0

1

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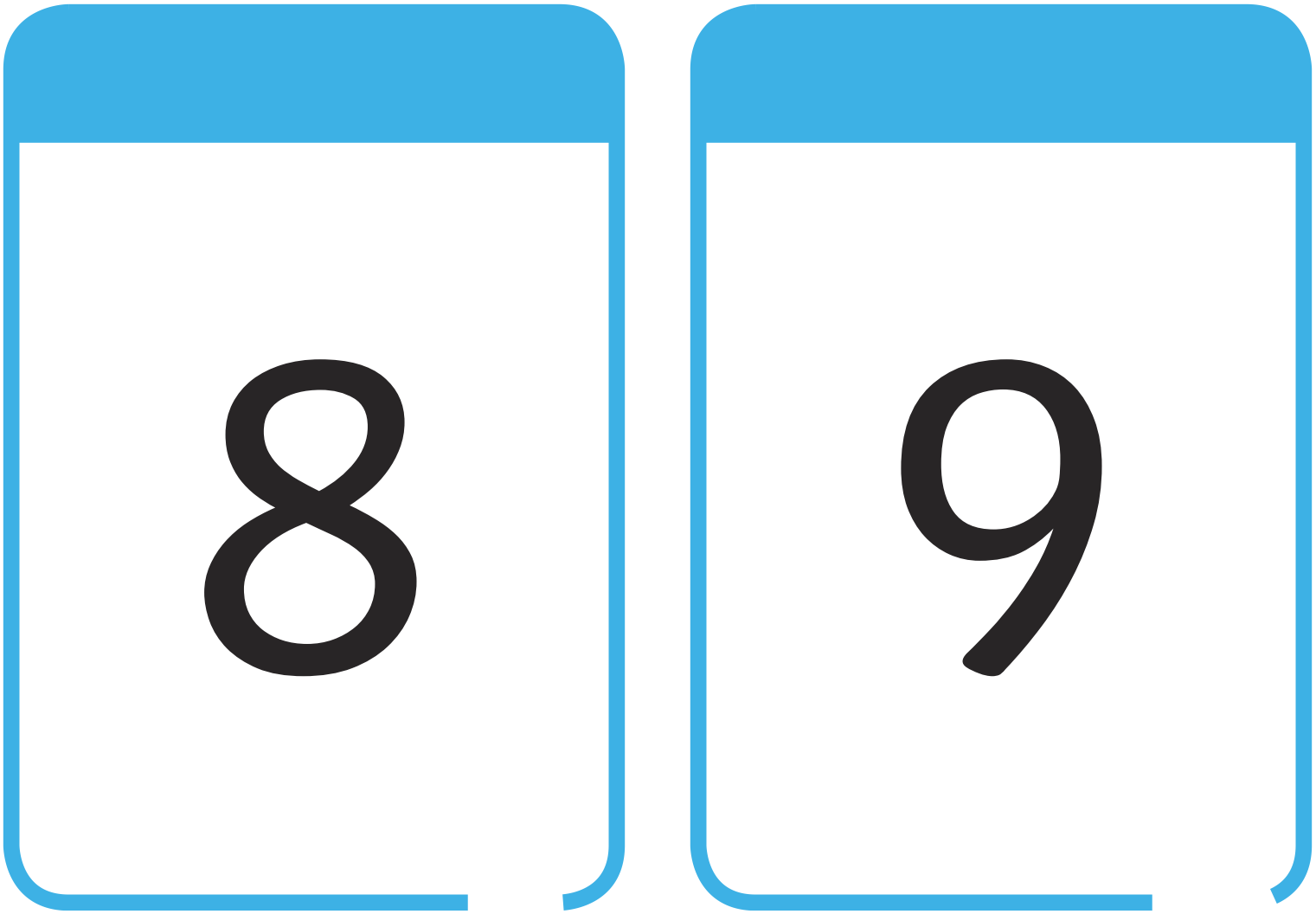

8
9

Add and Subtract 9

Adult Guidance with Question Prompts

Children apply number bonds up to ten to investigate number facts to 100. They build fluency by using known facts and investigating number patterns created with ten more or ten less. Children would benefit from using representations of tens and ones to investigate different ideas.

What is this challenge asking us to do?

What happens if you add nine to zero? (Invite children to use representations of tens and ones to support what they tell you.)

Can you draw a line from zero to nine?

What can you do to find the next number?

Do you remember how using ten can help?

Repeat, using practical equipment until planet Earth has been reached.

Can you see a pattern? Can you describe it to me?

What would the next number be?

What is the challenge asking us to do?

Can you find 90?

How much do you need to subtract?

Do you remember how the number ten can help?

Does your answer match the number on the card?

Can you see a pattern? Can you describe it to me?

Continue to subtract nine.

Add and Subtract 9

Start on 0.

Keep adding 9 to get home.

Draw a line to show the way.

Keep subtracting 9 to blast off.

TOP TIP: Take away 10 then add 1.

Add and Subtract 9

Adult Guidance with Question Prompts

Children investigate what happens when nine is added to or subtracted from a number. They demonstrate their reasoning skills by identifying correct statements and calculations. They explain how they reached their decision and provide evidence to support it. Children will need representations of tens and ones to demonstrate their reasoning.

What does Adam think? What does Ann think?

Who do you agree with? Can you use equipment to show me?

Can you check Alex's calculations?

Is this correct? How do you know? Can you show me?

If Alex has an incorrect answer, ask the children:

Can you spot his mistake? What does he need to remember?

Do both of the rockets make 23?

What can you do to find out?

Can you make pairs of + 9 and − 9 calculations that reach the same total?

Add and Subtract 9

Ann and Adam are learning how to add 9.

I add 10 then take away 1.

I add 10 then add 1.

Who do you agree with?

Can you show me why?

Alex subtracted 9.

28 − 9 = 18

16 − 9 = 7

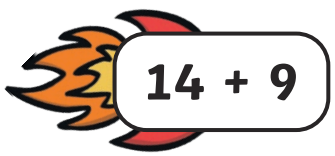
37 − 9 = 48

45 − 9 = 36

Are these all correct?

How do you know?

Both make 23.



Is this true?

Can you prove it?

Add and Subtract 9

Adult Guidance with Question Prompts

Children investigate what happens when nine is added to or subtracted from a number. They demonstrate their problem-solving skills by identifying numbers that could be reached by adding nine from a given starting point. They are invited to suggest further possibilities. Children investigate which starting point would lead them closest to zero if they continued to subtract nine. They are also asked to provide further possibilities. Children will need representations of tens and ones to explore possibilities and demonstrate their reasoning.

What is this challenge asking you to do?

What can you do to make sure you don't miss any answers? (Children could work systematically, use equipment or make jottings.)

Which other planets could you land on? (Remind the children that this challenge is asking us to start from zero before adding nine.)

If you start with these numbers and keep subtracting nine,

which would lead you closest to zero? Why?

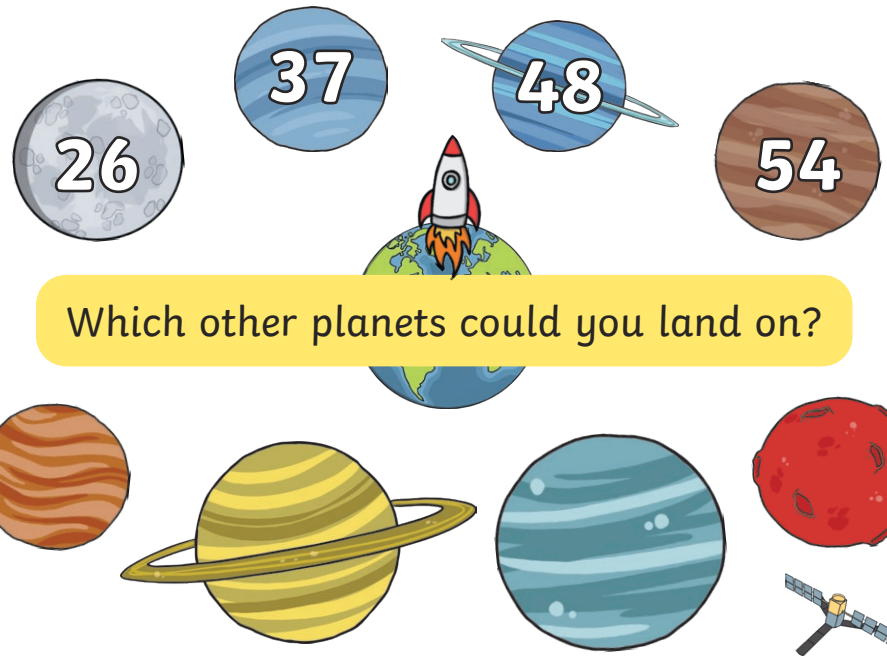
What can you do to find out?

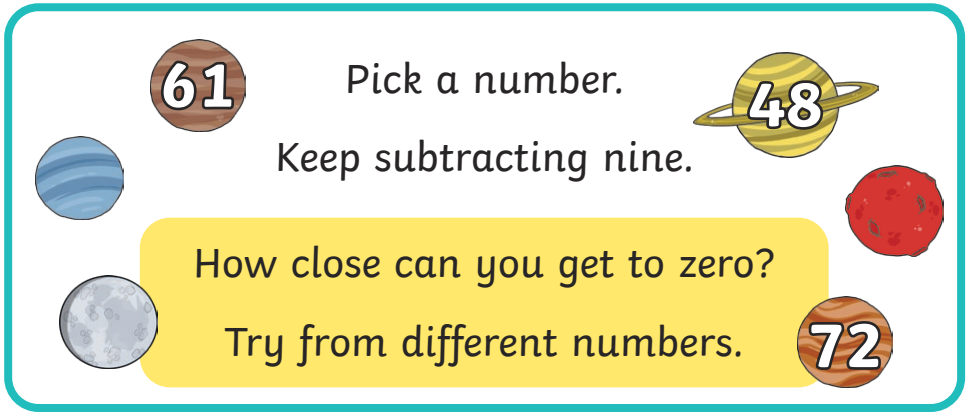
Was the answer what you expected?

Can you find more starting points that would lead you to zero by subtracting nines? How do you know? Can you show me?

Add and Subtract 9

If you start on 0 and keep adding nine, which planet could you go to?





Add and Subtract a Multiple of Ten and Ones

Adult Guidance with Question Prompts

Children recognise patterns when adding and subtracting ones without bridging beyond a multiple of ten. In this activity, children become fluent in spotting and continuing patterns through adding and subtracting ones.

What happens when we add/subtract one?

What pattern do you see in the addition list?

What is the same?

What is different?

What pattern do you see in the subtraction list?

What is the same?

What is different?

Can you make your own pattern like this?

Can you explain the pattern to your friend?

Add and Subtract a Multiple of Ten and Ones

Continue these patterns.

30 + 1 = 31	49 − 8 = 41
30 + 2 = 32	48 − 7 = 41
30 + 3 = ☐	47 − 6 = ☐
☐ + ☐ = ☐	☐ − ☐ = ☐
☐ + ☐ = ☐	☐ − ☐ = ☐
☐ + ☐ = ☐	☐ − ☐ = ☐
☐ + ☐ = ☐	☐ − ☐ = ☐
☐ + ☐ = ☐	☐ − ☐ = ☐
☐ + ☐ = ☐	☐ − ☐ = ☐

Can you create your own pattern by adding ones?

Add and Subtract a Multiple of Ten and Ones

Adult Guidance with Question Prompts

Children recognise patterns when adding and subtracting ones without bridging beyond a multiple of ten. Children will need base ten blocks for this activity. They use equipment to explain how a group of ones can be added to a multiple of ten, or subtracted, to target a multiple of ten. They could use the 'Tens and Ones Mat' from the lesson resources.

What number has Jane made with her base ten blocks?

How do you know?

How many tens does her number have?

How many ones?

How can she get to 50?

Is she correct about taking away all the ones? Why?

Show me with your base ten blocks.

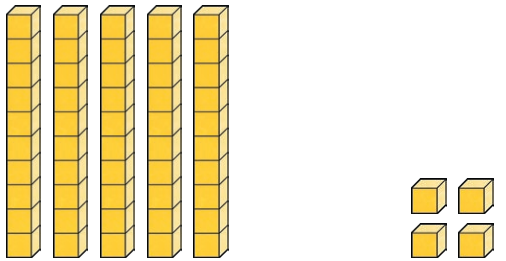
What would Jane need to write in the ones column to show she had no ones?

Now show me how to do 38 – 8 with your base ten blocks.

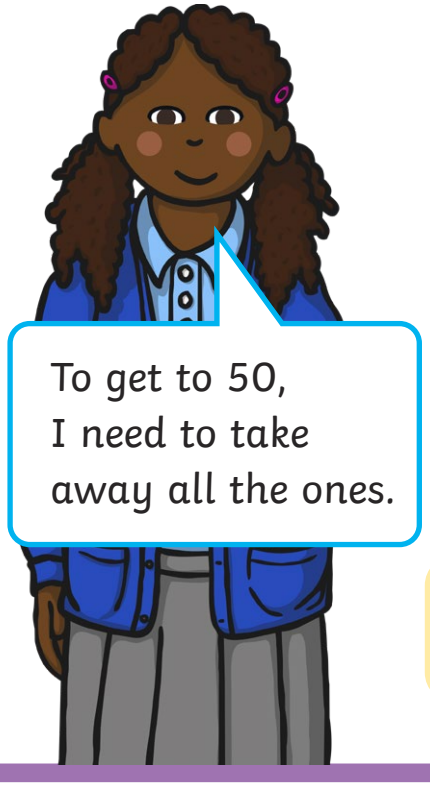
What if we want to add?

Show me 50 + 2 with base ten blocks.

Add and Subtract a Multiple of Ten and Ones



Jane



Is Jane correct?
Explain how you know.

Show Jane how to solve these calculations:

38 – 8 = ___

50 + 2 = ___

Can you use equipment to show Jane what to do?

Add and Subtract a Multiple of Ten and Ones

Adult Guidance with Question Prompts

Children recognise patterns when adding and subtracting ones without bridging beyond a multiple of ten. Children solve clues to find a phrase. They must add and subtract ones to find the answers. They could use practical apparatus if needed.

Can you add and subtract ones to find the answers?

Explain how you worked it out.

Do you need to calculate the answer?

Could you use the pattern of the numbers to help you? How?

Can you make a rule about what you have noticed? Try using the words 'sometimes' or 'never' in your sentence.

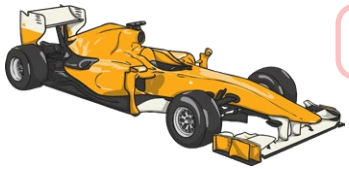
What letter does that number match with?

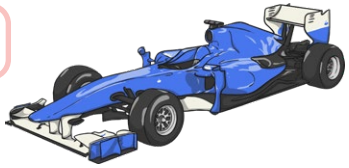
What words have you written?

Add and Subtract a Multiple of Ten and Ones

Solve these calculations to break the code and find the phrase to do with racing.

45 − 5 = ___	60 + 3 = ___	59 − 9 = ___
20 + 6 = ___	12 − 2 = ___	54 − 4 = ___
40 + 8 = ___	55 − 5 = ___	37 − 7 = ___
90 + 9 = ___	71 − 1 = ___	80 + 5 = ___
	26 − 6 = ___	





a	b	c	d	e	f	g	h	i	j	k	l	m
85	60	40	30	50	99	20	63	80	90	11	70	51

n	o	p	q	r	s	t	u	v	w	x	y	z
82	29	44	26	48	87	62	10	77	89	18	21	36

Answer:

Can you use these letters and numbers to make a code for your friend?

Add Across 10

Adult Guidance with Question Prompts

Children add across ten by making number facts of ten then add the remaining part. Children build fluency by completing part-whole models and ten-frames to find totals. Children would benefit from investigating this practically, using counters, part-whole models and ten-frames.

What does the first number tell you?

What does the next number tell you?

Were there enough red apples to fill the whole box?

How many spaces were left for the green apples?

Is this a number fact of ten that you already know?

Two of the green apples have been used. The rest of the green apples have been put in a new ten-frame.

How many are there?

We split the whole group of seven green apples into two parts. Can you find a part-whole model that matches this?

What does the representation tell us?

Can you find a set of ten-frames to match the calculation? Explain your choice.

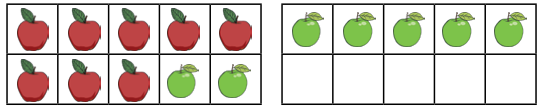
Read the representation.

What would this look like in ten-frames?

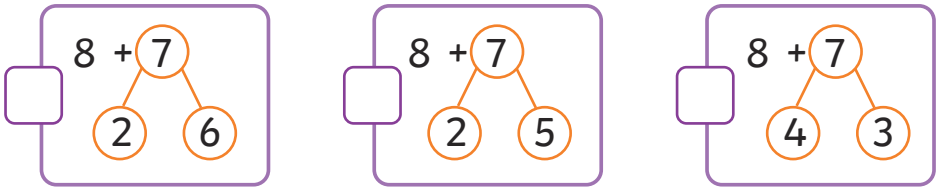
Can you show me?

Add Across 10

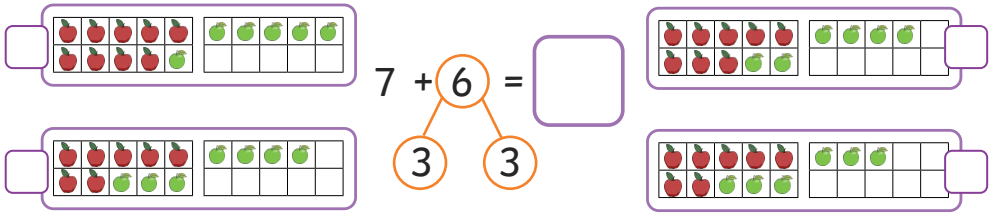
Tick the part-whole model that matches the ten-frame.



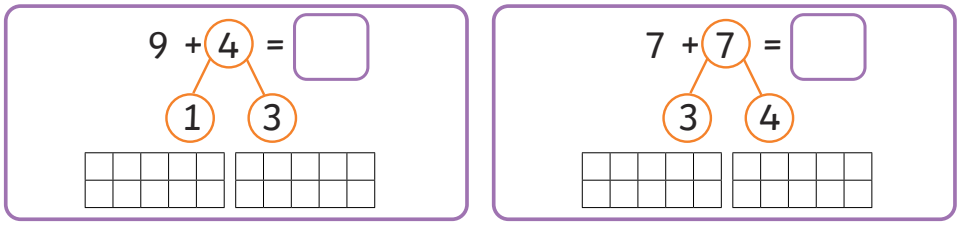
8 + 7 = ☐



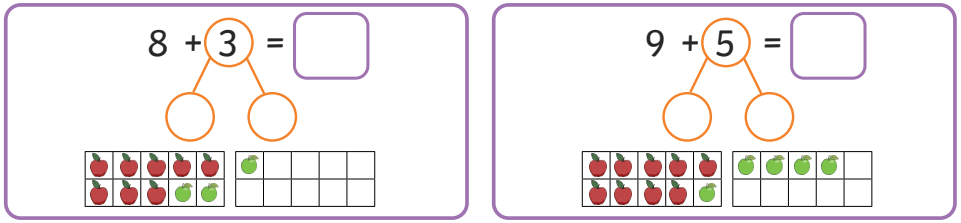
Tick the ten-frames that match representation.



Complete the ten-frames to match the representation.



Write the missing numbers.



Add Across 10

Adult Guidance with Question Prompts

Children add across ten by making number facts of ten then add the remaining part. In this activity, children demonstrate their reasoning skills as they investigate adding across ten with part-whole models and ten-frames. They check children's work, spot inaccuracies and explain how to correct them.

Read each calculation in turn.

Do you agree with the total? How do you know?

Look at the different parts of the representation.

What went well? What do they need to change?

Can you show them how this can be corrected?

What do they need to remember next time?

What could they practise?

Does 6 + 4 = 10?

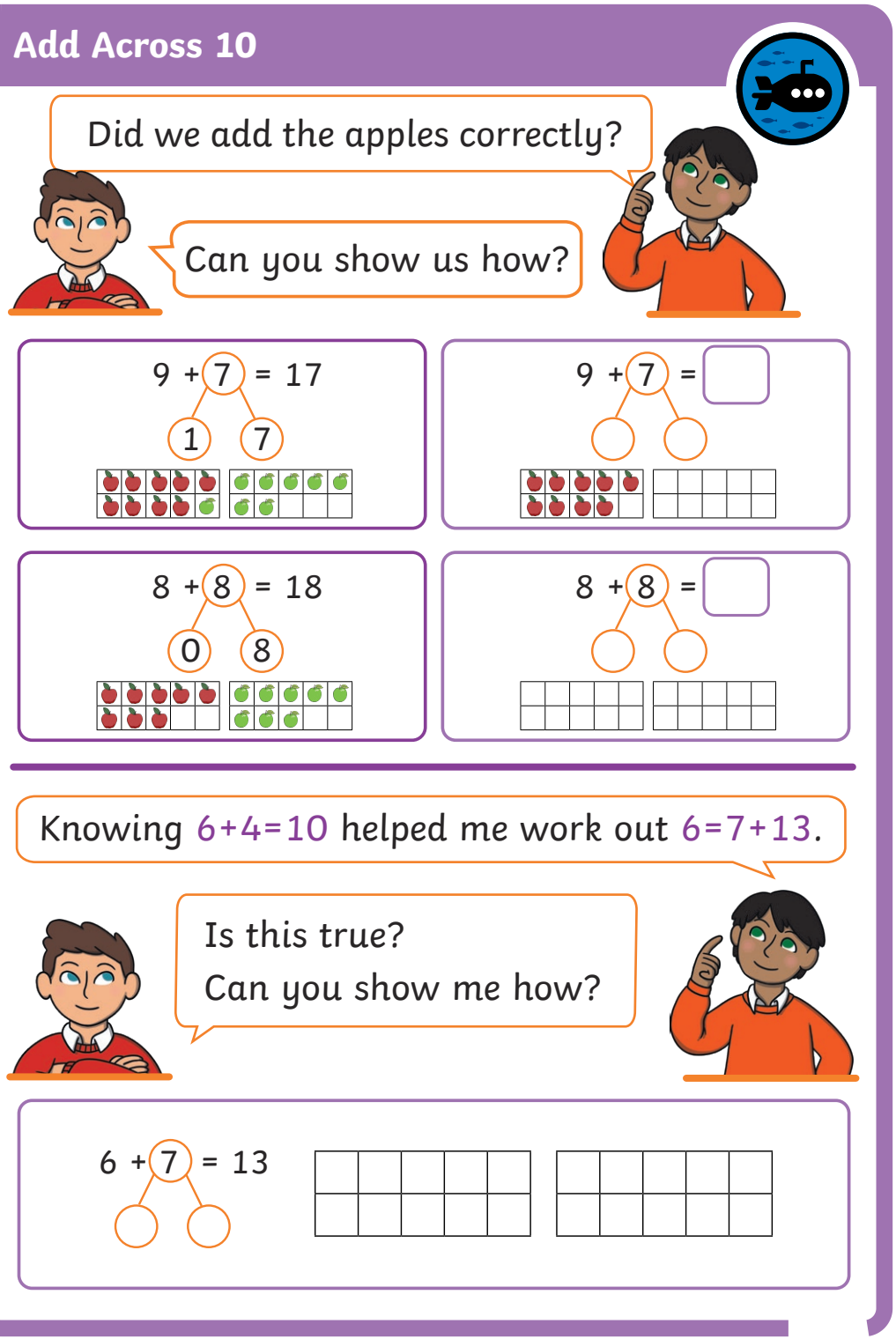
Is this a number fact that that you know?

Will this number fact help you work out 6 + 7?

How?

Can you show me?

Can you use number facts of ten to help you solve more addition calculations?



Add Across 10

Adult Guidance with Question Prompts

Children add across ten by making number facts of ten then add the remaining part. In this activity, they work systematically to investigate how one number fact of ten can be used to solve different addition calculations across ten. They use part-whole models and ten-frames to demonstrate their learning. Children discover patterns and use these to predict outcomes. They move on to pick other number facts of ten and apply these to addition calculations across ten.

Can you spot the number fact in the first calculation?

Are there 7 red apples and 3 green apples in the ten-frame?

Explain how this number fact can help you solve 7 + 4? How could the number fact help us solve 7 + 5?

What patterns can you see?

Can you describe them to me?

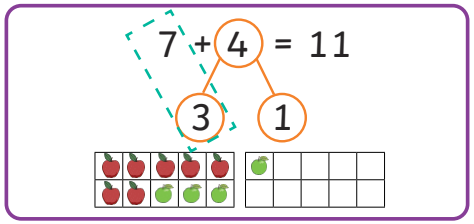
Can you use this number fact to solve more addition calculations across ten?

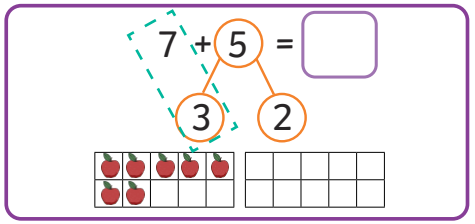
Pick another number fact of ten. Use this to solve more addition calculations across ten. Do you find this method helpful when adding across ten? Explain why/why not.

Add Across 10

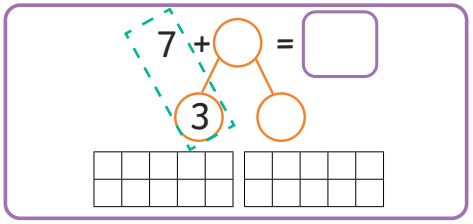
This number fact will help us solve lots of calculations.

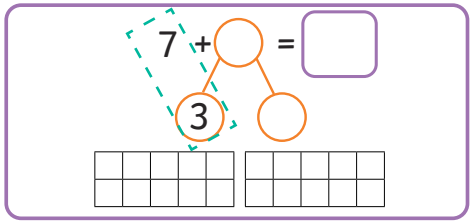
7 + 3 = 10

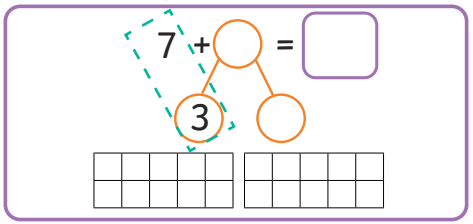


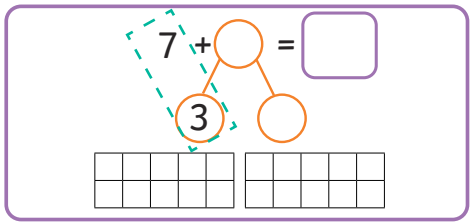


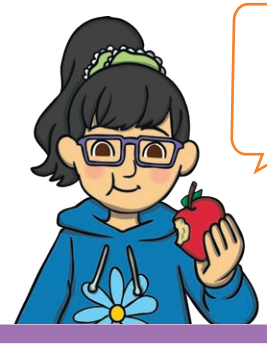
Can you think of any more?











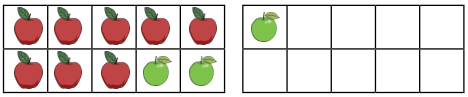
Pick another number fact of 10 to solve addition calculations.

Add across 10

I can add across 10.

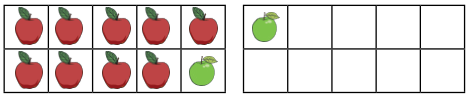
8 + 3 = 11

2 1

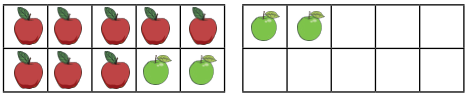


Make ten, then add the ones.

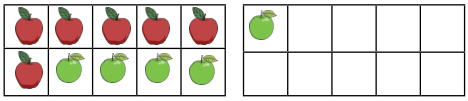
9 + 2 = ☐



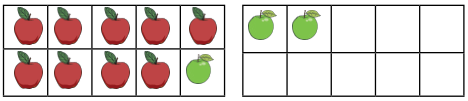
8 + 4 = ☐



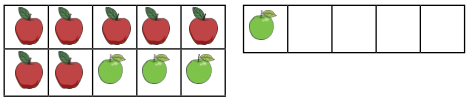
6 + 5 = ☐



9 + 3 = ☐

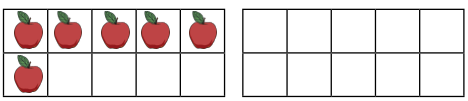


7 + 4 = ☐

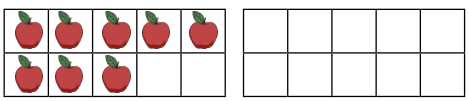


Now add your own green apples, then find the total.

6 + 6 = ☐



8 + 5 = ☐

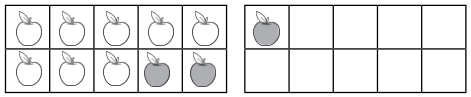


Add across 10 Answers

I can add across 10.

8 + 3 = 11

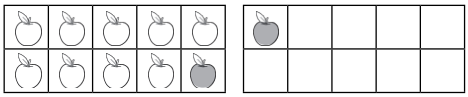
2 1



Make ten, then add the ones.

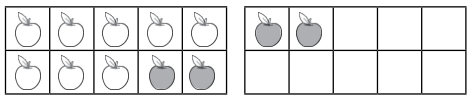
9 + 2 = 11

1 1



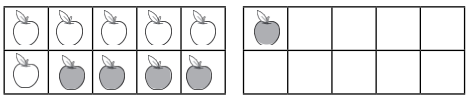
8 + 4 = 12

2 2



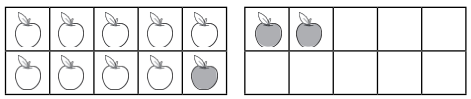
6 + 5 = 11

4 1



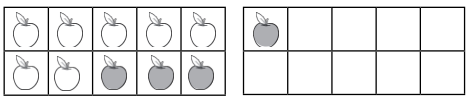
9 + 3 = 12

1 2



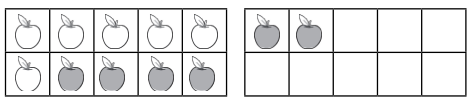
7 + 4 = 11

3 1



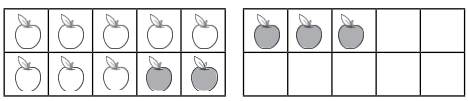
6 + 6 = 12

4 2



8 + 5 = 13

2 3

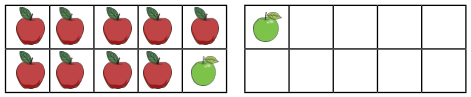


Add across 10

I can add across 10.

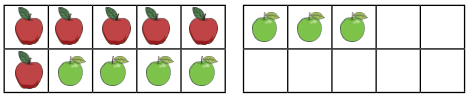
9 + 2 = 11

1 1

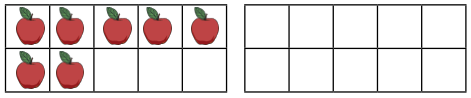


Make ten, then add the ones.

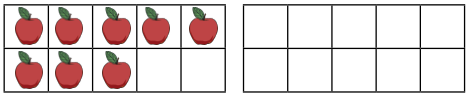
6 + 7 = ☐



7 + 5 = ☐



8 + 6 = ☐



9 + 4 = ☐

7 + 7 = ☐

8 + 8 = ☐

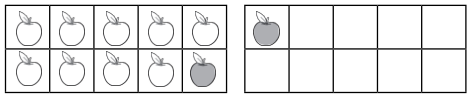
9 + 5 = ☐

Add across 10 Answers

I can add across 10.

9 + 2 = 11

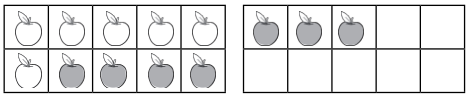
1 1



Make ten, then add the ones.

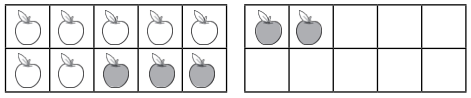
6 + 7 = 13

4 3



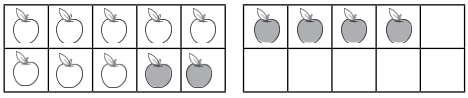
7 + 5 = 12

3 2



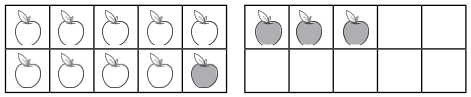
8 + 6 = 14

2 4



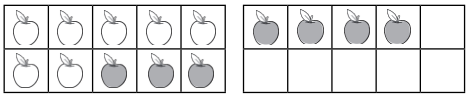
9 + 4 = 13

1 3



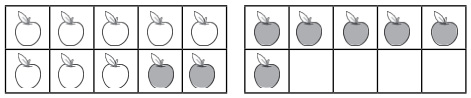
7 + 7 = 14

3 4



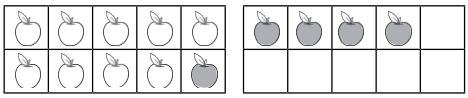
8 + 8 = 16

2 6



9 + 5 = 14

1 4

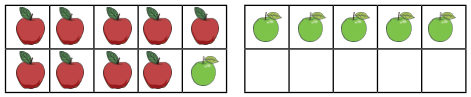


Add across 10

I can add across 10.

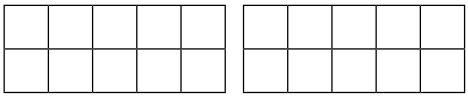
9 + 6 = **15**

1 5

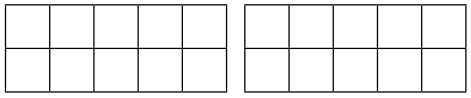


Make ten, then add the ones.

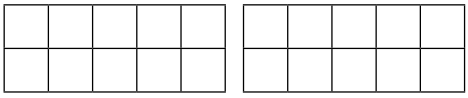
6 + 5 = ☐



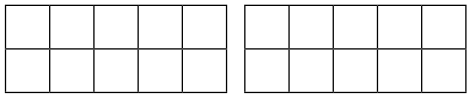
7 + 6 = ☐



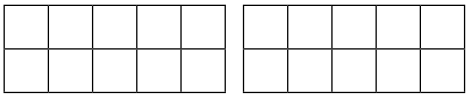
8 + 7 = ☐



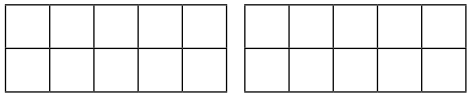
9 + 8 = ☐



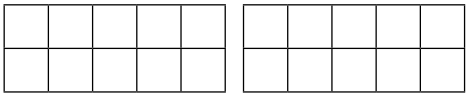
6 + 9 = ☐



8 + 8 = ☐

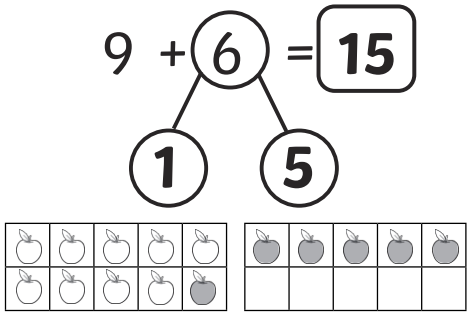


9 + 7 = ☐

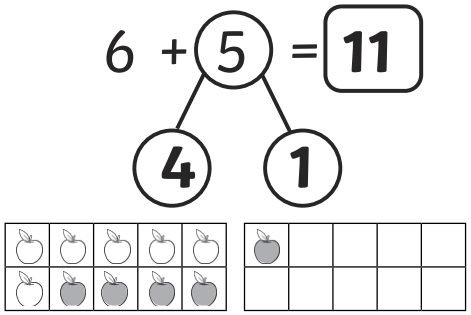


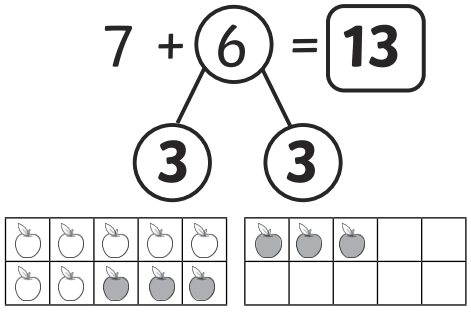
Add across 10 Answers

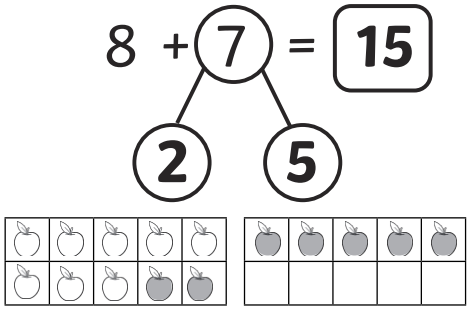
I can add across 10.

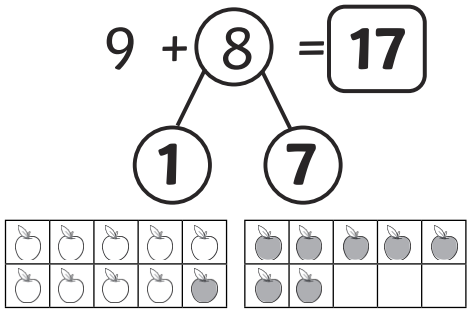


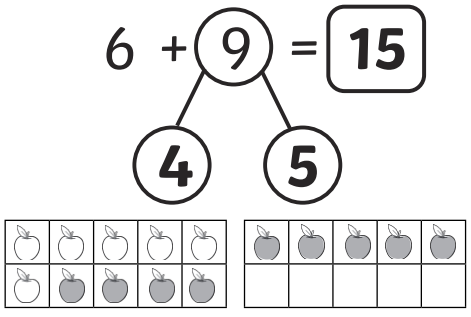
Make ten, then add the ones.

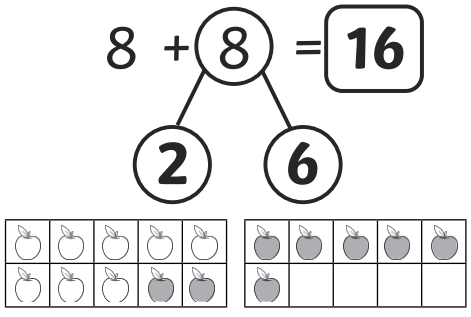


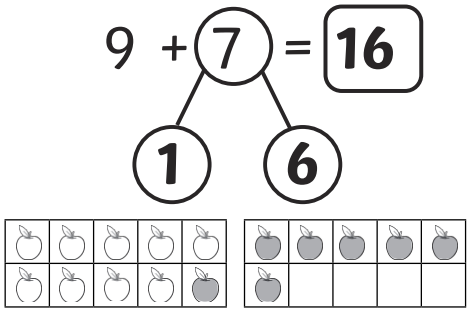


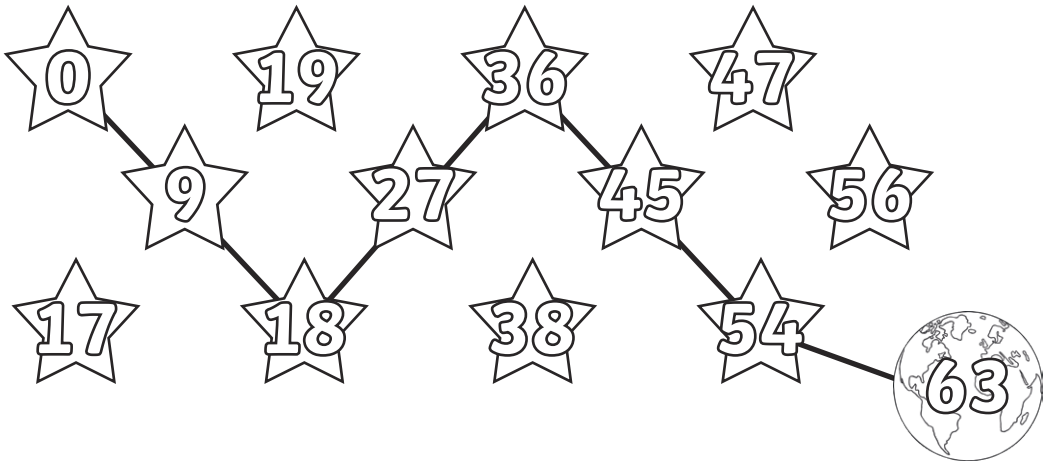


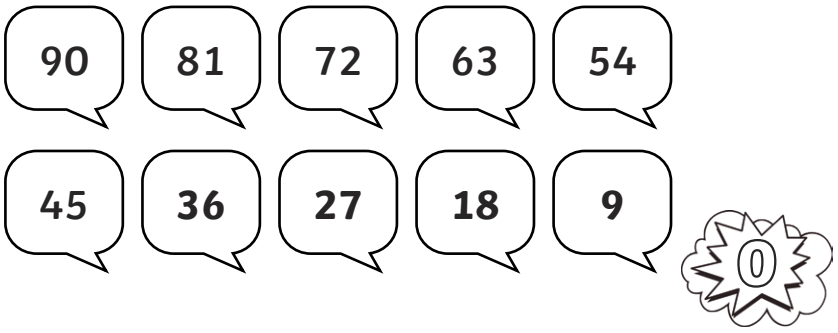












Adam is correct: Add 10 then take away 1 because 9 is 1 less than 10.

Children can use jottings or mathematical equipment to demonstrate this.

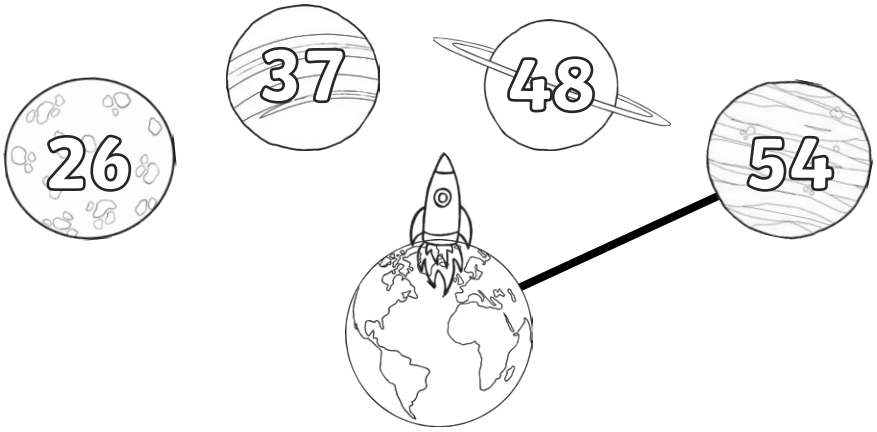
16 – 9 = 7 **Correct**

28 – 9 = 18 **Incorrect. 10 was subtracted but 1 wasn't added, so he subtracted 10 not 9.**

37 – 9 = 48 **Incorrect. 10 was added plus a further 1, meaning he added 11 instead of subtracting 9.**

45 – 9 = 36 **Correct**

Both calculations make 23. Children can use jottings or mathematical equipment to demonstrate this.



The rocket could land on any multiple of 9.

Continuing to subtract 9 from 72 will lead to 0.

Continuing to subtract 9 from any multiple of 9 will lead to 0.

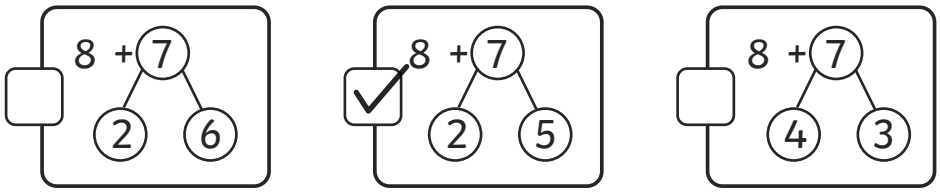
30 + 1 = 31	49 – 8 = 41
30 + 2 = 32	48 – 7 = 41
30 + 3 = **33**	47 – 6 = **41**
30 + 4 = 34	**46 – 5 = 41**
30 + 5 = 35	**45 – 4 = 41**
30 + 6 = 36	**44 – 3 = 41**
30 + 7 = 37	**43 – 2 = 41**
30 + 8 = 38	**42 – 1 = 41**
30 + 9 = 39	**41 – 0 = 41**

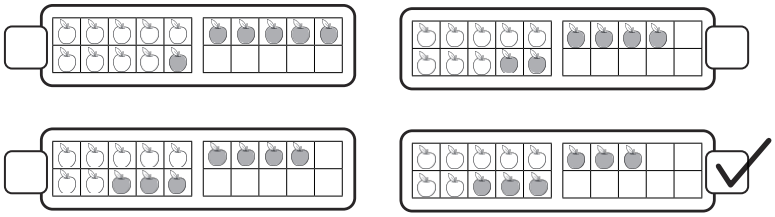
Jane is correct. Children demonstrate how to take away the blocks representing the ones and show there are no ones left therefore zero would be used as a place holder and Jane would have 50.

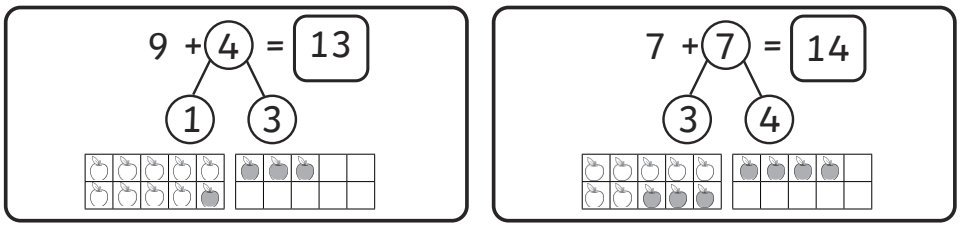
Children use base ten blocks to show 38 – 8 = 30 and 50 + 2 = 52.

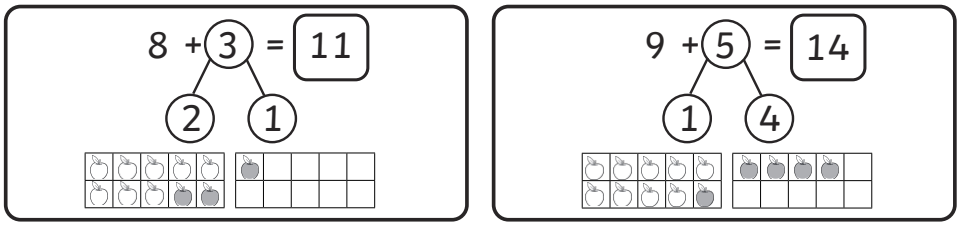
45 – 5 = **40**	**c**	60 + 3 = **63**	**h**	59 – 9 = **50**	**e**
20 + 6 = **26**	**q**	12 – 2 = **10**	**u**	54 – 4 = **50**	**e**
40 + 8 = **48**	**r**	55 – 5 = **50**	**e**	37 – 7 = **30**	**d**
90 + 9 = **99**	**f**	71 – 1 = **70**	**l**	80 + 5 = **85**	**a**
		26 – 6 = **20**	**g**		

Answer: chequered flag



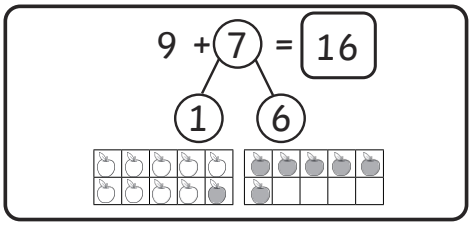


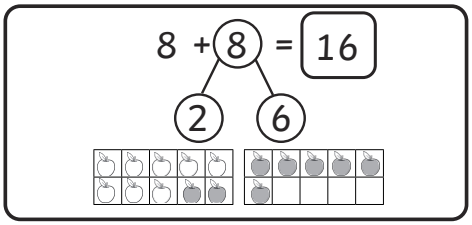


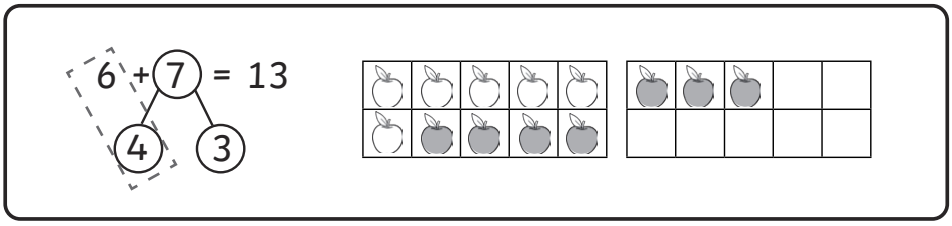


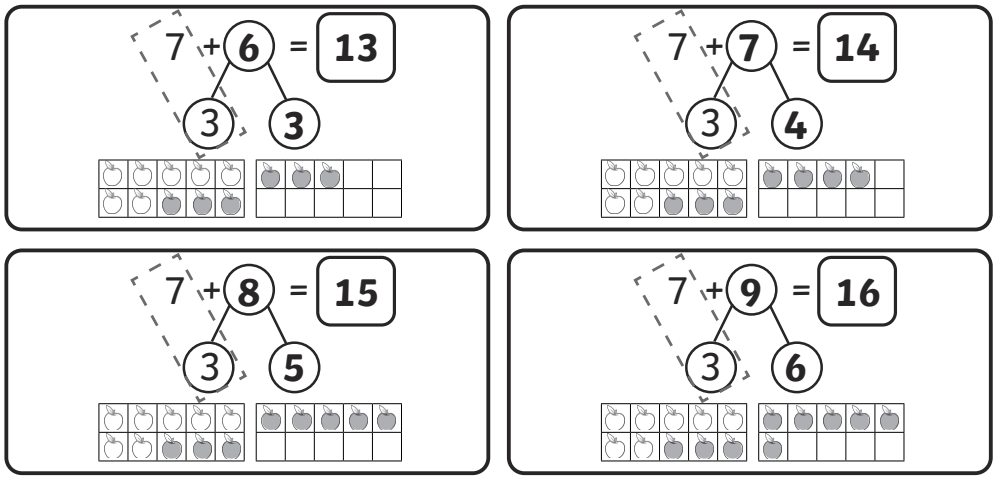
They have partitioned seven incorrectly. They have partitioned it into one and seven which makes 8 as the whole not seven.

They have not created a number fact of ten. 8 + 0 = 8 not ten.








7 + 6 = 13
3
3
7 + 7 = 14
3
4
7 + 8 = 15
3
5
7 + 9 = 16
3
6

Subtract Across 10

Adult Guidance with Question Prompts

Children subtract across ten by subtracting to the nearest ten then subtracting the remaining part. Children build fluency by using part-whole models and ten-frames to find solutions to shopping challenges. Children would benefit from investigating this practically, using counters, part-whole models and ten-frames.

What does the first number tell you?
What does this [subtraction] symbol tell you to do?
What does the next number tell you?
Which ten-frame will you take your fruit from first?
Can you explain why?
Can you cross out the fruit that you have taken?
Have you taken enough yet?
How many more do you need?
How do you know?
Cross these pieces of fruit out.
Do you have enough now?
What can you do to check?
Use the ten-frame to help you complete the part-whole model.
How many apples do they have left?
How many does Frank want to buy?
Show me how to use the part-whole model and ten-frame to find the answer. Can you explain what you are doing?
Use part-whole models, ten-frames and counters to make your own farm shop challenge. How much fruit do you have? How much fruit does your customer want to buy? How much do you have left?

Subtract Across 10

Adult Guidance with Question Prompts

Children demonstrate their reasoning skills as they calculate how many apples are in the unmarked bag. They use part-whole models and ten-frames to show their solutions. Children would benefit from investigating different ideas practically, using counters, jottings, part-whole models and ten-frames.

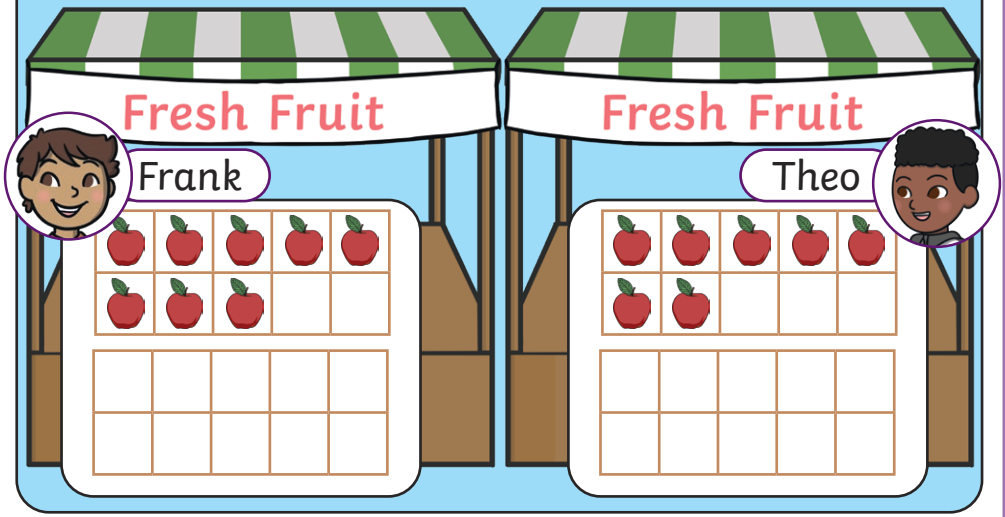
How many apples did Frank and Theo each have to sell?
How many do they each have now?
Look at the labels on the bags. Who do you think sold the bag of 8 apples? Can you explain why?
How many apples do you think are in the other bag?

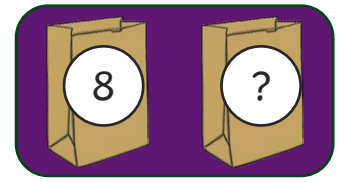
How many apples will you draw in each ten-frame to start with?
Where does this number go in the calculations?
How many apples do you need to leave on each part-whole model?
Cross the rest out to show that they have been taken and put into the bags.
How many have been taken from Frank?
How many have been taken from Theo?
Where does this number go on the calculations?
What's the missing number on the bag?
Can you explain how to complete the part-whole models?
How do the ten-frames help?

Use part-whole models, ten-frames and counters to make your own missing number challenge. How much fruit did you start with?
How much do you have left?
How much fruit did the customer want to buy?

Subtract Across 10

Frank and Theo both had 15 apples to sell. They sold a bag of apples each. This is what they have left

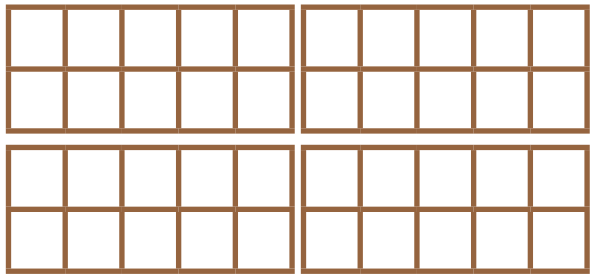


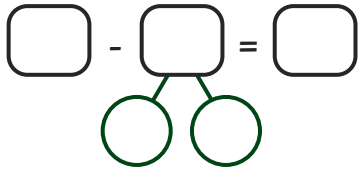


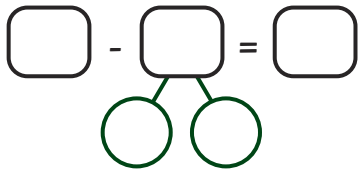
Who sold the bag of 8 apples?

How many apples are in the other bag?

Use ten-frames and part-whole models to prove it.







Subtract Across 10

Adult Guidance with Question Prompts

Children use part-whole models and ten-frames to subtract across ten. They apply their problem-solving skills to investigate different ways to reach the same answer. Children then investigate a different number. Will they find more, less or the same number of solutions?

How many apples could Frank and Theo have started with?
Can you explain how you worked this out? How many apples do they have left?
Can you spot this in the ten-frames and the calculations?
Can you find a way to work systematically to find all of the possible answers?
Can you describe any patterns that you see?
How do these help?
How many solutions did you find?
What can you do to check that you have found all of them?
What if there were 8 apples left?
Do you think there would be more, less or the same number of solutions?
Can you explain why?

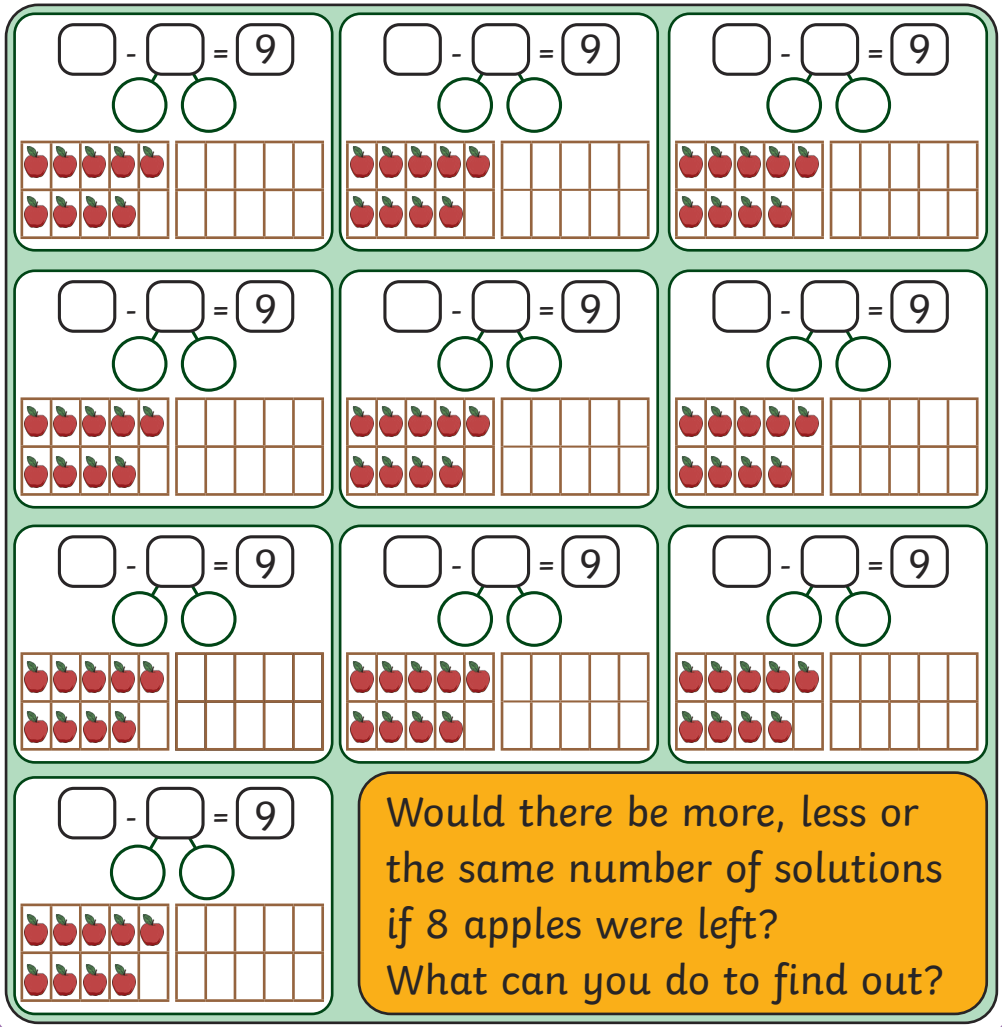
Subtract Across 10

Frank and Theo started with between 11 and 20 apples.

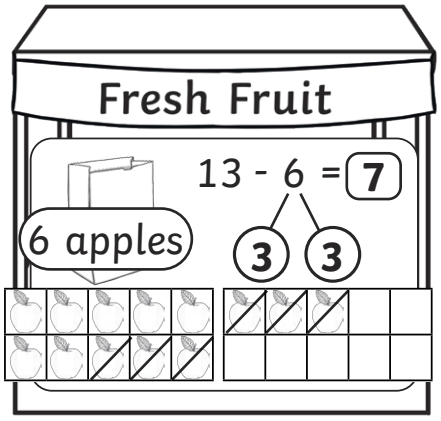
Frank: We have 9 apples left.

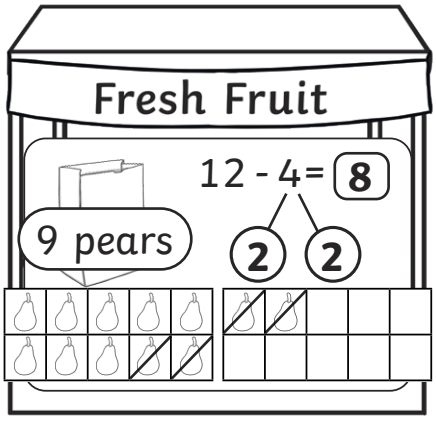
Theo: How many could we have sold?

How many different solutions can you find?



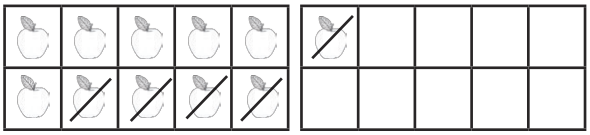
Would there be more, less or the same number of solutions if 8 apples were left?
What can you do to find out?



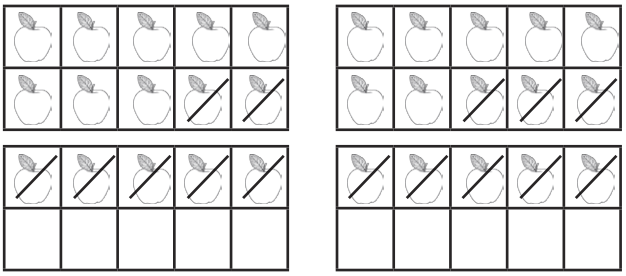


11 - 5 = 6

1 4



Use ten-frames and part-whole models to prove it.



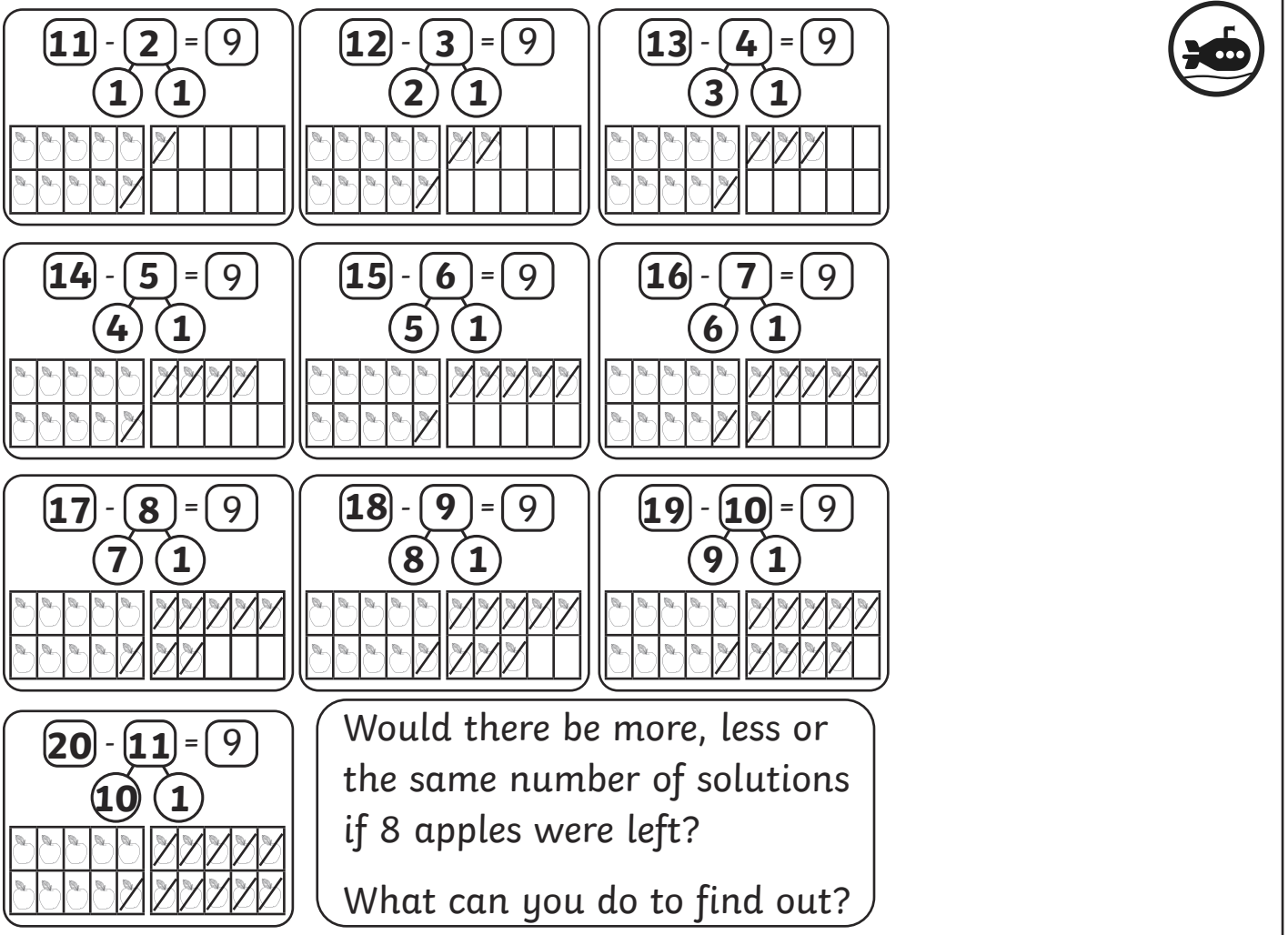
15 - 7 = 8

5 2

15 - 8 = 7

5 3

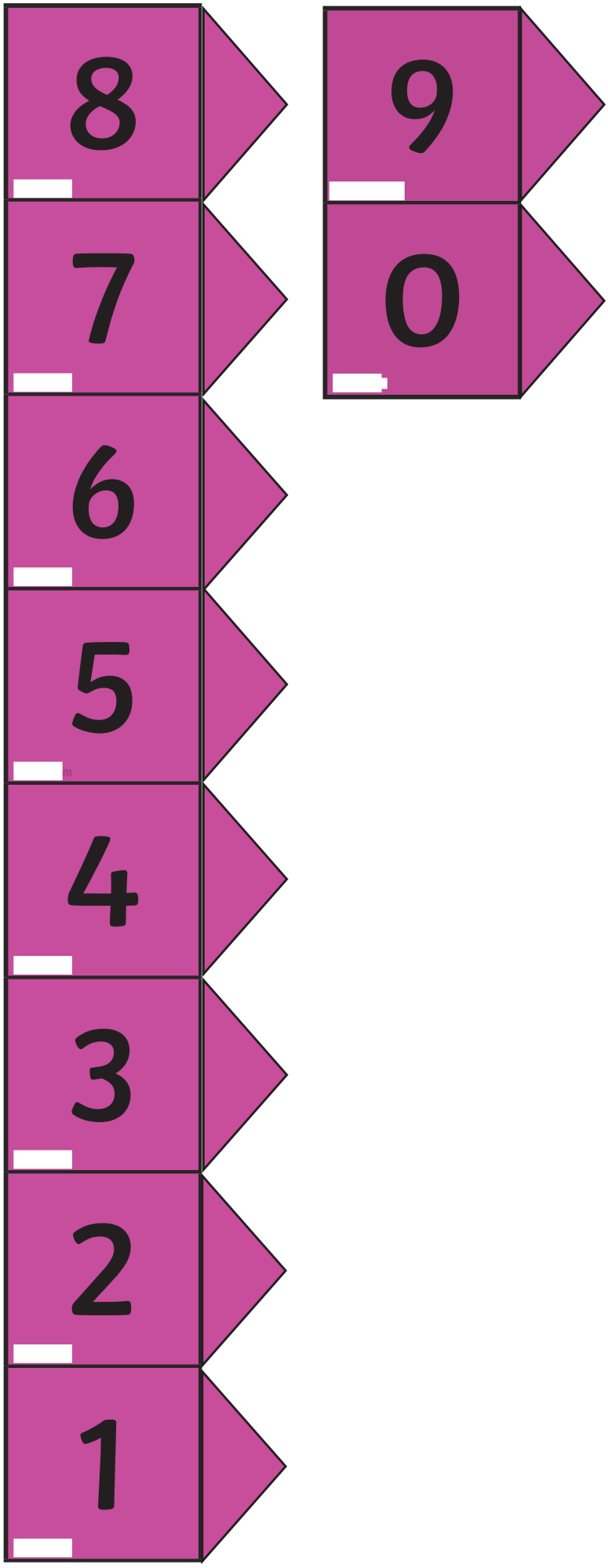
Theo sold the bag of 8 apples.

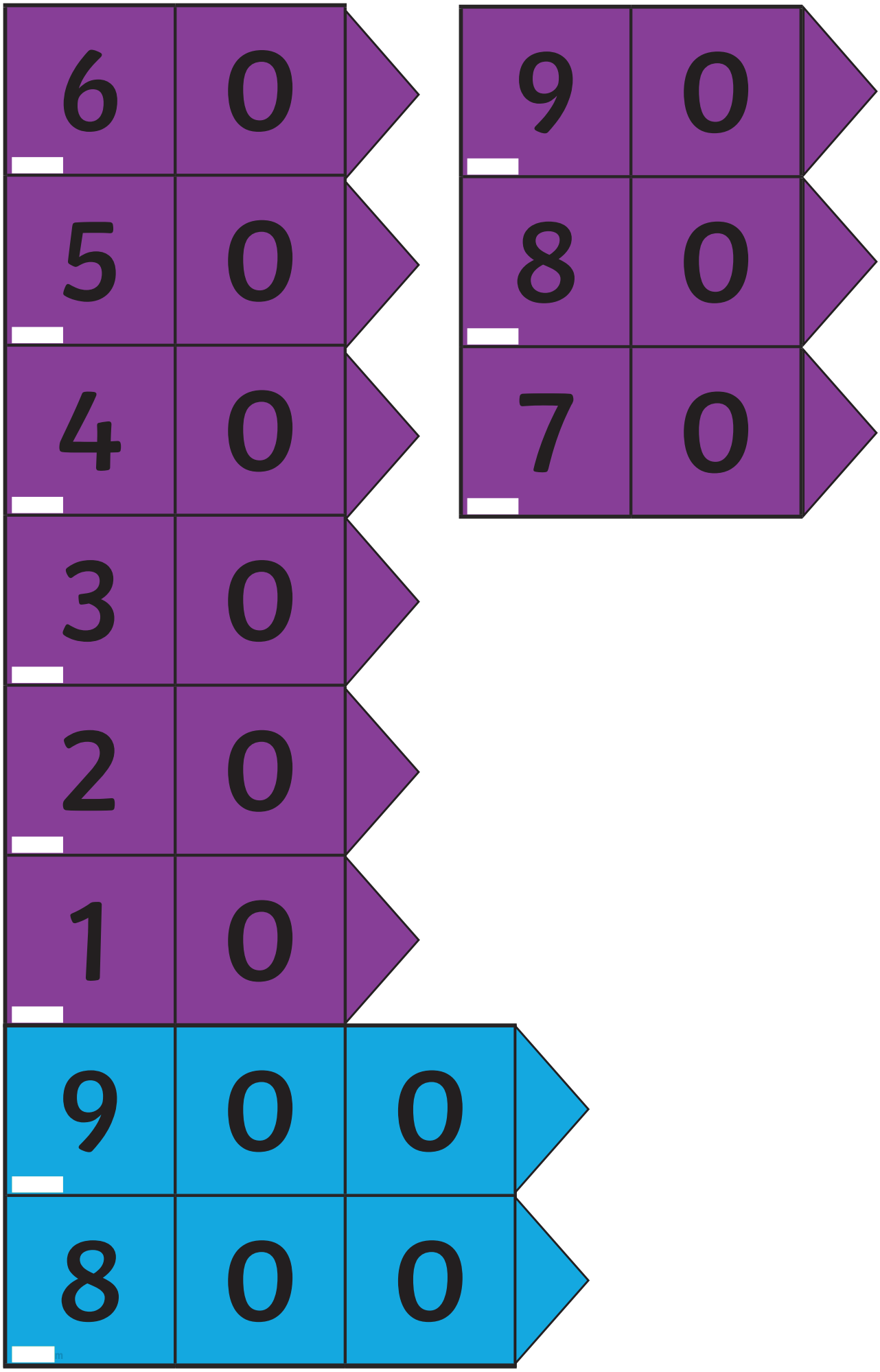


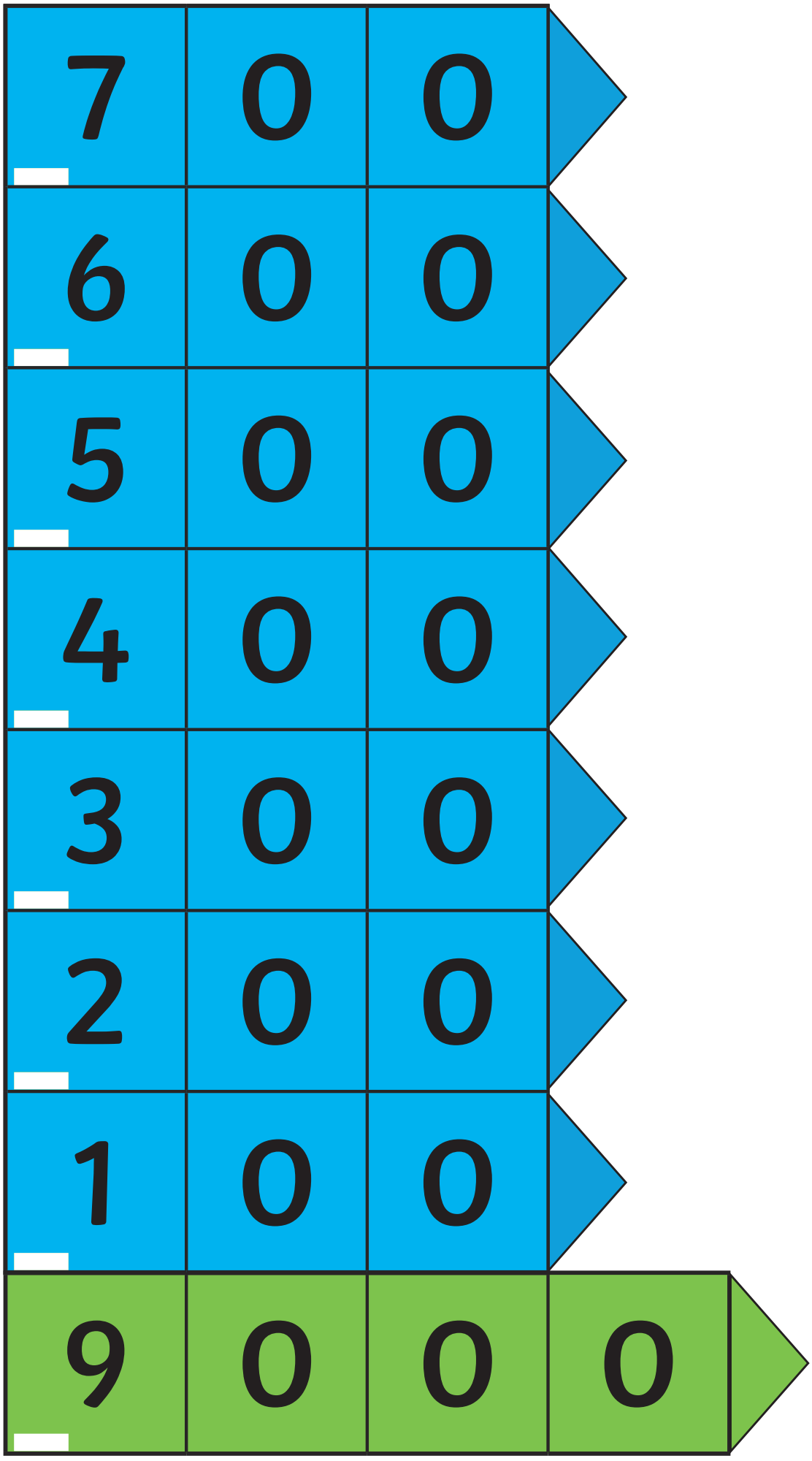
Would there be more, less or the same number of solutions if 8 apples were left?

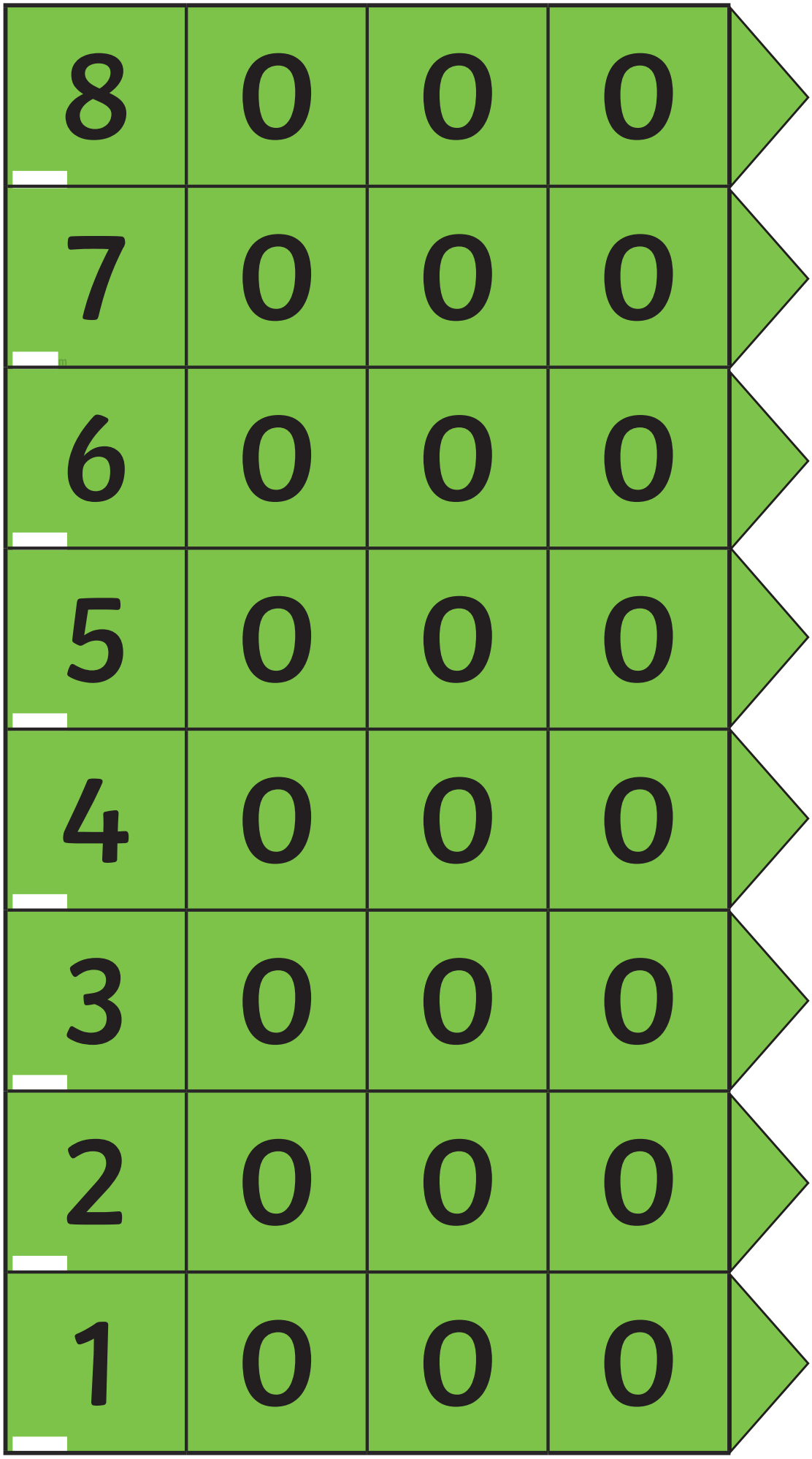
What can you do to find out?

Subtracting from:
11, 12, 13, 14, 15, 16, 17, 18, 19 or 20 there would still be ten possible solutions.


8
9
7
0
6
5
4
3
2
1

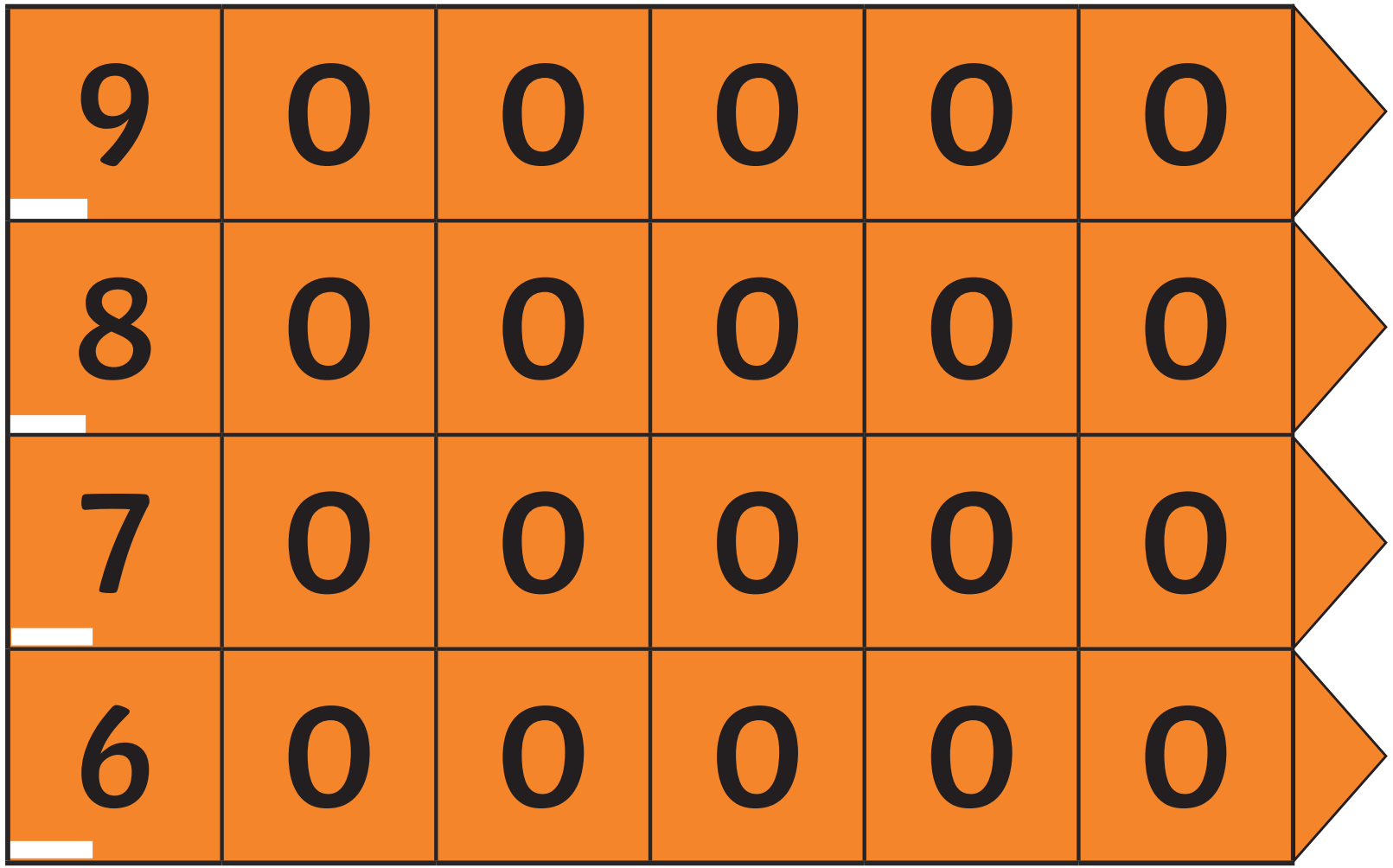

6 0
5 0
4 0
3 0
2 0
1 0
9 0
8 0
7 0
9 0 0
8 0 0


7 0 0
6 0 0
5 0 0
4 0 0
3 0 0
2 0 0
1 0 0
9 0 0 0


8 0 0 0
7 0 0 0
6 0 0 0
5 0 0 0
4 0 0 0
3 0 0 0
2 0 0 0
1 0 0 0

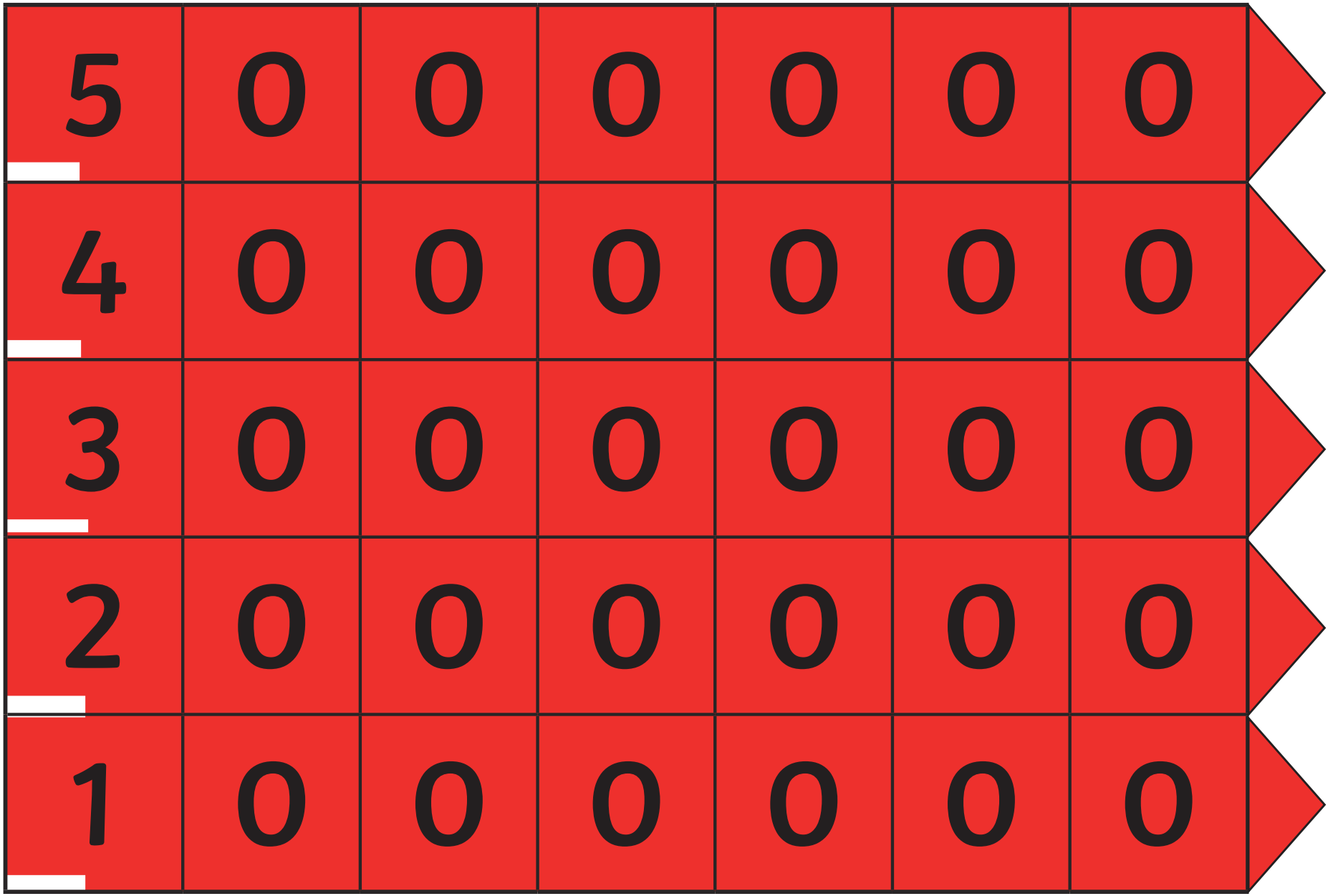
9	0	0	0	0
8	0	0	0	0
7	0	0	0	0
6	0	0	0	0

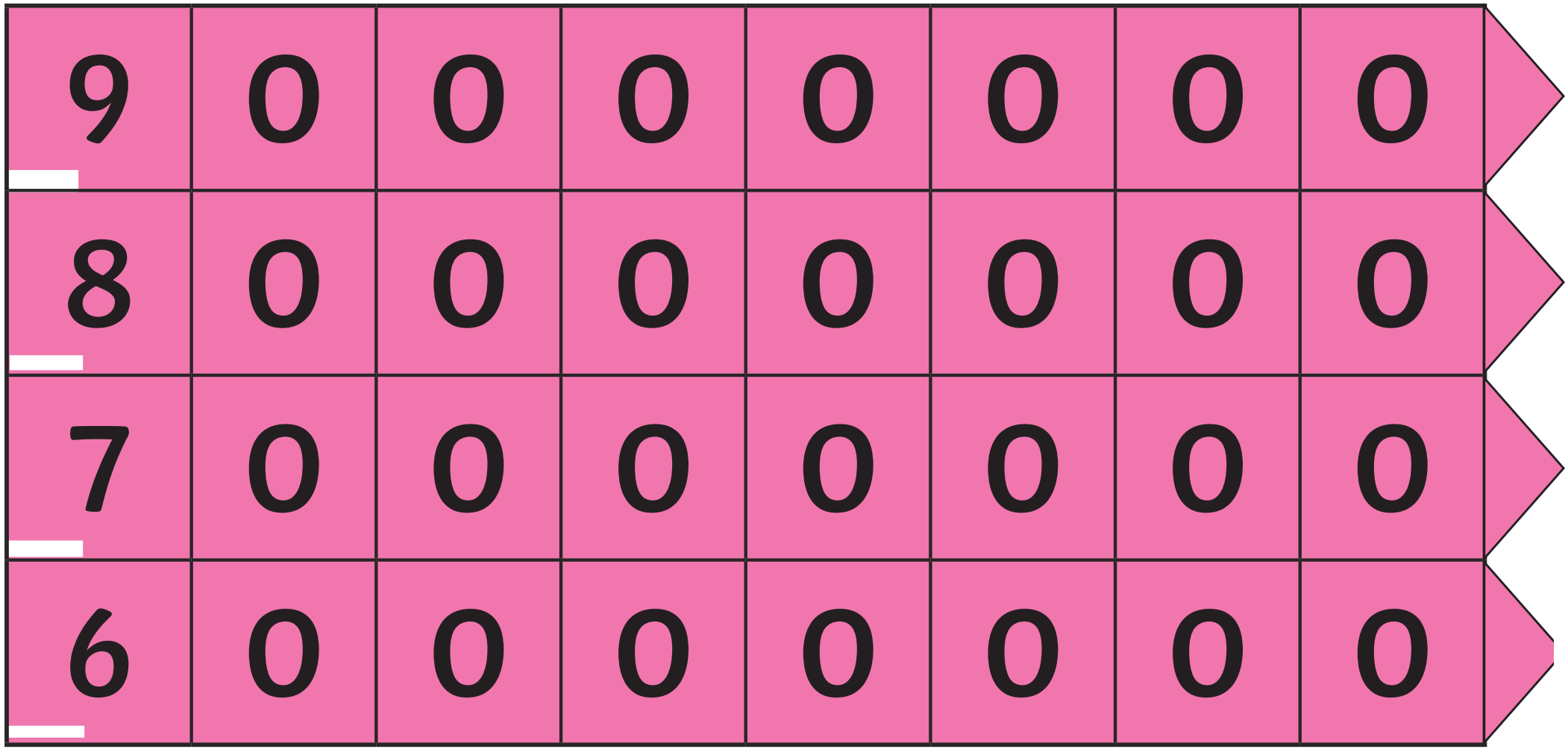
5	0	0	0	0
4	0	0	0	0
3	0	0	0	0
2	0	0	0	0
1	0	0	0	0

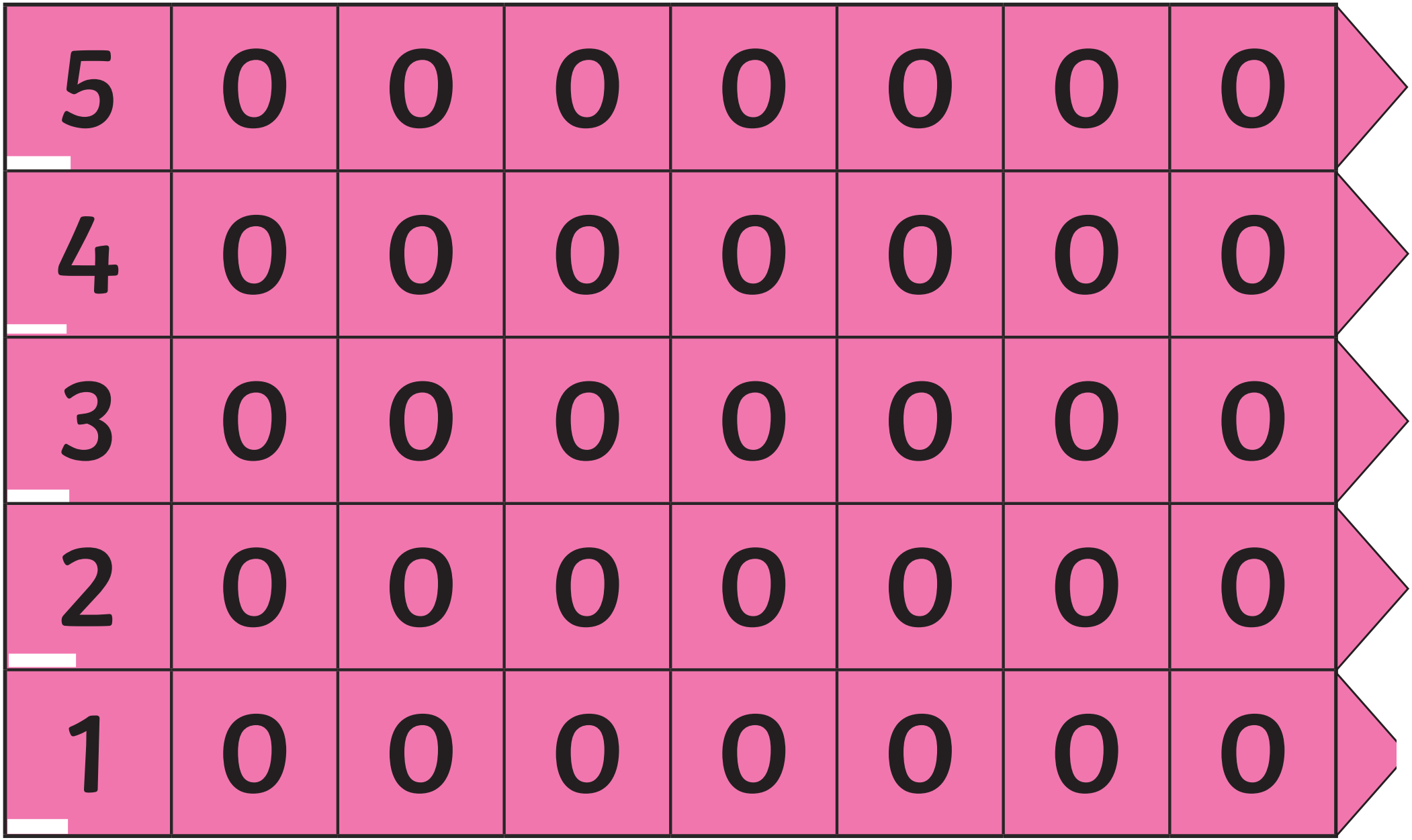

9 0 0 0 0 0
8 0 0 0 0 0
7 0 0 0 0 0
6 0 0 0 0 0

5	0	0	0	0	0
4	0	0	0	0	0
3	0	0	0	0	0
2	0	0	0	0	0
1	0	0	0	0	0

9	0	0	0	0	0	0
8	0	0	0	0	0	0
7	0	0	0	0	0	0
6	0	0	0	0	0	0


5 0 0 0 0 0 0
4 0 0 0 0 0 0
3 0 0 0 0 0 0
2 0 0 0 0 0 0
1 0 0 0 0 0 0


9 0 0 0 0 0 0 0
8 0 0 0 0 0 0 0
7 0 0 0 0 0 0 0
6 0 0 0 0 0 0 0


5 0 0 0 0 0 0 0
4 0 0 0 0 0 0 0
3 0 0 0 0 0 0 0
2 0 0 0 0 0 0 0
1 0 0 0 0 0 0 0

Question 1

Complete the sentences, then continue the pattern.

30 + 1 = ____, 30 + 2 = ____, 30 + 3 = ____,

30 + 4 = ____, 30 + 5 = ____

Use a tens and ones mat, base ten blocks or other tens and ones equipment to explain the pattern to a friend.

Question 2

Complete the sentences, then continue the pattern.

49 – 9 = ___, 48 – 8 = ___, 47 – 7 = ___, 46 – 6 = __

Do all your answers have a zero? Use a tens and ones mat, base ten blocks or other tens and ones equipment to explain why.

Answers

Question 1

30 + 1 = **31**

30 + 2 = **32**

30 + 3 = **33**

30 + 4 = **34**

30 + 5 = **35**

30 + 6 = 36

30 + 7 = 37

30 + 8 = 38

30 + 9 = 39

Question 2

49 - 9 = **40**

48 - 8 = **40**

47 - 7 = **40**

46 - 6 = **40**

45 - 5 = 40

44 - 4 = 40

43 - 3 = 40

42 - 2 = 40

41 - 1 = 40

Question 1

Complete the sentences, then continue the pattern.

40 + ___ = 41

40 + 2 = ___

40 + ___ = 43

40 + 4 = ___

Use a tens and ones mat, base ten blocks or other tens and ones equipment to explain the pattern to a friend.

Question 2

Complete the sentences, then continue the pattern.

_____ 57 – 7 = 55 – 6 = 56 - 5 = _____

_____ _____ _____ _____

Do all your answers have a zero? Use a tens and ones mat, base ten blocks or other tens and ones equipment to explain why.

Answers

Question 1	Question 2
40 + **1** = 41	**59 – 9 = 50**
40 + 2 = **42**	**58 – 8 = 50**
40 + **3** = 43	57 – 7 = **50**
40 + 4 = **44**	56 – 6 = **50**
40 + 5 = 45	55 – 5 = **50**
40 + 6 = 46	**54 – 4 = 50**
40 + 7 = 47	**53 – 3 = 50**
40 + 8 = 48	**52 – 2 = 50**
40 + 9 = 49	**51 – 1 = 50**

★★★

Question 1

Complete the sentences, then continue the pattern.

30 + 1 = 30 + 2 = 30 + 3 = 30 + 4 = 30 + 5 =

Use a tens and ones mat, base ten blocks or other tens and ones equipment to explain the pattern to a friend.

Question 2

If I subtract all the ones from a 2-digit number, I will always have a zero in my answer.

Prove it!

Question 3

Explore the pattern:

95 – 5 = 95 – 15 = 95 – 25 =

Can you describe what is happening?

Can you make a rule?

Can you make up a pattern of your own?

★★★

Answers

Question 1

Complete the sentences, then continue the pattern.

20 + **1** = 21

20 + 2 = 22

20 + 3 = 23

20 + 4 = 24

20 + **5** = 25

20 + 6 = 26

20 + 7 = 27

20 + 8 = 28

20 + 9 = 29

Question 3

Explore the pattern:

95 – 5 = **90**

95 – 15 = **80**

95 – 25 = **70**

95 – 35 = 60

95 – 45 = 50

95 – 55 = 40

95 – 65 = 30

95 – 75 = 20

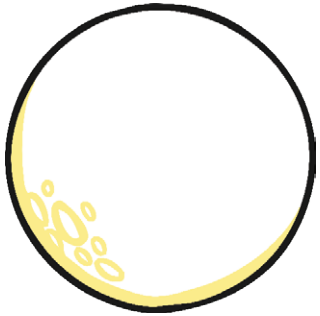
95 – 85 = 10

95 – 95 = 0

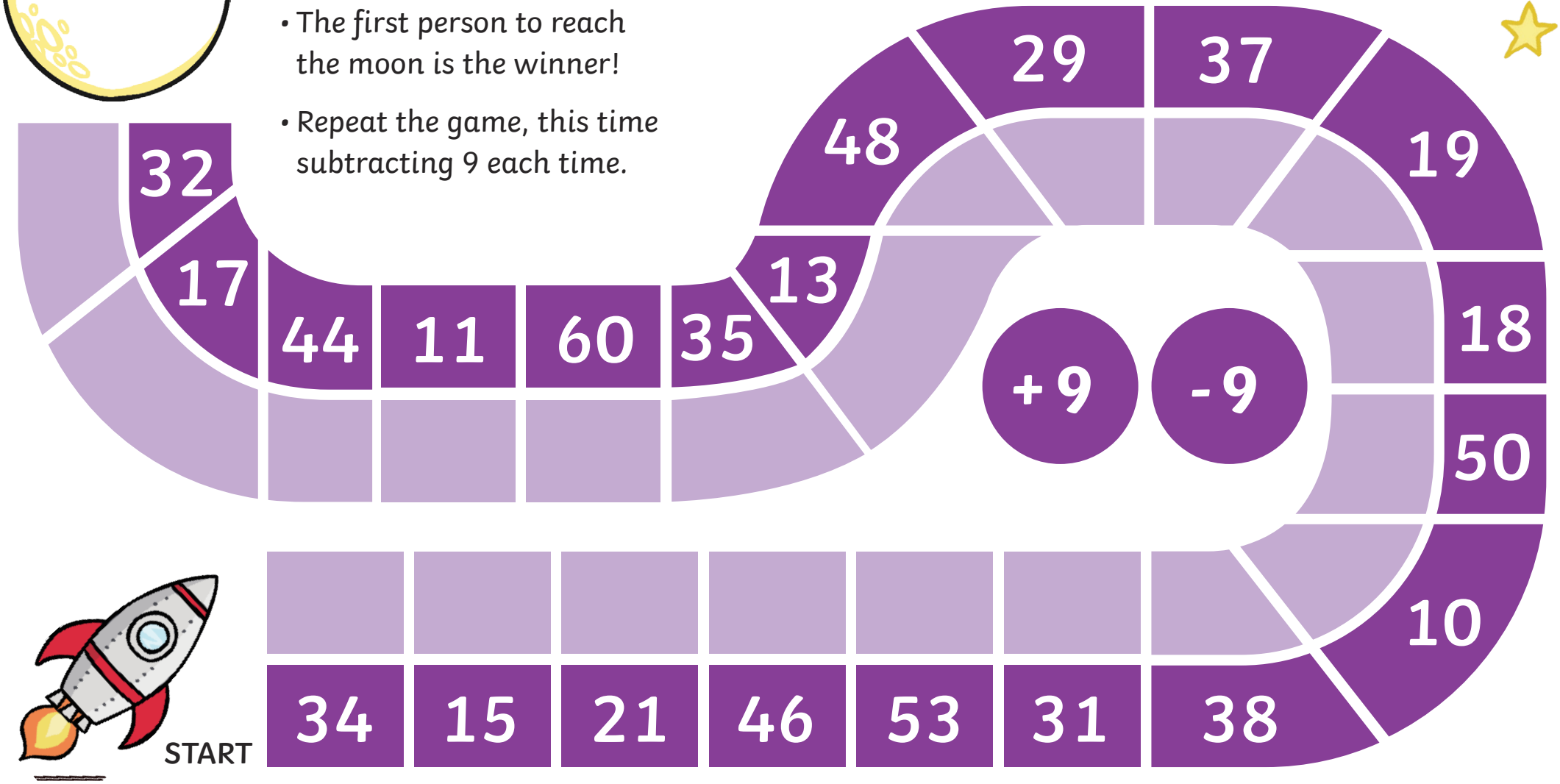
Question 2

True, subtracting all the ones from a 2-digit number will always leave no ones. We represent no ones by using a zero in the ones column. Therefore, any 2-digit number that has subtracted all the ones will have a zero in the ones column.

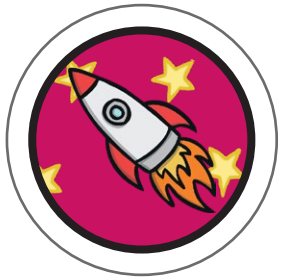
Adding and Subtracting 9 Space Race

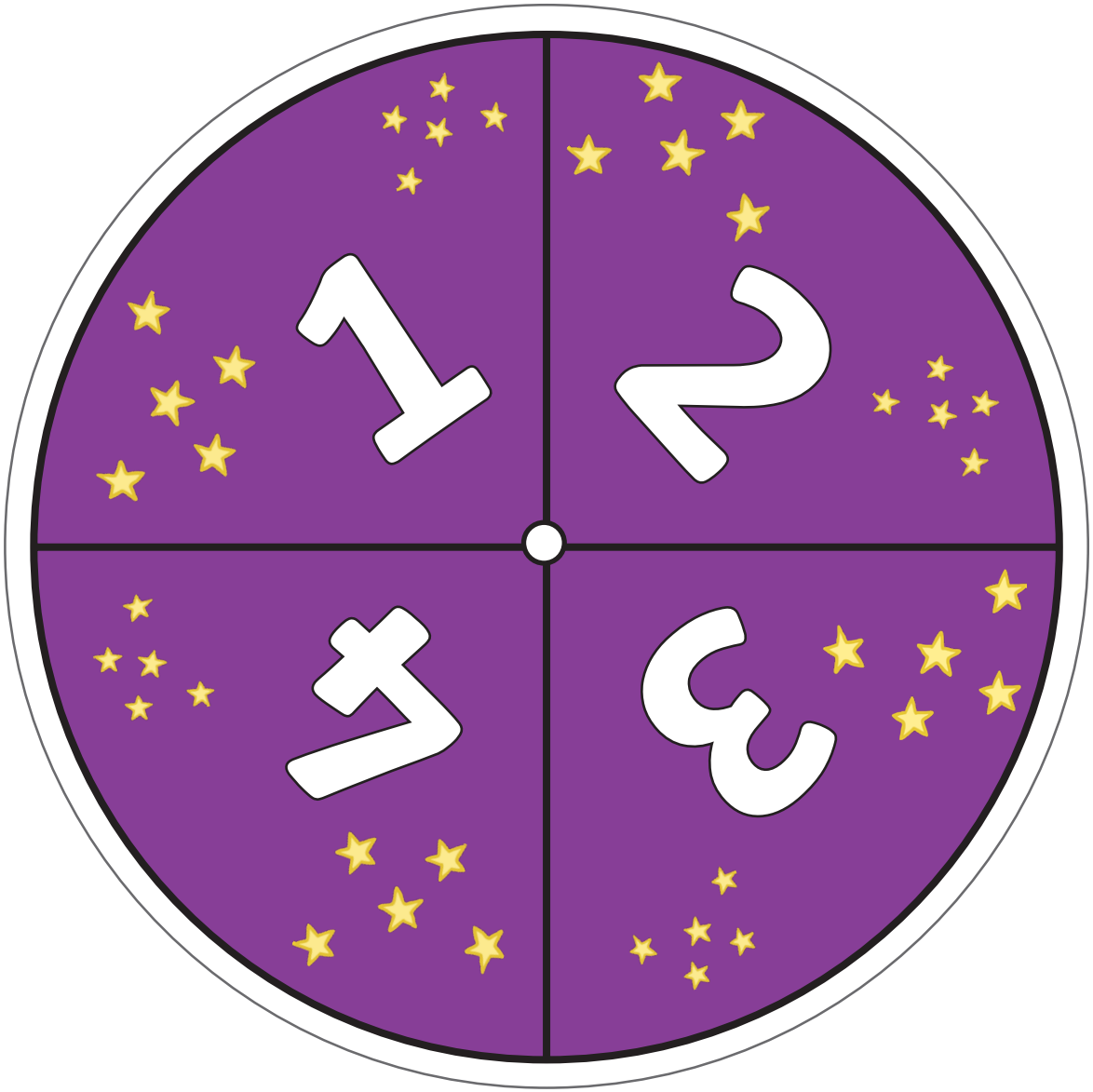


- Spin the spinner and move your counter that number of places. Add 9 to the number you land on. Use equipment to explain your thinking to your partner.
- The first person to reach the moon is the winner!
- Repeat the game, this time subtracting 9 each time.



Adding and Subtracting 9 Space Race





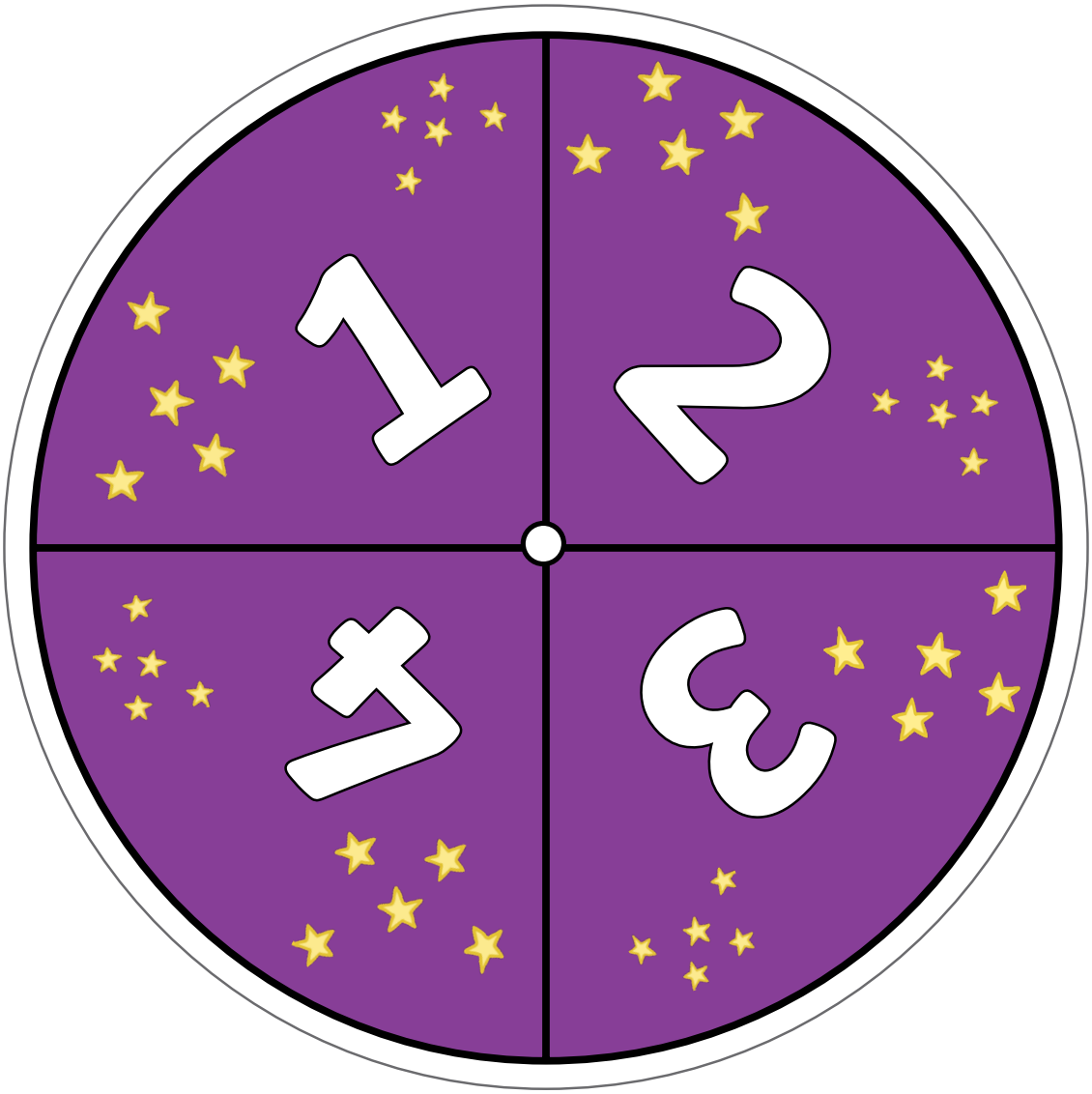
Adding and Subtracting 10 Space Race **Answers**

- 9	Number	+ 9
25	34	43
6	15	24
12	21	30
37	46	55
44	53	62
22	31	40
29	38	47
1	10	19
41	50	59
9	18	27
10	19	28
28	37	46
20	29	38
39	48	57
4	13	22
26	35	44
51	60	69
2	11	20
35	44	53
8	17	26
23	32	41

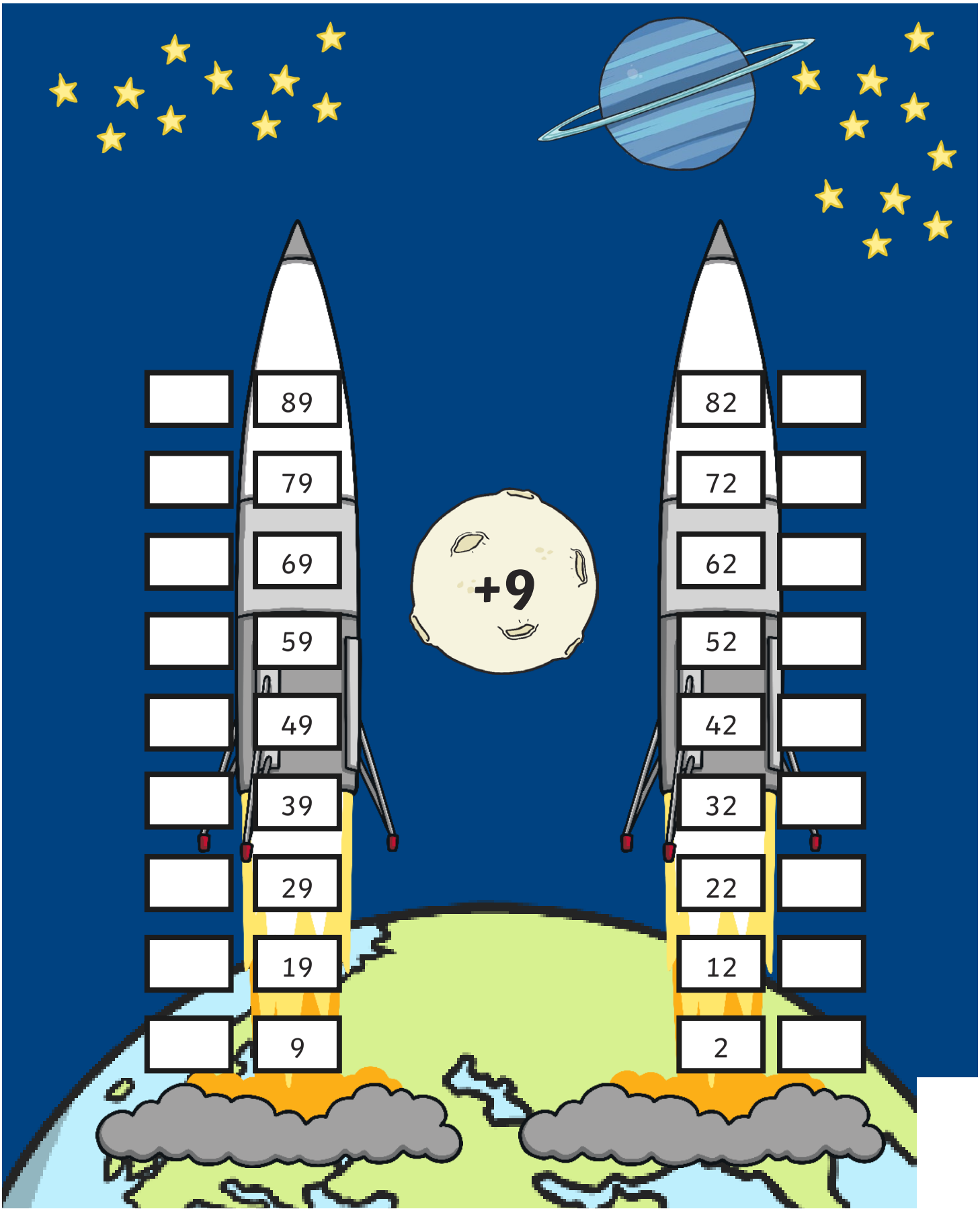
Race to Space

How to Play:

- Each player chooses a spaceship. Take it in turns to spin the spinner and move that number of places.
- Add 9 to the number you land on.
- The first person to reach space is the winner!
- Now, add 9 to the other numbers on your ship.
- Discuss what you notice with your partner.
- Use equipment to explain your thinking.



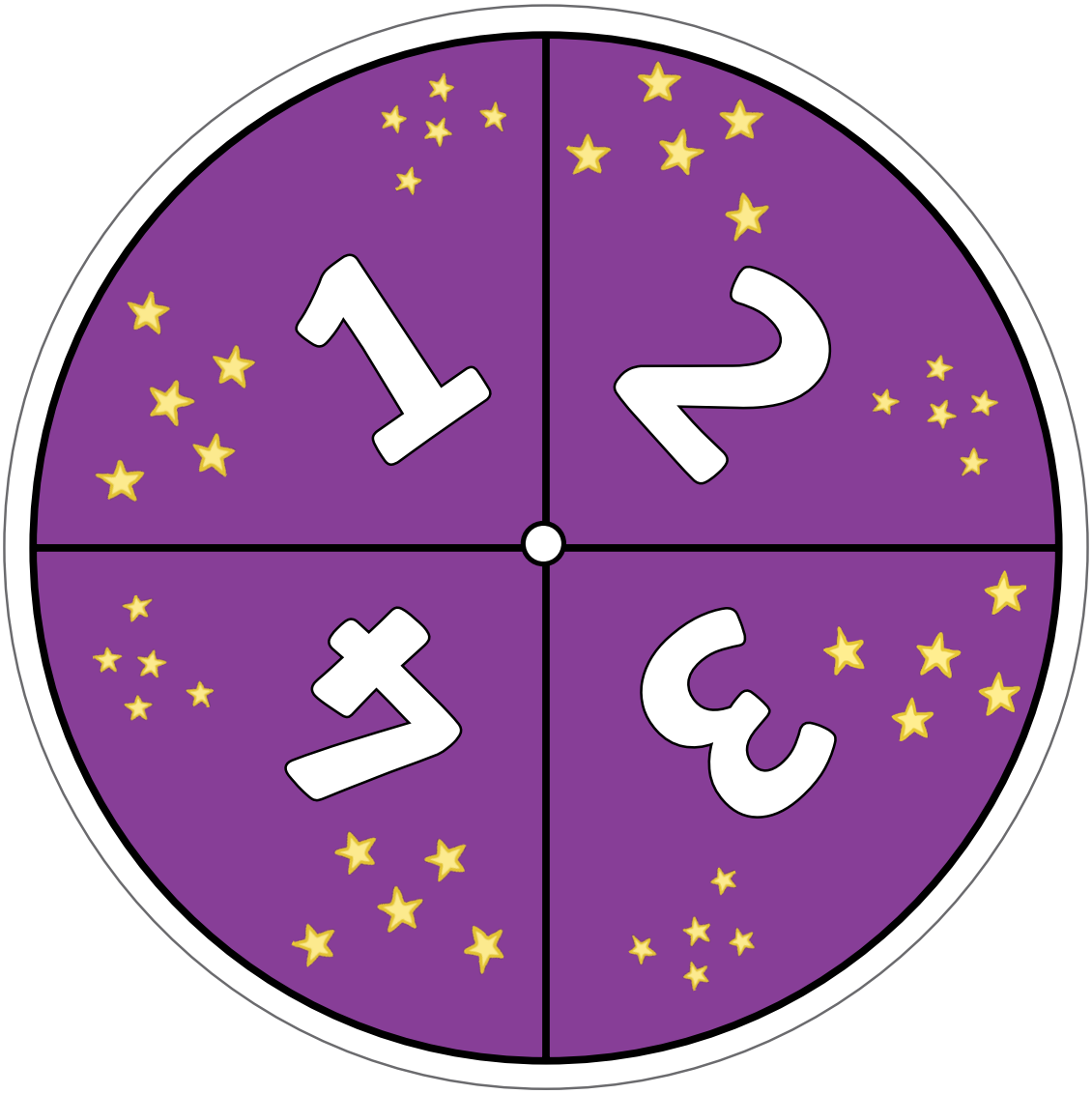
Race to Space



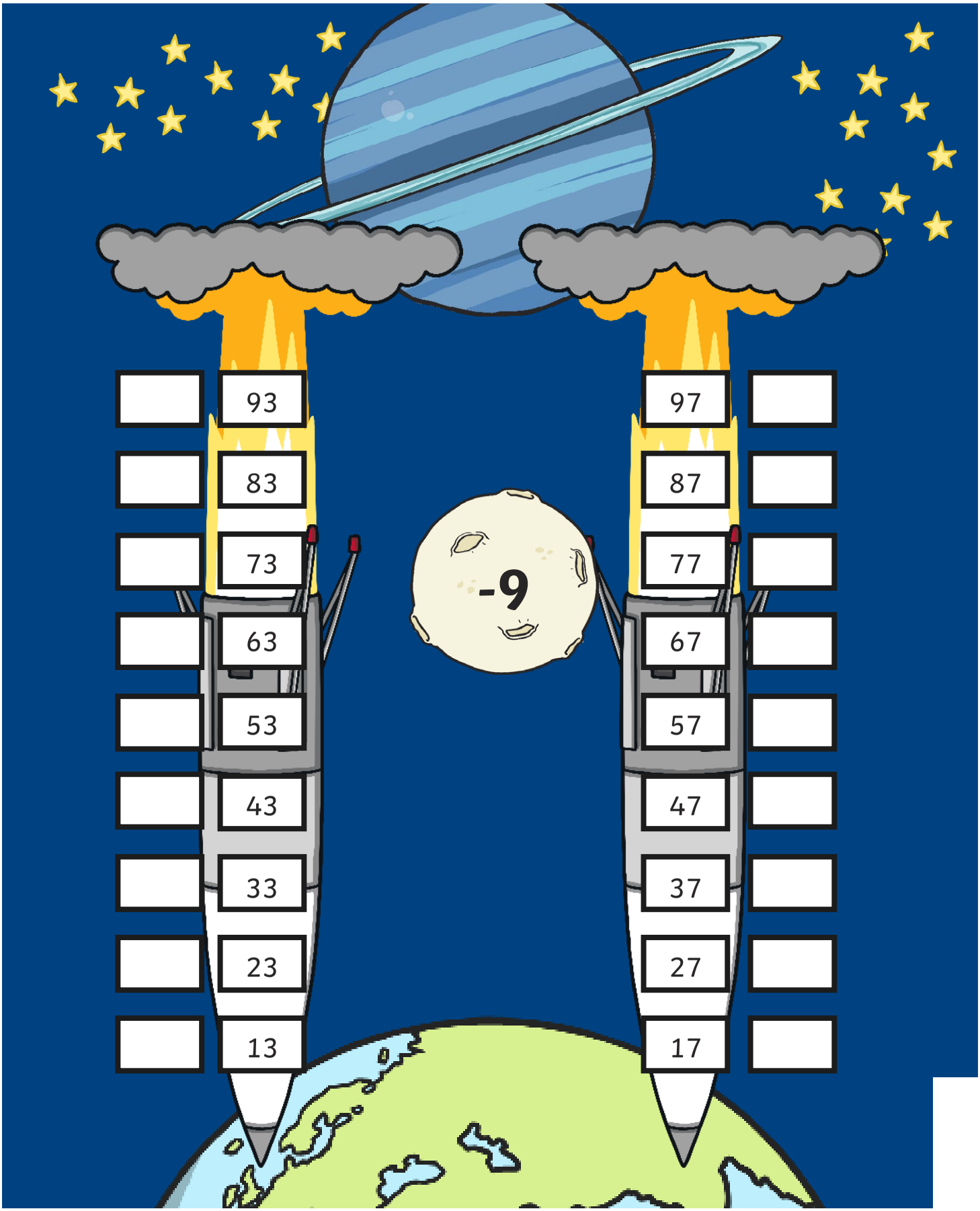
Race Home from Space

How to Play:

- Each player chooses a spaceship. Take it in turns to spin the spinner and move that number of places.
- Subtract 9 from the number you land on.
- The first person to reach Earth is the winner!
- Now, subtract 9 from the other numbers on your ship.
- Discuss what you notice with your partner.
- Use equipment to explain your thinking.



Race Home from Space



Race to Space **Answers**

Spaceship 1	+9
9	18
19	28
29	38
39	48
49	58
59	68
69	78
79	88
89	98

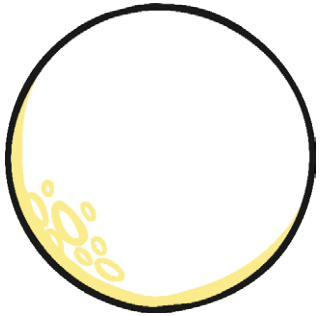
Spaceship 2	+9
2	11
12	21
22	31
32	41
42	51
52	61
62	71
72	81
82	91

Race Home from Space **Answers**

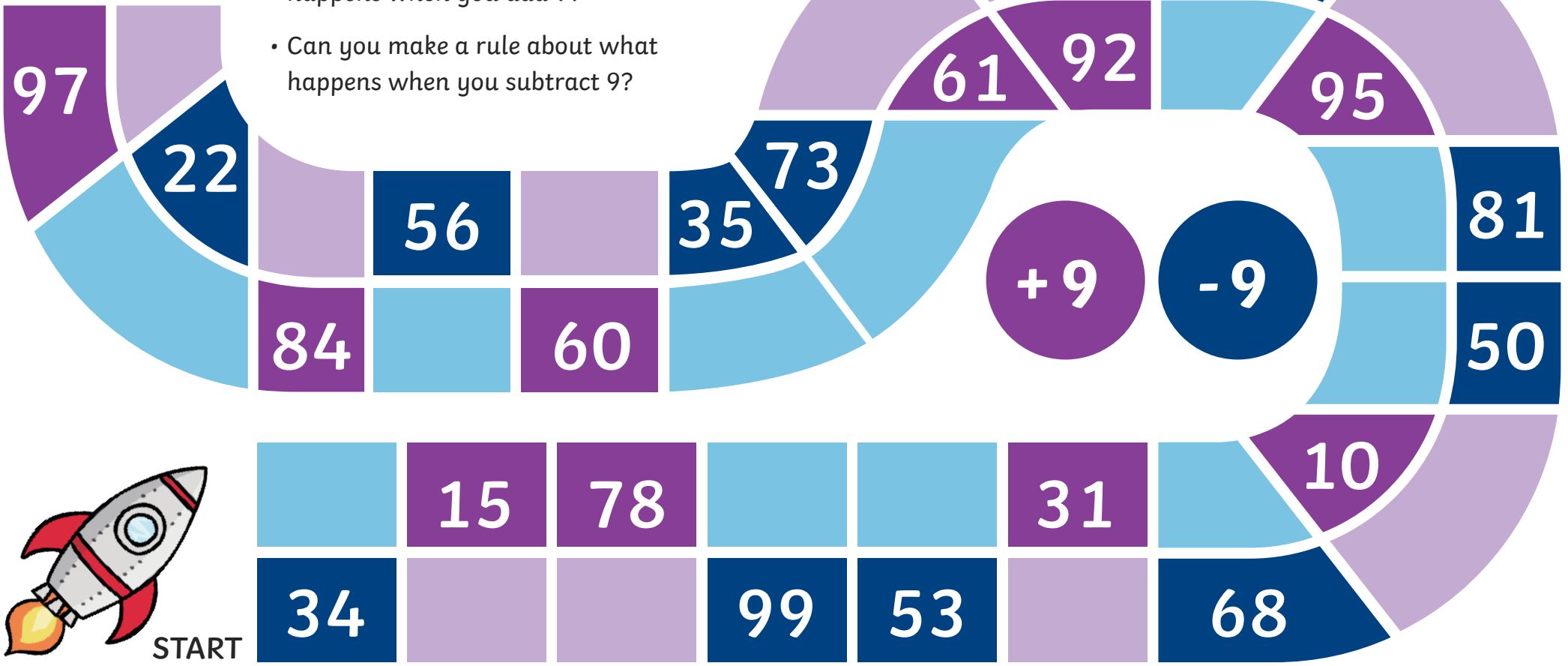
Spaceship 1	-9
93	84
83	74
73	64
63	54
53	44
43	34
33	24
23	14
13	4

Spaceship 2	-9
97	88
87	78
77	68
67	58
57	48
47	38
37	28
27	18
17	8

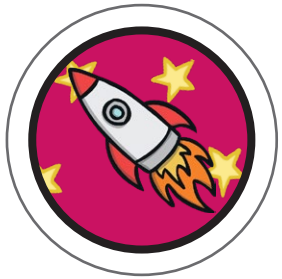
Adding and Subtracting 9 Space Race

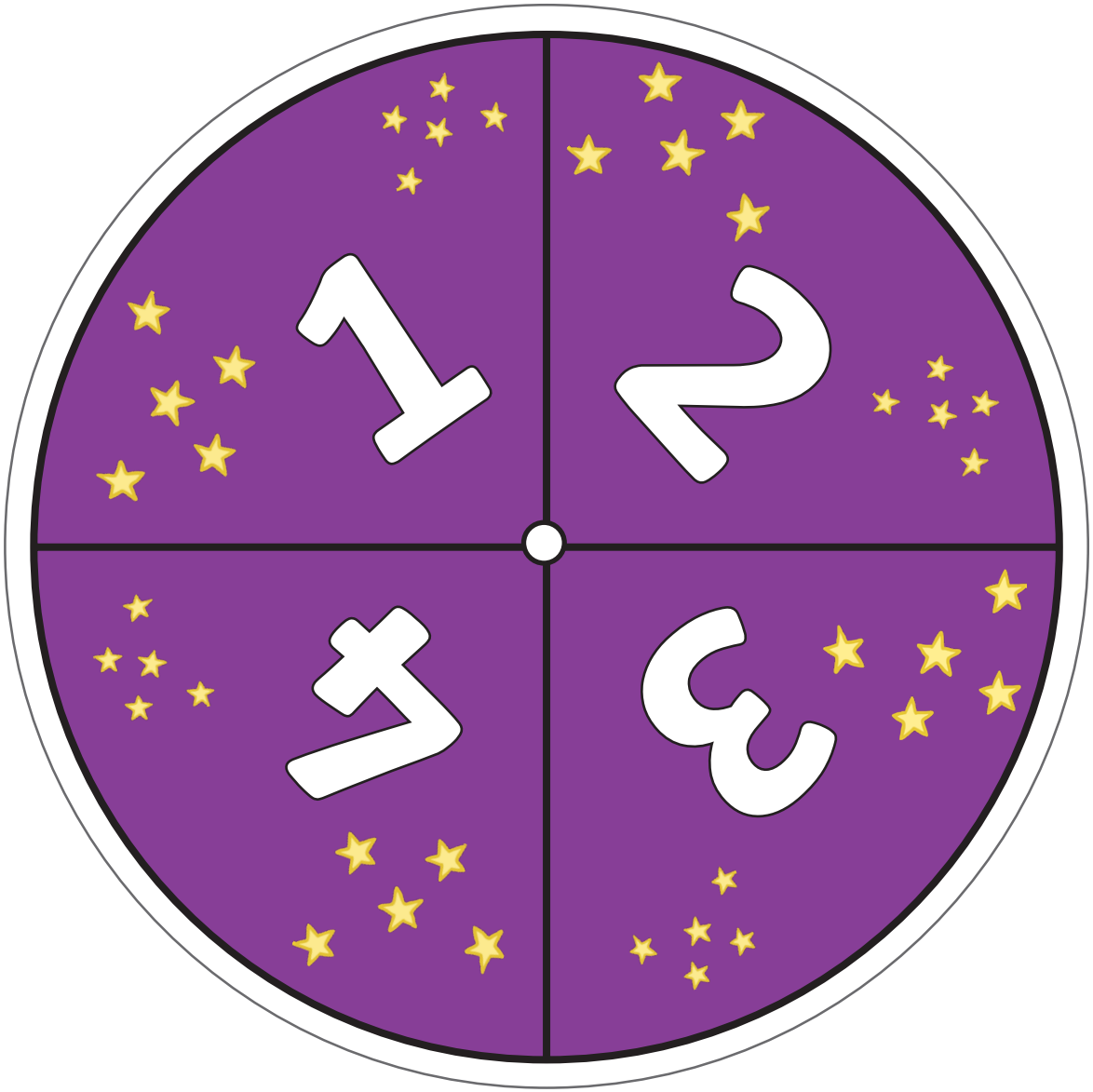


- Spin the spinner and move your spaceship that number of places. Add or subtract 9 from the number you land on. The first person to reach the moon is the winner.
- Choose a number from the board and explain what you notice. Can you continue the pattern?
- Can you explain the pattern to your friend?
- Can you make a rule about what happens when you add 9?
- Can you make a rule about what happens when you subtract 9?



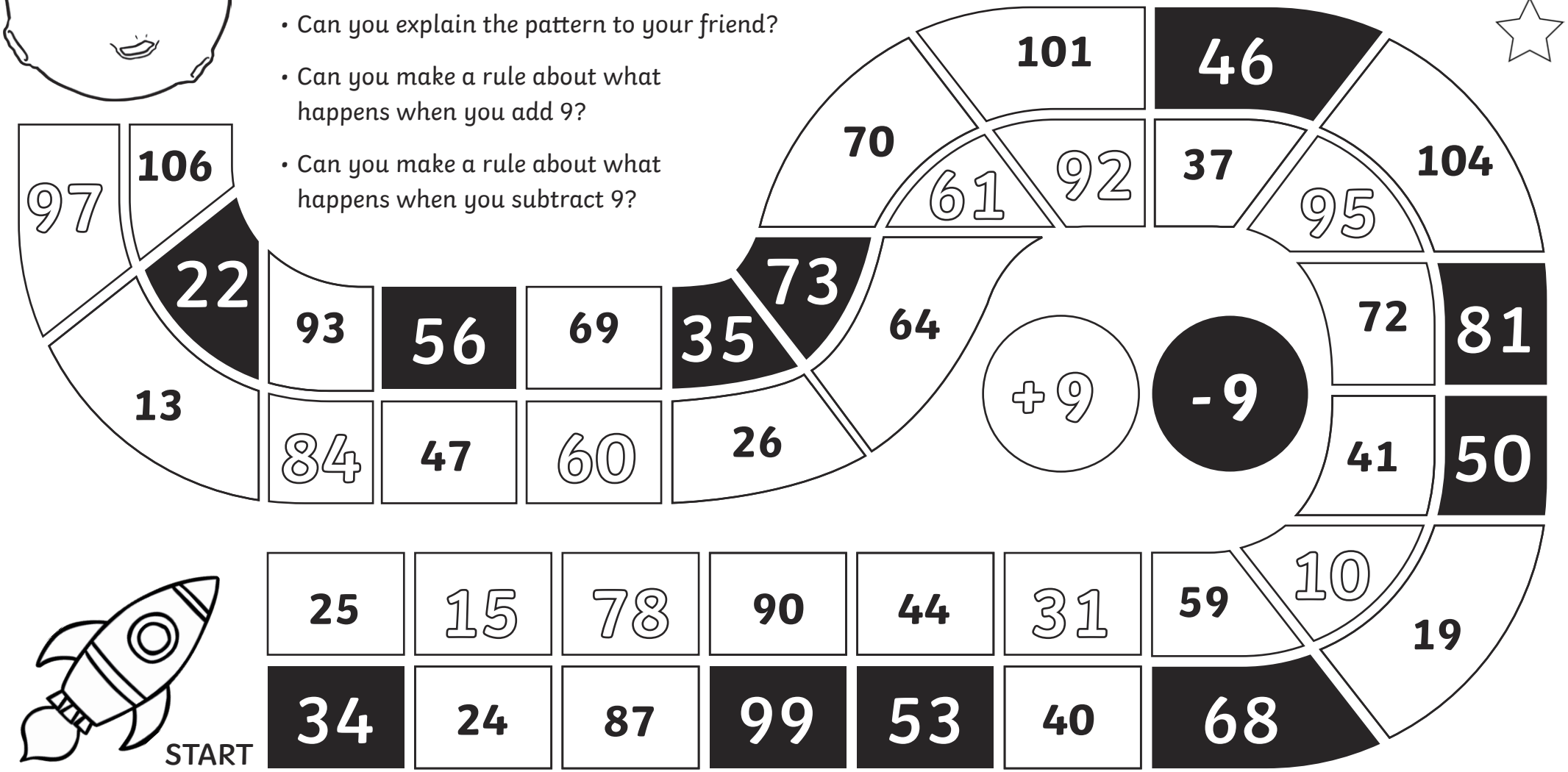
Adding and Subtracting 9 Space Race





Adding and Subtracting 9 Space Race **Answers**

- Spin the spinner and move your spaceship that number of places. Add or subtract 9 from the number you land on. The first person to reach the moon is the winner.
- Choose a number from the board and explain what you notice. Can you continue the pattern?
- Can you explain the pattern to your friend?
- Can you make a rule about what happens when you add 9?
- Can you make a rule about what happens when you subtract 9?

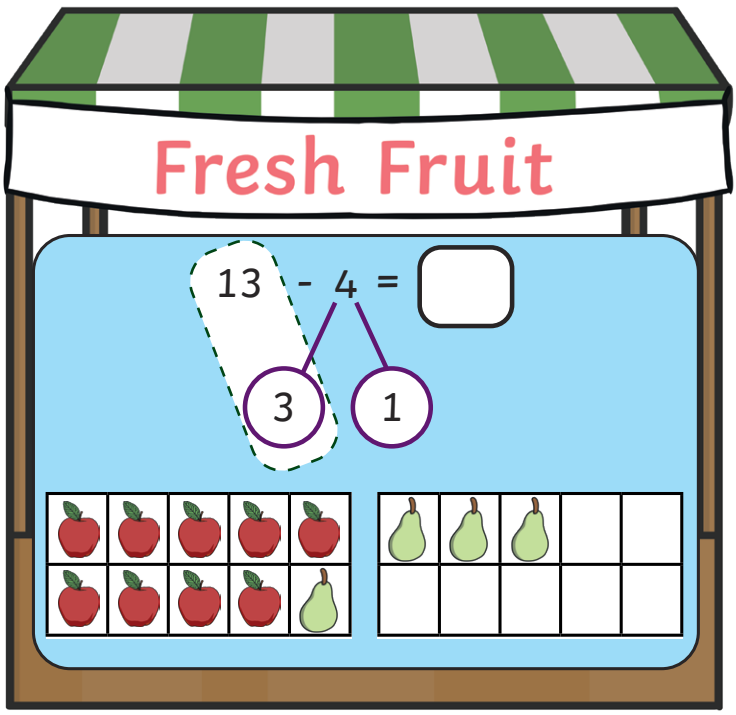


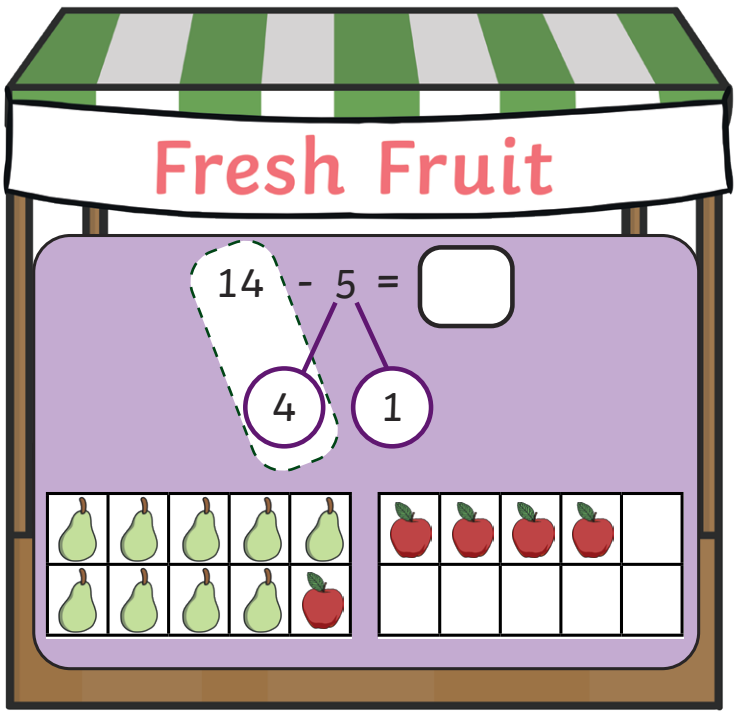
Subtract Across 10

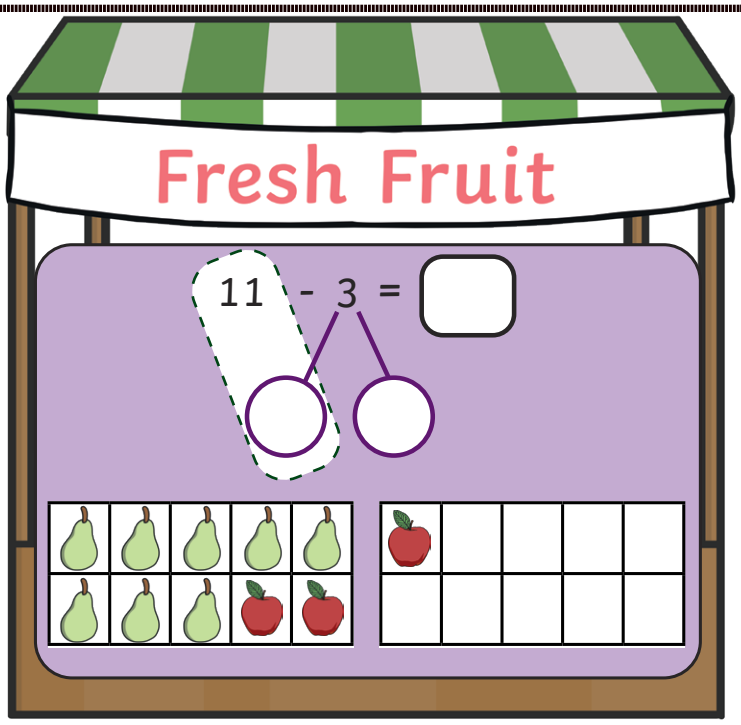
To subtract across 10.

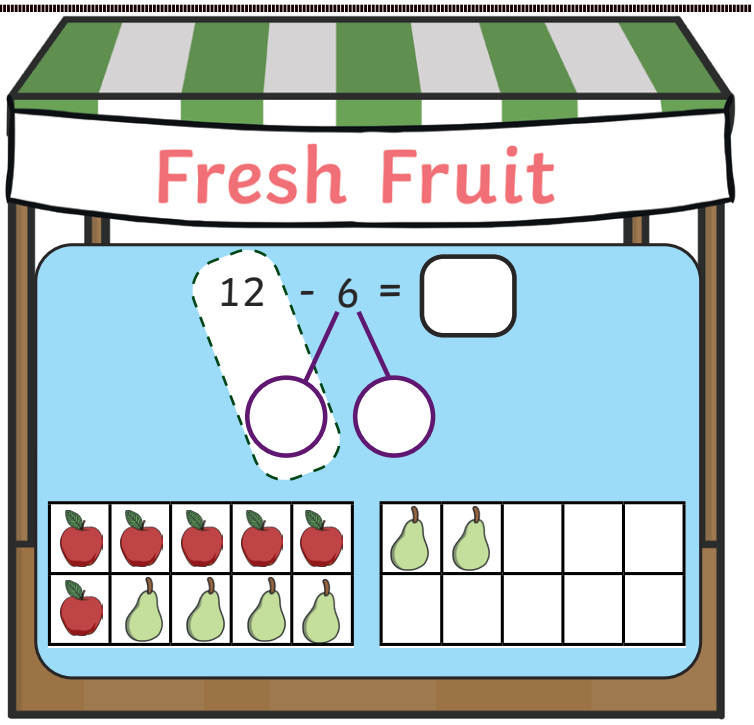
Use the part-whole models and ten-frames to subtract the numbers.

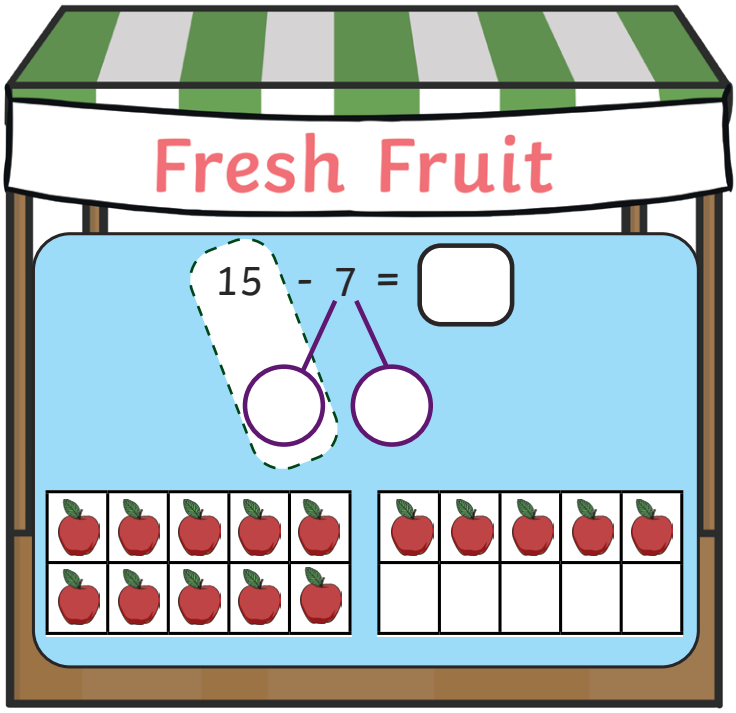
Cross out the pictures of fruit as you subtract them.

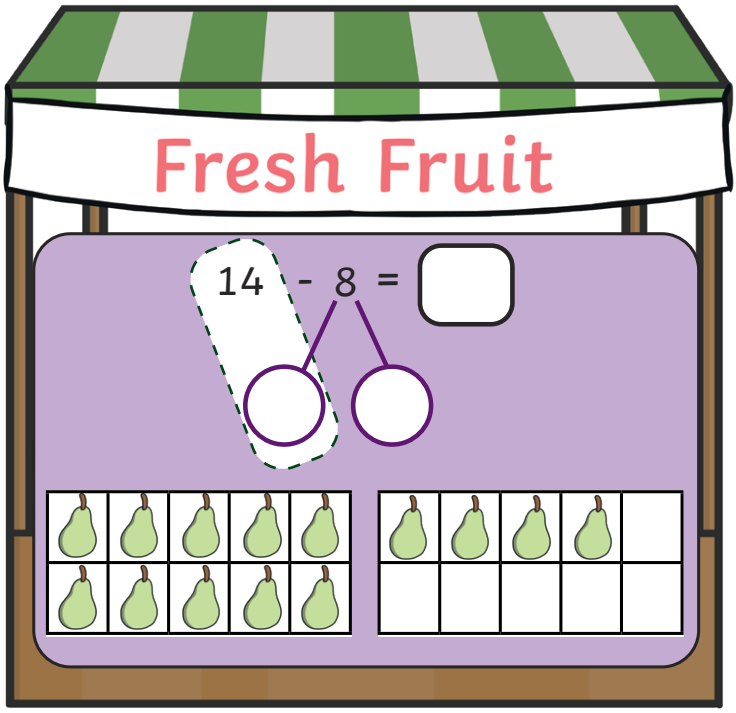


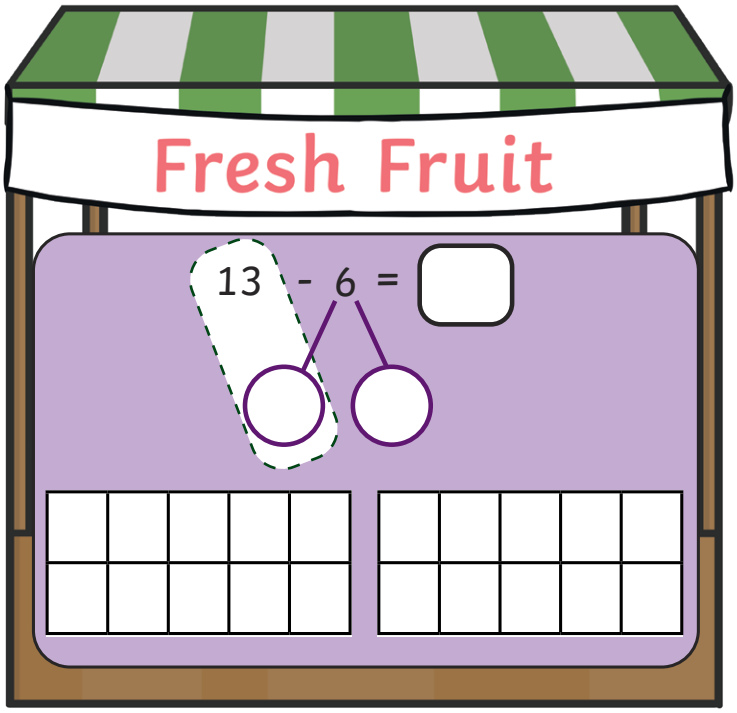


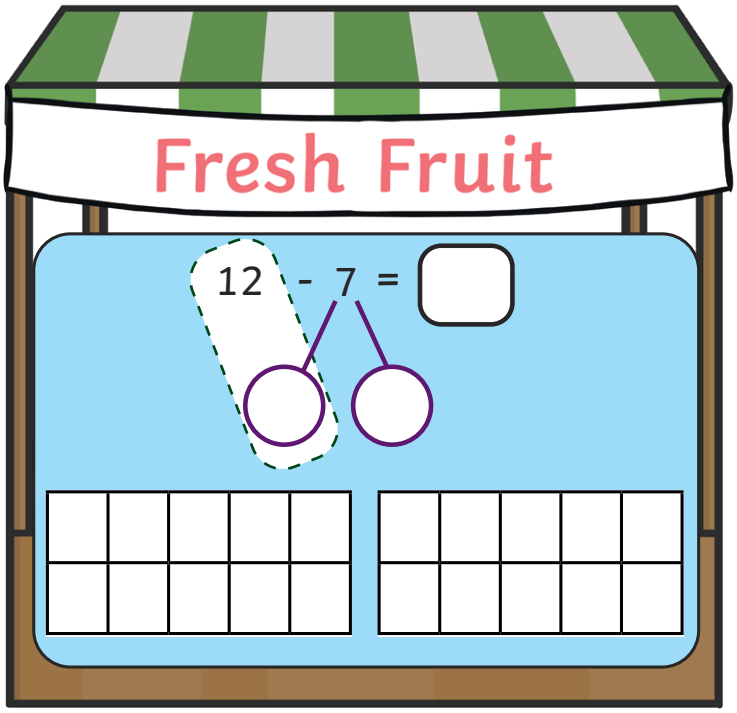




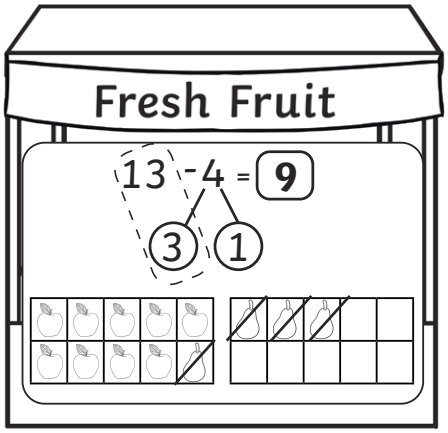

Fresh Fruit
15 - 7 =

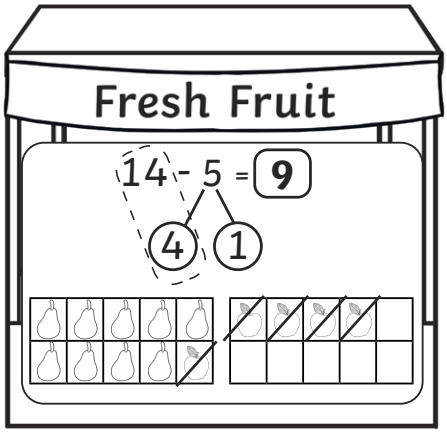

Fresh Fruit
14 - 8 =

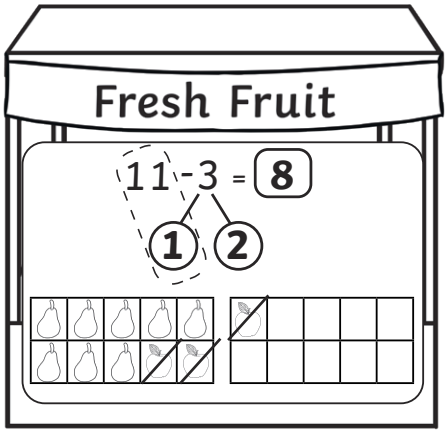

Fresh Fruit
13 - 6 =

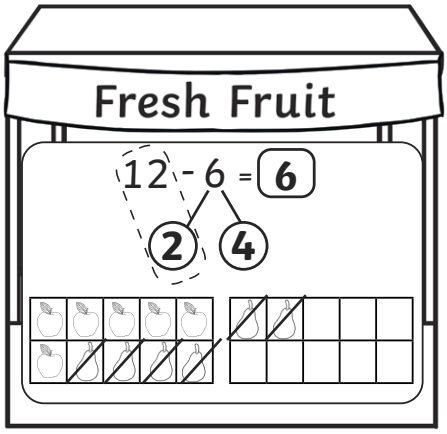

Fresh Fruit
12 - 7 =

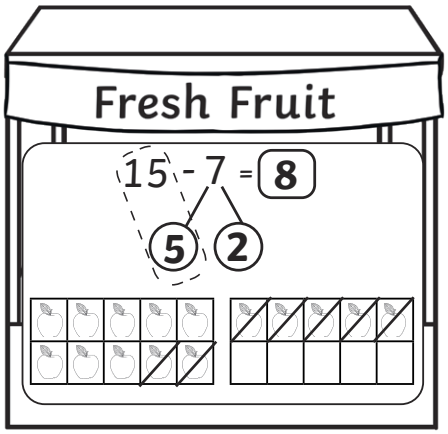
Subtract Across 10 **Answers**

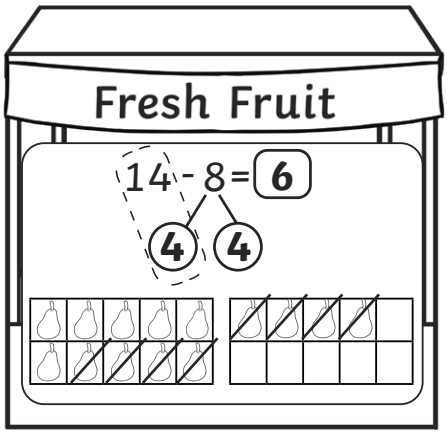


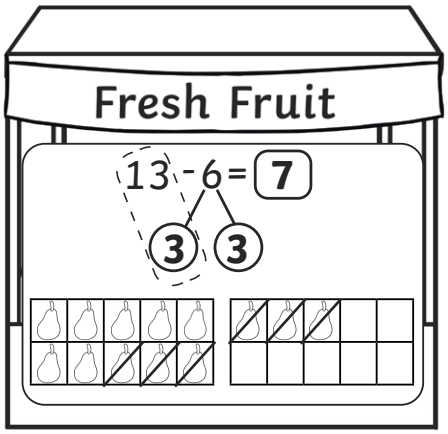


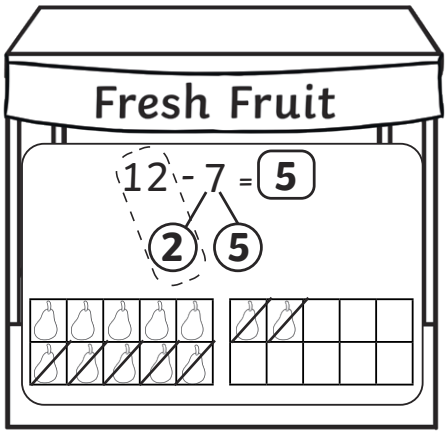












Subtract Across 10

To subtract across 10.

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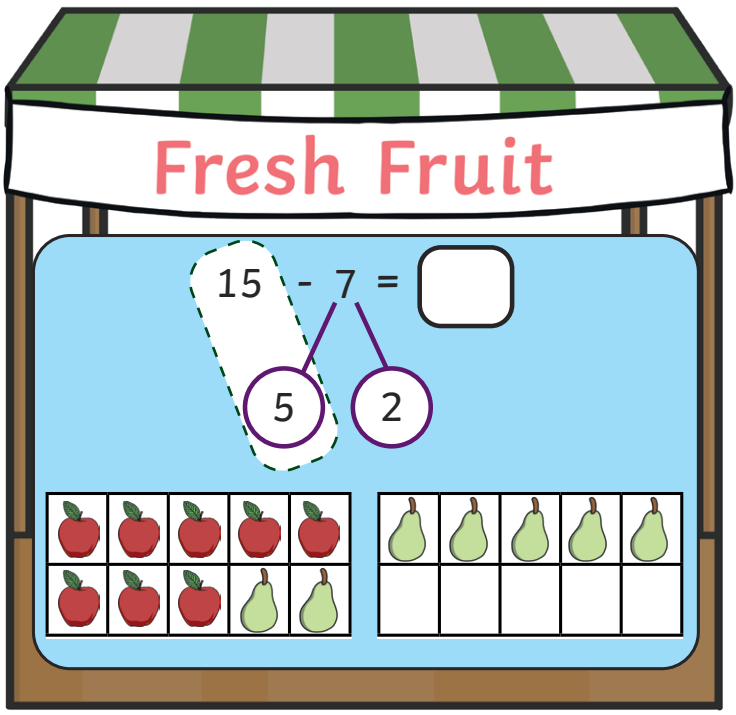
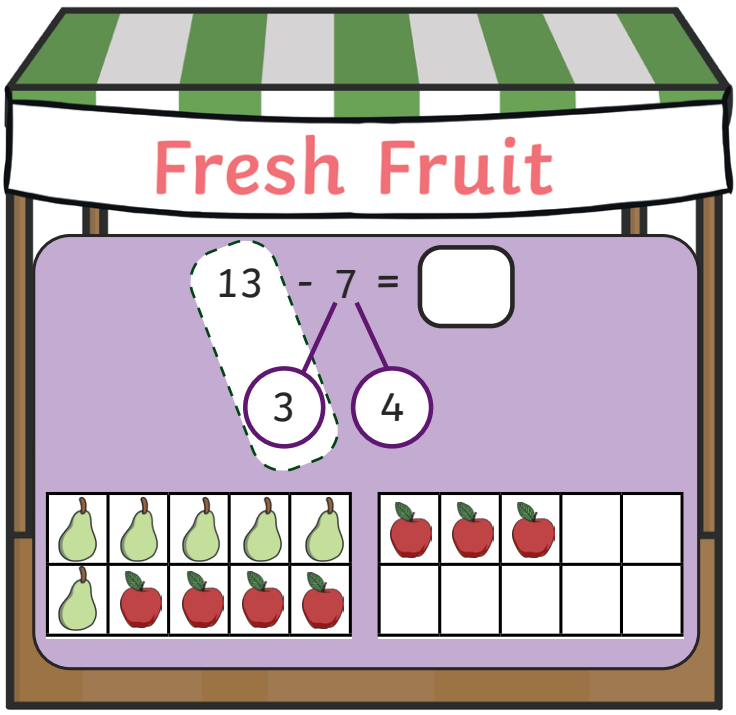
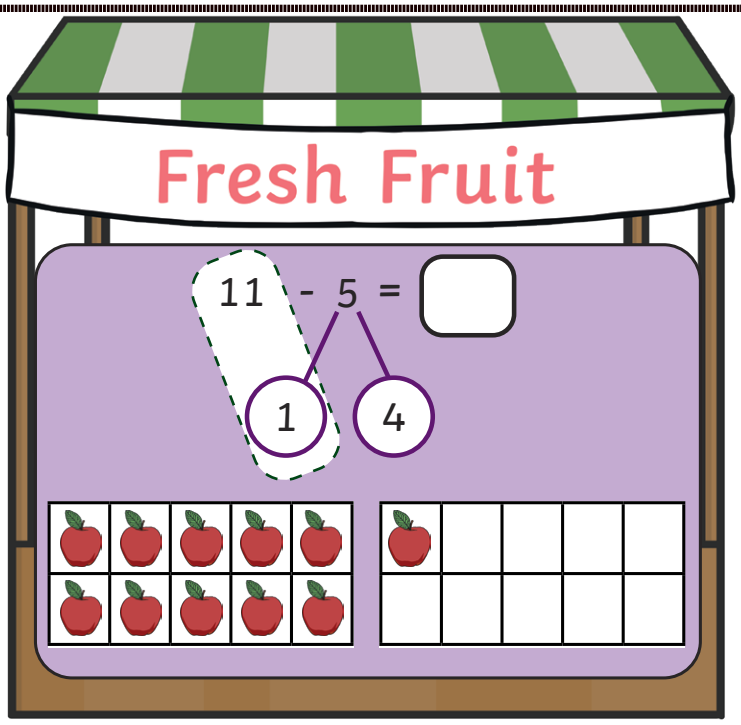
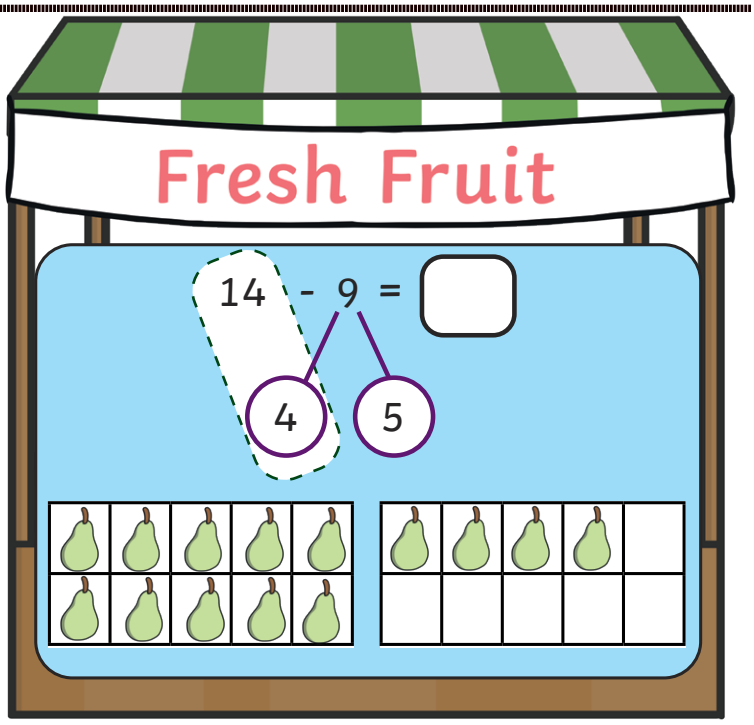
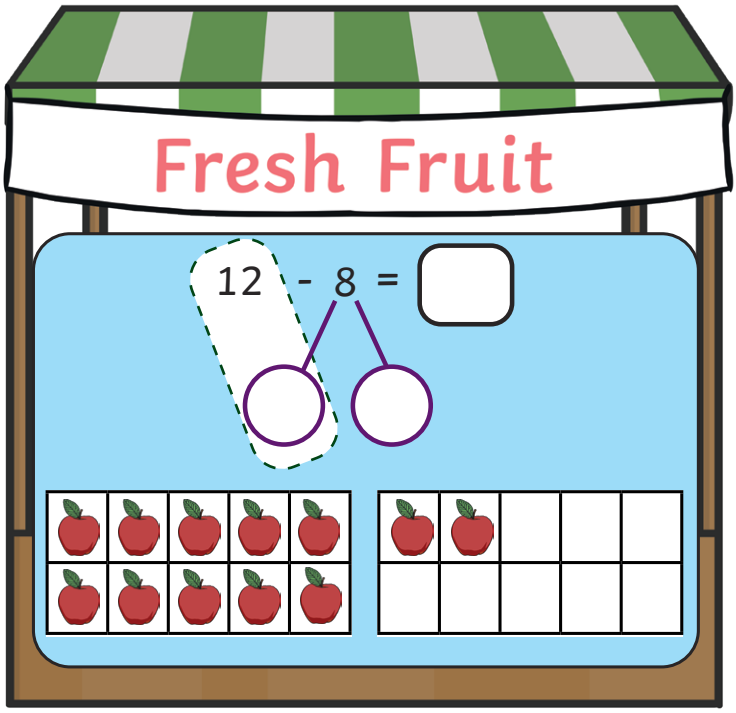
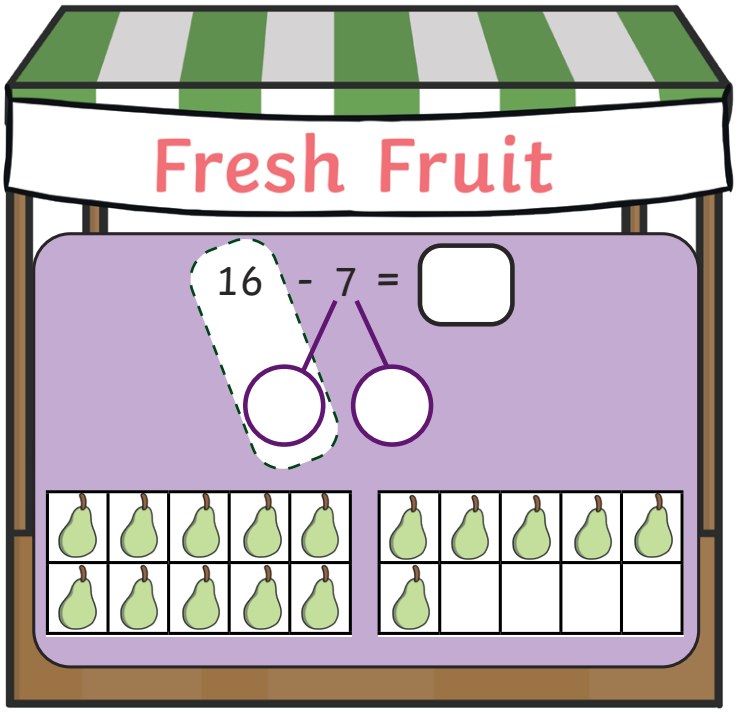


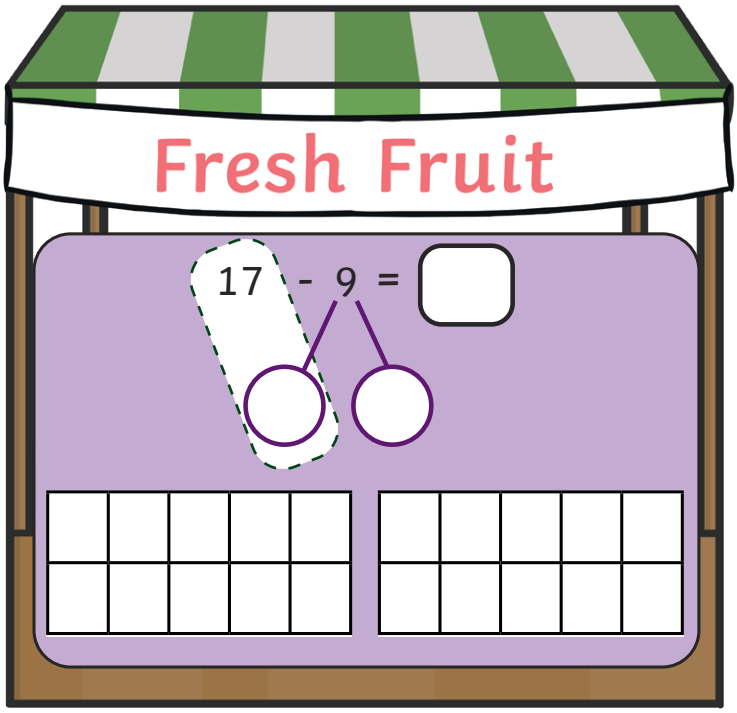


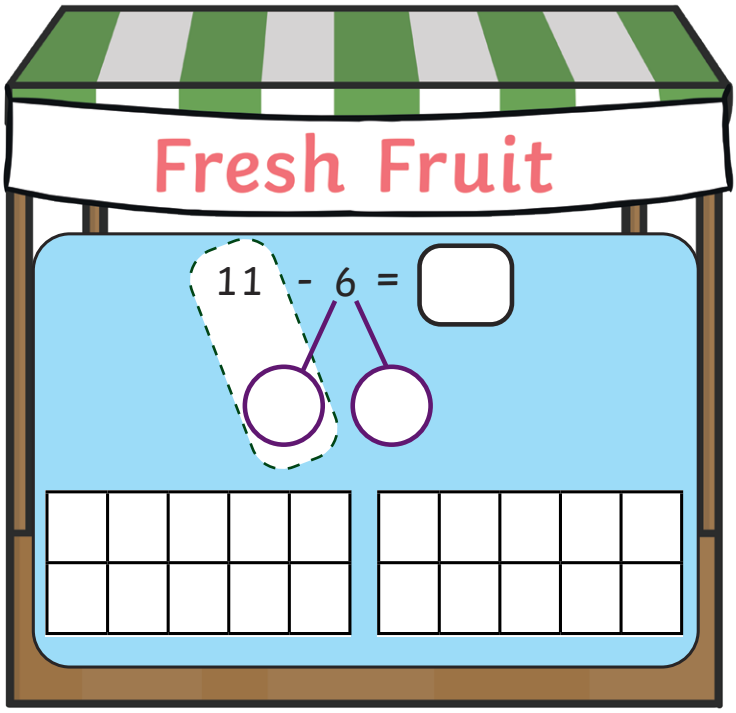




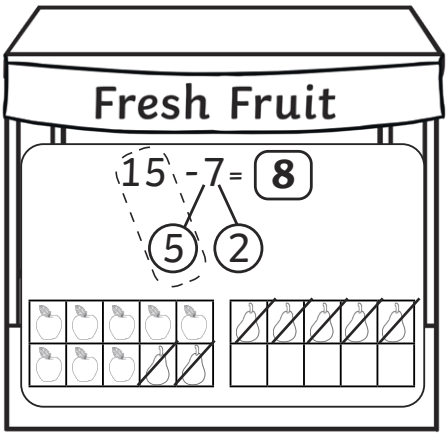

Fresh Fruit
12 - 8 =

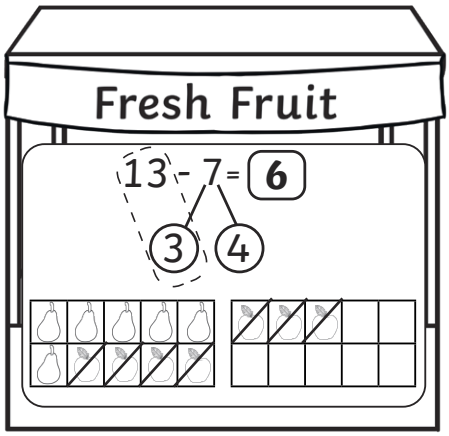

Fresh Fruit
16 - 7 =

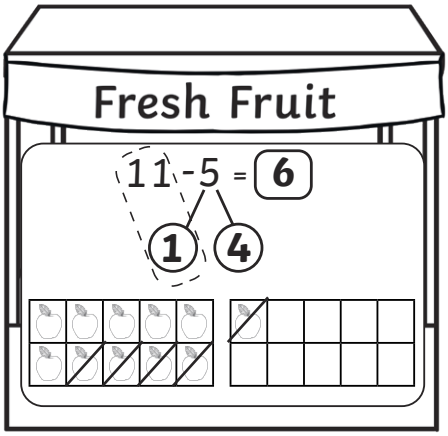

Fresh Fruit
17 - 9 =

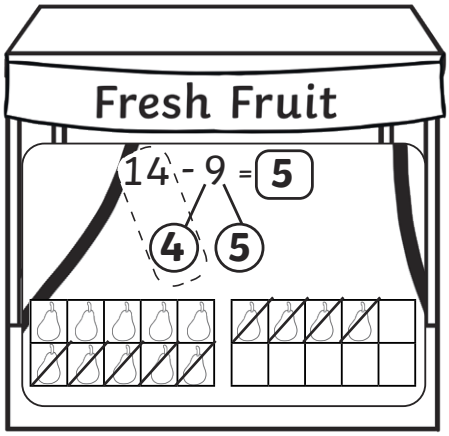

Fresh Fruit
11 - 6 =

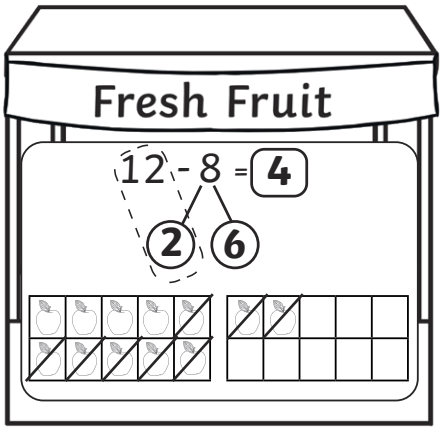
Subtract Across 10 **Answers**

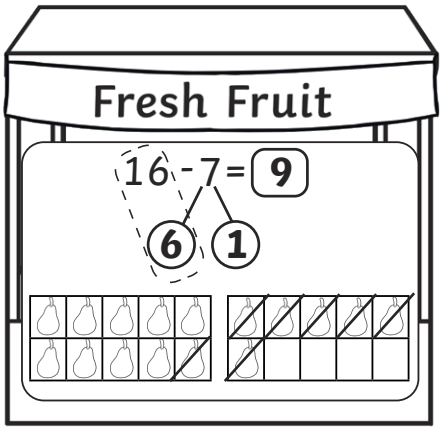


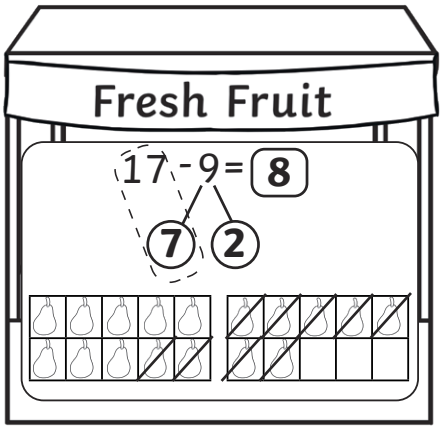


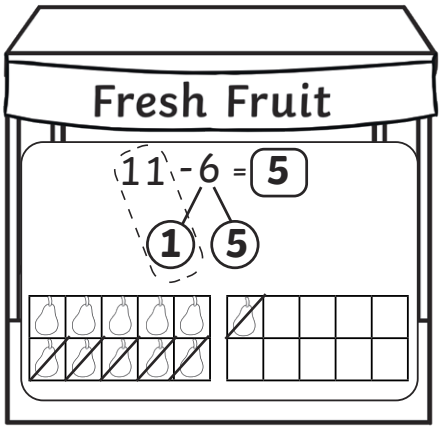










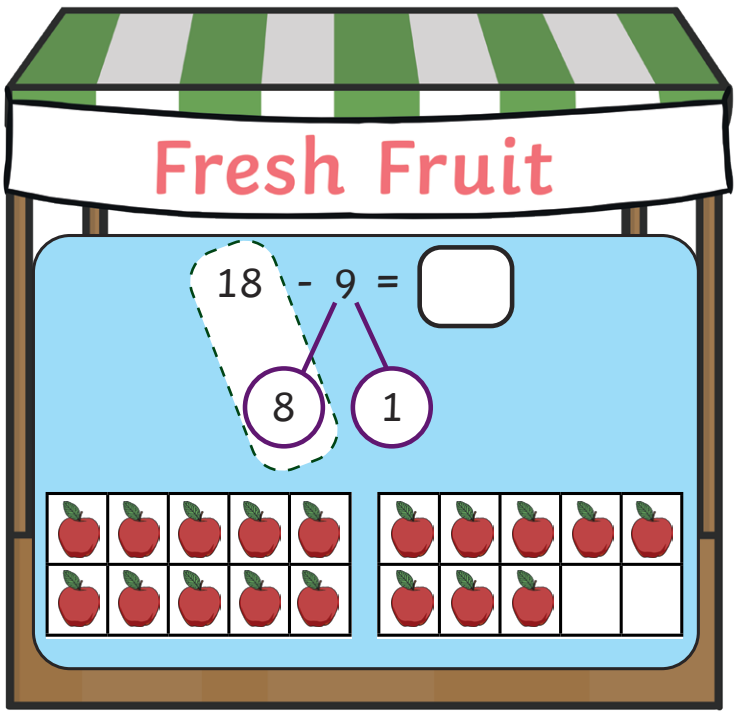


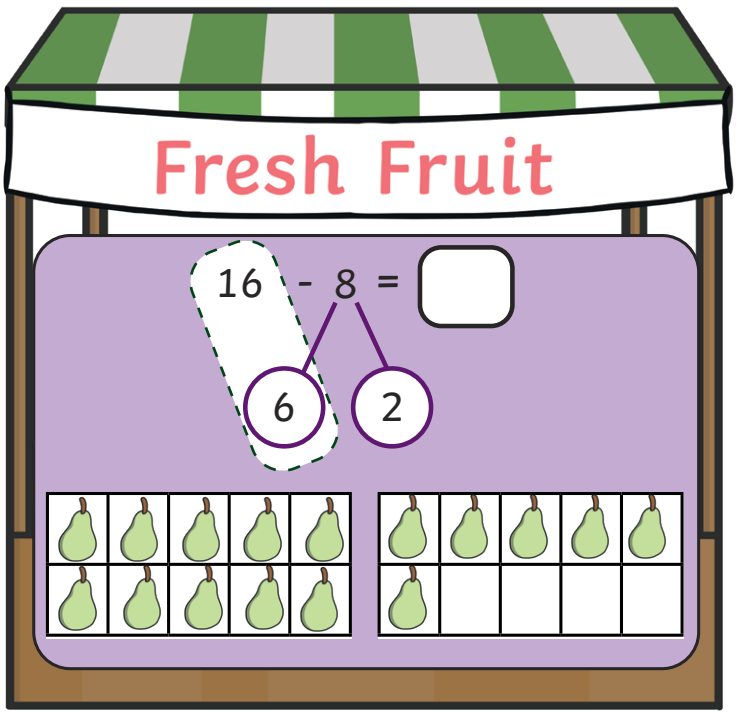
Subtract Across 10

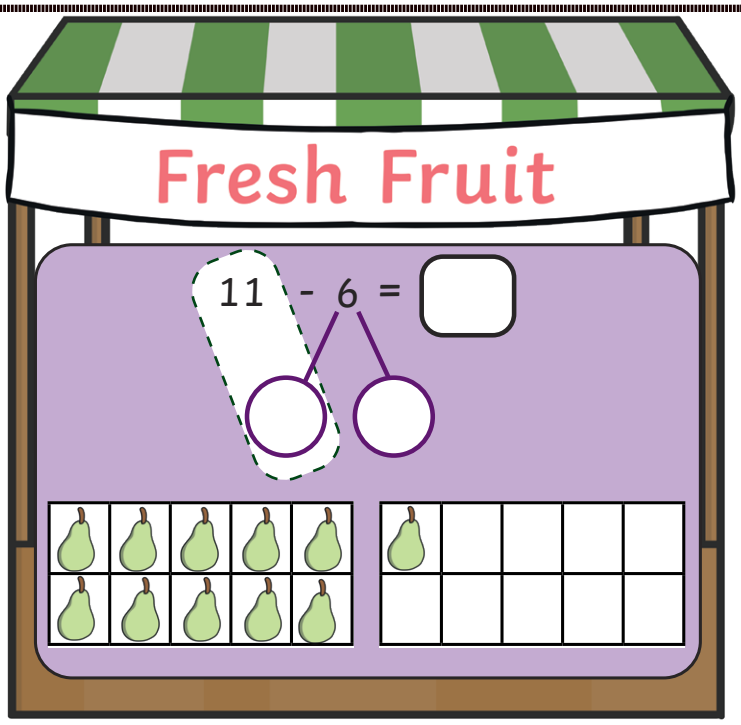
To subtract across 10.

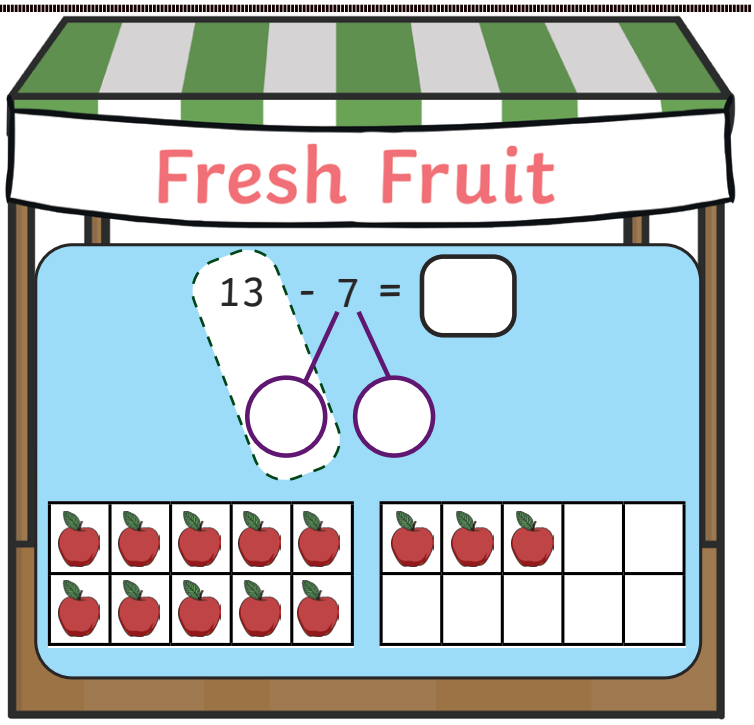
Use the part-whole models and ten-frames to subtract the numbers.

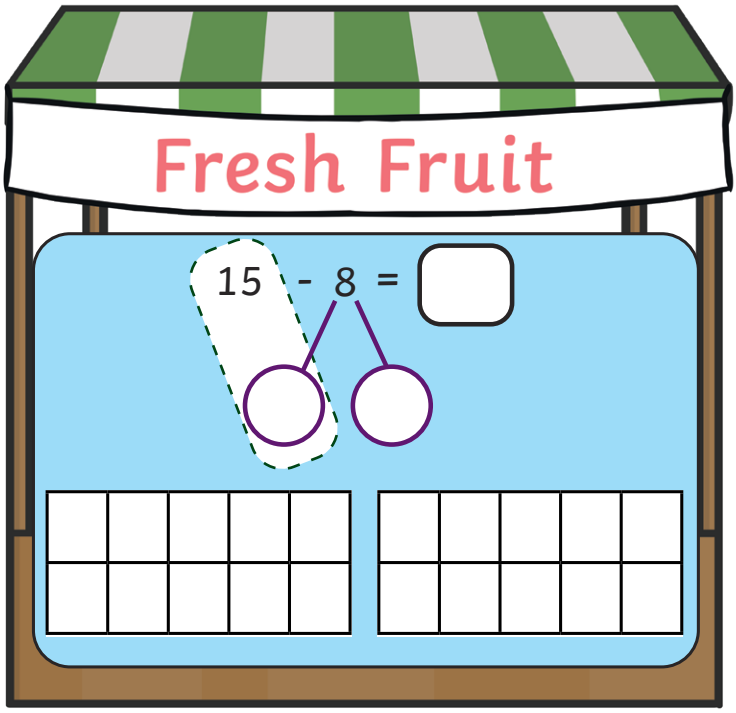
Cross out the pictures of fruit as you subtract them.

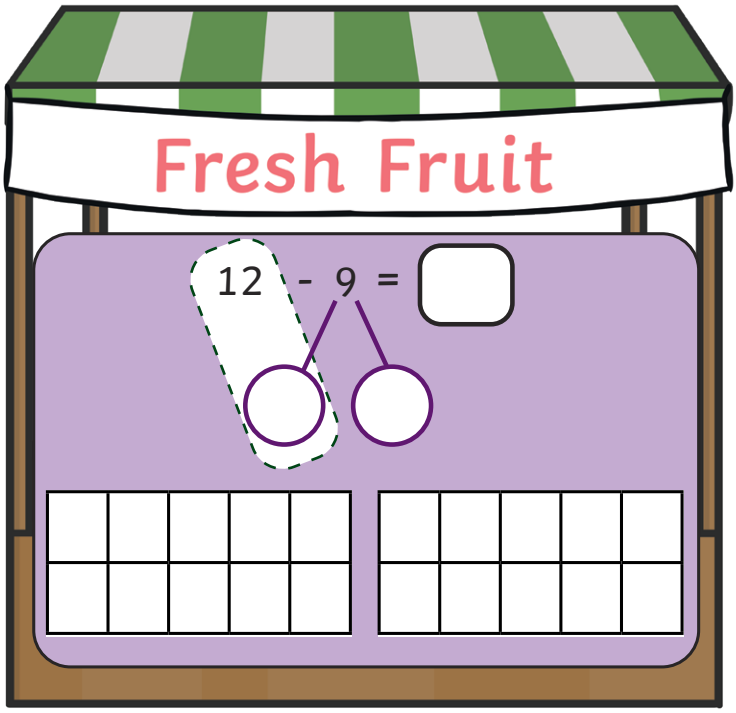


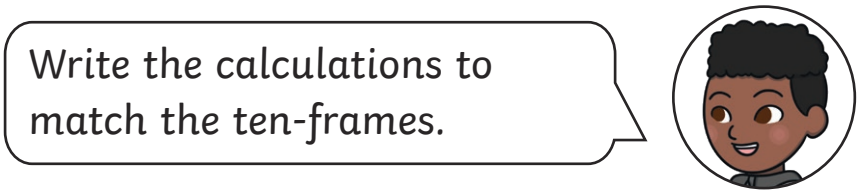


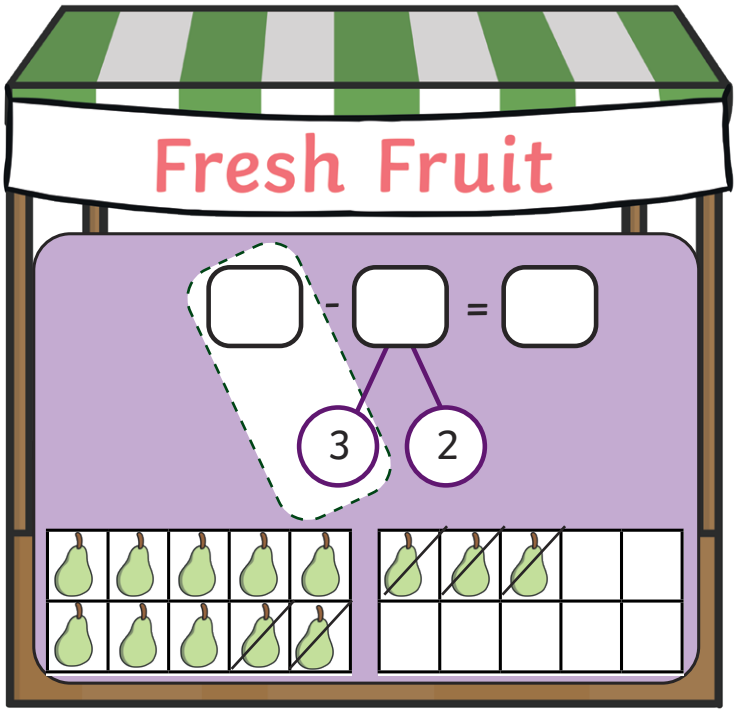


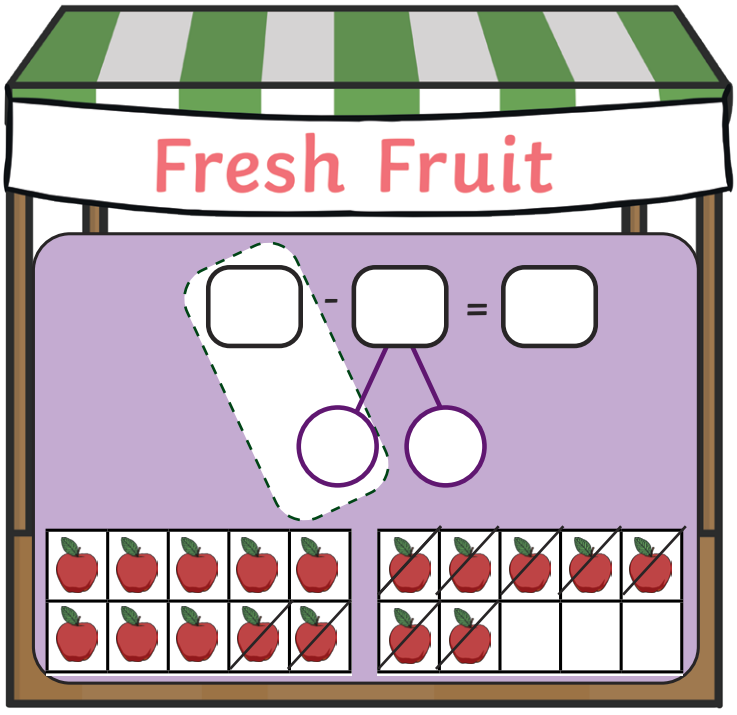



Fresh Fruit
15 - 8 =

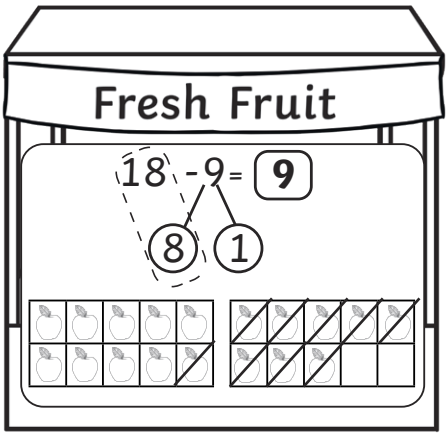

Fresh Fruit
12 - 9 =

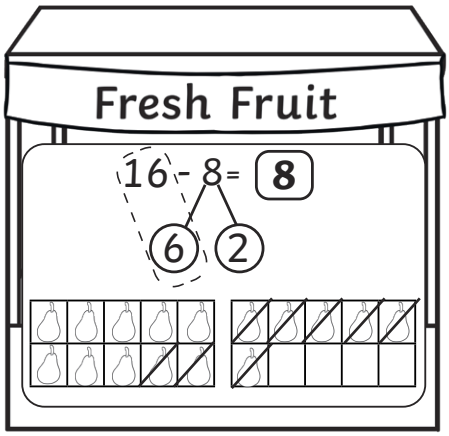

Write the calculations to match the ten-frames.

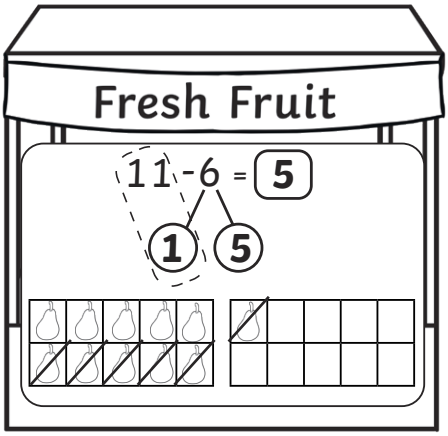

Fresh Fruit
-
=
3
2

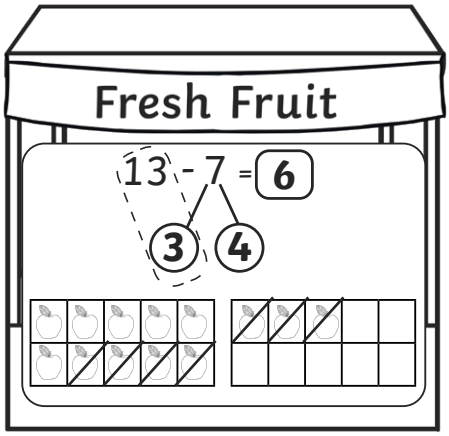

Fresh Fruit
-
=

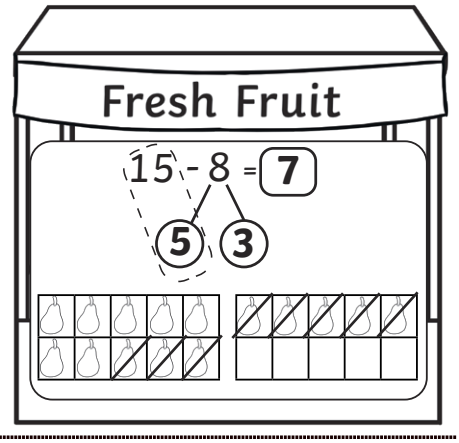
Subtract Across 10 **Answers**

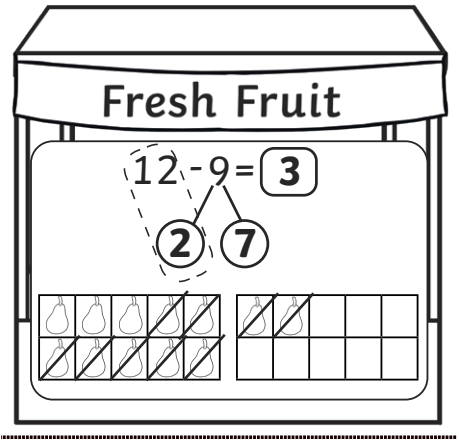


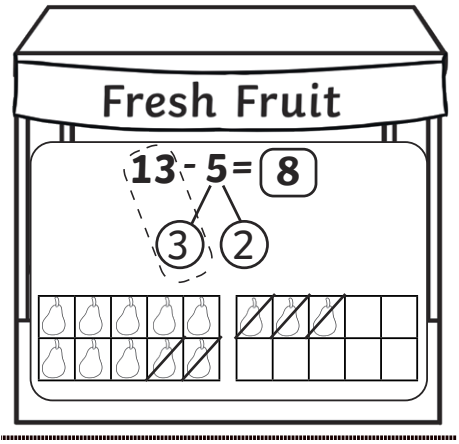


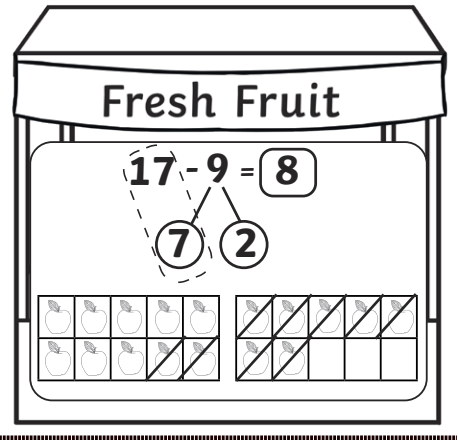












Tens	Ones