).

Key Questions

How many 50s make 300?

What is the next multiple of 25: 450, 475, 500...

Multiply 25 by 4.

What are 6 lots of 50?

How many 25s are in 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?

Varied starting points - Can your child count in 50s from 200? Can they count backwards in 25s from 600?

5 times table - Can your child use the 5x table to help them count in 50s?

Maze - create a maze of numbers and ask your child to solve it using multiples of 25 or 50. Can they make one of their own?

Bowling - label some empty plastic bottles with multiples of 25 and/or 50. Play bowling by rolling a soft ball and trying to knock the bottles down. Ask your child to add up their score. The winner is the first to get to 1000.

Fluency Facts: Parent Guide
Year 3: Spring 2

I know multiplication and division facts for the 3 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.

3 × 1 = 3	3 ÷ 3 = 1
3 × 2 = 6	6 ÷ 3 = 2
3 × 3 = 9	9 ÷ 3 = 3
3 × 4 = 12	12 ÷ 3 = 4
3 × 5 = 15	15 ÷ 3 = 5
3 × 6 = 18	18 ÷ 3 = 6
3 × 7 = 21	21 ÷ 3 = 7
3 × 8 = 24	24 ÷ 3 = 8
3 × 9 = 27	27 ÷ 3 = 9
3 × 10 = 30	30 ÷ 3 = 10
3 × 11 = 33	33 ÷ 3 = 11
3 × 12 = 36	36 ÷ 3 = 12

Pupils should understand the commutative property of multiplication e.g. that 3 x 2 is the same as 2 x 3.

They should also recognise the relationship between 27 ÷ 3 and 27 ÷ 9.

They should be able to answer these questions in any order, including missing number questions e.g. 3 × □ = 18 or □ ÷ 3 = 11.

Key Questions

What is 3 **multiplied** by 7?

What is the **product** of 3 and 4?

What is 8 **times** 3?

What is 24 **divided by** 3?

What is 36 shared **into groups of** 3?

What is 30 shared **into** 3 equal 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 your child's recall.

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

Buy one get three free - If your child knows one fact (e.g. 3 × 5 = 15), can they tell you the other three facts in the same fact family? (5 x 3 = 15, 15 ÷ 3 = 5, 15 ÷ 5 = 3)

Warning! - When creating fact families, children sometimes get confused by the order of the numbers in the division number sentence. It is tempting to say that the biggest number goes first, but it is more helpful to say that the answer to the multiplication (or the product) goes first, as this will help your child in later years when they study fractions, decimals and algebra.
E.g. 3 × 12 = 36. The product is 36, so 36 ÷ 3 = 12 and 36 ÷ 12 = 3.

Fluency Facts: Parent Guide
Year 3: Summer 1

I know multiplication and division facts for the 4 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.

4 × 1 = 4	4 ÷ 4 = 1
4 × 2 = 8	8 ÷ 4 = 2
4 × 3 = 12	12 ÷ 4 = 3
4 × 4 = 16	16 ÷ 4 = 4
4 × 5 = 20	20 ÷ 4 = 5
4 × 6 = 24	24 ÷ 4 = 6
4 × 7 = 28	28 ÷ 4 = 7
4 × 8 = 32	32 ÷ 4 = 8
4 × 9 = 36	36 ÷ 4 = 9
4 × 10 = 40	40 ÷ 4 = 10
4 × 11 = 44	44 ÷ 4 = 11
4 × 12 = 48	48 ÷ 4 = 12

Pupils should understand the commutative property of multiplication e.g. that 4 x 2 is the same as 2 x 4.

They should also recognise the relationship between 32 ÷ 4 and 32 ÷ 8.

They should be able to answer these questions in any order, including missing number questions e.g. 4 × □ = 16 or □ ÷ 4 = 11.

Key Questions

What is 4 **multiplied** by 7?

What is the **product** of 4 and 5?

What is 8 **times** 4?

What is 24 **divided by** 4?

What is 36 shared **into groups** of 4?

What is 48 shared **into** 4 **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.

What do you already know? - Your child will already know many of these facts from the 2, 3, 5 and 10 times tables. Talk about which they need to learn—they might be surprised by how few there are.

Double and double again - Multiplying a number by 4 is the same as doubling and doubling again. Double 6 is 12 and double 12 is 24, so 6 × 4 = 24.

Games - You could make a pairs game using the questions to the 4 times tables and the answers (products).

Fluency Facts: Parent Guide
Year 3: Summer 2

I know multiplication and division facts for the 8 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.

8 × 1 = 8	8 ÷ 8 = 1
8 × 2 = 16	16 ÷ 8 = 2
8 × 3 = 24	24 ÷ 8 = 3
8 × 4 = 32	32 ÷ 8 = 4
8 × 5 = 40	40 ÷ 8 = 5
8 × 6 = 48	48 ÷ 8 = 6
8 × 7 = 56	56 ÷ 8 = 7
8 × 8 = 64	64 ÷ 8 = 8
8 × 9 = 72	72 ÷ 8 = 9
8 × 10 = 80	80 ÷ 8 = 10
8 × 11 = 88	88 ÷ 8 = 11
8 × 12 = 96	96 ÷ 8 = 12

Pupils should understand the commutative property of multiplication e.g. that 8 x 2 is the same as 2 x 8.

They should also recognise the relationship between 32 ÷ 8 and 32 ÷ 4.

They should be able to answer these questions in any order, including missing number questions e.g. 8 × □ = 56 or □ ÷ 8 = 12.

Key Questions

What is 8 **multiplied** by 7?

What is the **product** of 8 and 5?

What is 9 **times** 8?

What is 24 **divided by** 8?

What is 48 shared **into groups** of 8?

What is 88 shared **into** 8 **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.

Double your fours - Multiplying a number by 8 is the same as multiply by 4 and then doubling the answer. 8 × 4 = 32 and double 32 is 64, so 8 × 8 = 64.

Five, six, seven, eight - Fifty-six is seven times eight (56 = 7 × 8).

Rhymes—Making up silly rhymes can help: I **ate** and I **ate** till I was **sick** on the **floor** (8 x 8 = 64).

Online games— Complete Maths has a free game that helps pupils to learn their times tables facts: https://completemaths.com/teaching-tools/digital-manipulatives/timestables