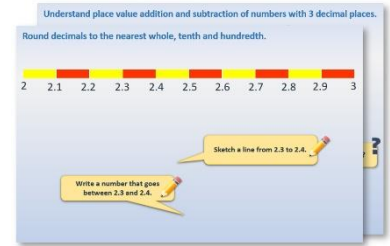


Year 1: Week 5, Day 2

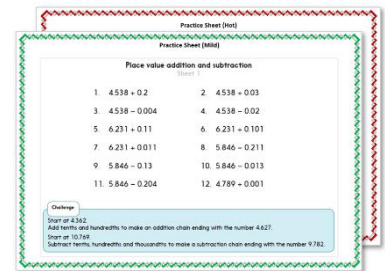
Add and subtract 11 and 12

Each day covers one maths topic. It should take you about 1 hour or just a little more.

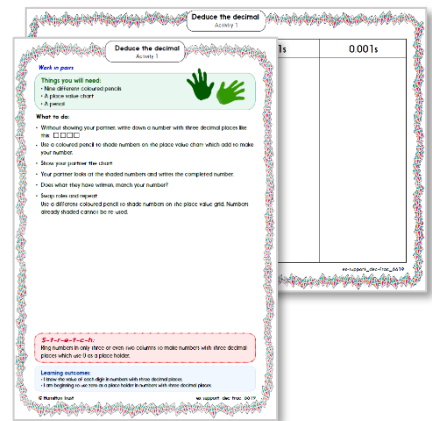
- Start by reading through the **Learning Reminders**. They come from our *PowerPoint* slides.



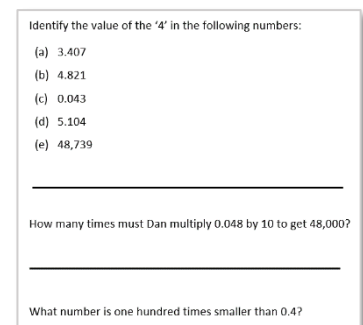
- Tackle the questions on the **Practice Sheet**. There might be a choice of either **Mild** (easier) or **Hot** (harder)! Check the answers.



- Finding it tricky? That's OK... have a go with a grown-up at **A Bit Stuck?**



- Have I mastered the topic? A few questions to **Check your understanding**. Fold the page to hide the answers!



Learning Reminders

Adding 12.

1-100 number grid

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Spider adds
10.



Then Fly adds
2.

$$34 + 12 = 46$$

Learning Reminders

Subtracting 12.

1-100 number grid

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
 31	32	 33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Spider
subtracts 10.

Then Fly
subtracts 2.

$$53 - 12 = 41$$

Practice Sheet Mild

Adding and subtracting 11 and 12

Find the answers to these number sentences.
You can use a 1-100 grid to help.

1. $30 + 10 =$

$30 + 11 =$

$30 + 12 =$

2. $40 - 10 =$

$40 - 11 =$

$40 - 12 =$

3. $20 + 10 =$

$20 + 11 =$

$20 + 12 =$

4. $33 + 10 =$

$33 + 11 =$

$33 + 12 =$

5. $42 + 10 =$

$42 + 11 =$

$42 + 12 =$

6. $36 - 10 =$

$36 - 11 =$

$36 - 12 =$

Practice Sheet Mild 1-100 grid

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

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Practice Sheet Hot

Adding and subtracting 11 and 12

Part A

Use the answer from the first questions to help with the second.

1. $36 + 10 =$

$36 + 12 =$

2. $78 - 10 =$

$78 - 12 =$

3. $44 + 10 =$

$44 + 12 =$

4. $23 - 10 =$

$23 - 12 =$

Part B

Now calculate these:

1. $39 - 11 =$

5. $92 - 12 =$

2. $41 - 11 =$

6. $38 + 12 =$

3. $67 + 11 =$

7. $31 - 12 =$

4. $55 - 12 =$

8. $89 + 12 =$

Practice Sheets Answers

Adding and subtracting 11 and 12 (mild)

- | | | | |
|----|----------------|----------------|----------------|
| 1. | $30 + 10 = 40$ | $30 + 11 = 41$ | $30 + 12 = 42$ |
| 2. | $40 - 10 = 30$ | $40 - 11 = 29$ | $40 - 12 = 28$ |
| 3. | $20 + 10 = 30$ | $20 + 11 = 31$ | $20 + 12 = 32$ |
| 4. | $33 + 10 = 43$ | $33 + 11 = 44$ | $33 + 12 = 45$ |
| 5. | $42 + 10 = 52$ | $42 + 11 = 53$ | $42 + 12 = 54$ |
| 6. | $36 - 10 = 26$ | $36 - 11 = 25$ | $36 - 12 = 24$ |

Adding and subtracting 11 and 12 (hot)

Part A

- | | | |
|----|----------------|----------------|
| 1. | $36 + 10 = 46$ | $36 + 12 = 48$ |
| 2. | $78 - 10 = 68$ | $78 - 12 = 66$ |
| 3. | $44 + 10 = 54$ | $44 + 12 = 56$ |
| 4. | $23 - 10 = 13$ | $23 - 12 = 11$ |

Part B

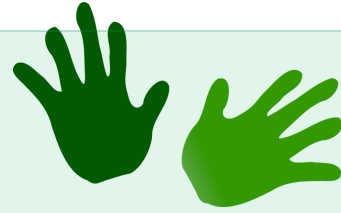
- $39 - 11 = 28$
- $41 - 11 = 30$
- $67 + 11 = 78$
- $55 - 12 = 43$
- $92 - 12 = 80$
- $38 + 12 = 50$
- $31 - 12 = 19$
- $89 + 12 = 101$

A Bit Stuck? Staircase maths

Work in pairs

Things you will need:

- Pencil
- Paper
- 1-100 grid



What to do:

- Choose a number from 1 and 5 on the top row of the 1–100 number grid.
- Draw a ring around it.
- Add 11, using a counter to act as 'Spider' and 'Fly' to help.
- Ring the answer.
- Add 11 again and again. Take care when adding 11 to the multiples of 10...
- Stop when you reach the bottom row of the grid.
- Write the number that you started on and the numbers you land on each time, e.g. 3, 14, 25... etc., with one number under the other in a column. What do you notice about the sequence of numbers? (Both digits increase by 1 each time, until reaching a 9.)
- Can you explain any patterns you noticed?
- Choose a different starting number on the top row of the grid. Repeat.

		3
1	4	
2	5	
3	6	
		etc.

S-t-r-e-t-c-h

- Next, choose a number from the bottom row and ring it on the grid.
- Subtract 11 and ring the answer.
- Repeat until you reach the top row. What do you notice about the sequence of numbers this time?

Learning outcomes

- I can add and subtract 11 from 1-digit or 2-digit numbers.
- I can begin to describe and explain number patterns.



A Bit Stuck?
1-100 grid

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Check your understanding Questions

Add 11 to 32.

Then add 11 to the answer.

Then add 11 to the answer.

How long can you continue this?

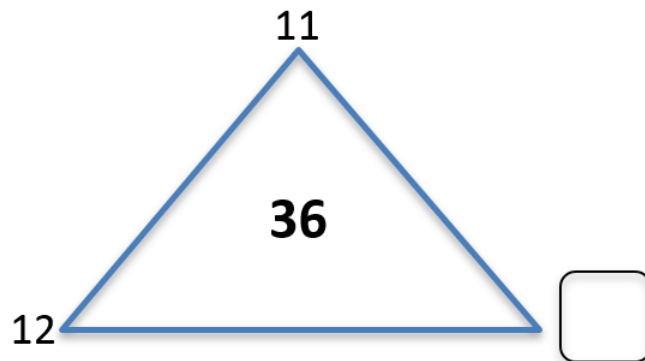
Subtract 11 from 87.

Then take 11 from the answer.

Subtract 11 again.

How long can you continue this?

Complete the triangle by writing the missing number. The 3 corner numbers add up to the one in the middle.



Answers on next page

Check your understanding

Answers

Add 11 to 32.

Then add 11 to the answer.

Then add 11 to the answer.

How long can you continue this?

43, 54, 65, 76, 87, 98.... It gets trickier after this if children are unfamiliar with 3-digit numbers but don't discourage them from trying!

Subtract 11 from 87.

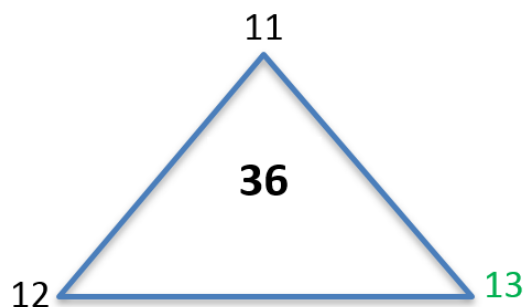
Then take 11 from the answer.

Subtract 11 again.

How long can you continue this?

76, 65, 54, 43, 32, 21, 10. Do children realise that the sequence is the opposite of the first question?

Complete the triangle by writing the missing number. The 3 corner numbers add up to the one in the middle.



An answer of 23 suggests that children have misinterpreted the problem.