

Counting in Fives

Adult Guidance with Question Prompts



Children learn to count forwards and backwards in multiples of 5. Children will count forwards and backwards in fives from multiples of five. Children will need to use dice and 5p coins or the 'Dice 5s Cards' and '5p Cards' from the lesson resource pack.

Are the sequences going forward or backward in fives?

How do you know?

What numbers are missing?

Will this missing number end in a five or a zero?

Why do you think that?

What comes after five when we count back in fives?

How can you tell if these numbers are multiples of five?

Can you represent that number using 5p coins/dice fives?

Counting in Fives



Complete these sequences counting forwards and backwards in fives.

25	30				50
----	----	--	--	--	----

		15		5	
--	--	----	--	---	--

100	95			80	
-----	----	--	--	----	--

	60		70		
--	----	--	----	--	--

Circle the numbers that are multiples of 5.

55

5

60

45

30

9

32

2

15

51

70



Represent the multiples of 5 using dice pictures or 5p coins.

Counting in Fives

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Children learn to count forwards and backwards in multiples of 5. Children will need practical equipment to represent a problem involving the five times table. The equipment could include number shapes, 5p coins, sticks of five cubes, etc.

How many children are there?

Each child has five fingers. What do you think is the most efficient way to count all their fingers?

Why do you think that?

Can you prove it?

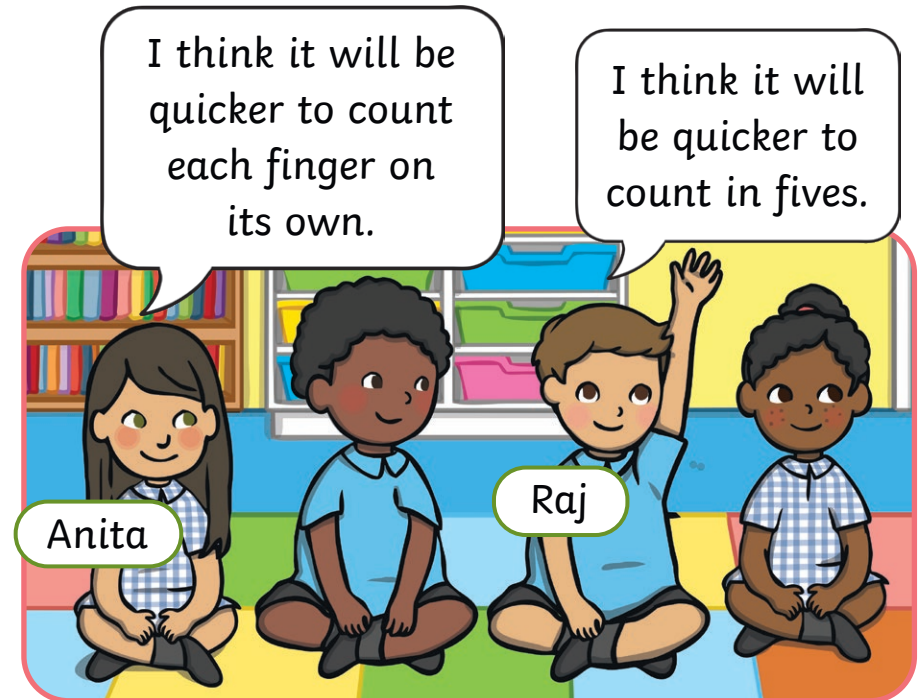
How many groups of five fingers does each child have?

Can you use equipment to represent the groups of five fingers we need to count?

Counting in Fives



A group of children have been asked to find out how many fingers they have altogether. Each child has 5 fingers.



Who do you agree with? Explain why.

Count in fives to find out how many fingers the children have. Use equipment to represent the total.

Counting in Fives

Adult Guidance with Question Prompts



Children learn to count forwards and backwards in multiples of 5. Children read clues about numbers that are multiples of five. They should then list all the possible solutions.

Clue A

What do we know about the number?

Could the number be 100? Why not?

Could it be 50? Why?

Clue B

What digit will be in the ones column if it is even and a multiple of 5?

Could it be 20? Why?

Could it be 10? Why not?

Clue C

What digit will be in the ones column? How do you know?

Could it be 75? Why not?

Could it be 5? Why?

Think of a multiple of five between 0 and 100 and give your friends clues to work out what the number is. Can you use the words 'greater than', 'less than', 'odd', 'even' or 'multiple of five' in your clues? How else could you describe your number?

Counting in Fives



Detective Donna is thinking of three numbers.

A

I am thinking of a 2-digit number. It is a multiple of 5. It is greater than 45. It has 0 in the ones column.

B

I am thinking of an even number. It is a multiple of 5. It is between 15 and 75.

C

I am thinking of a number less than 60. It is a multiple of 5. It is an odd number.



List all the possible solutions for clues A, B and C. Can you make clues like this for a friend to solve?

Counting in Tens



Adult Guidance with Question Prompts

Children count forwards and backwards in tens from any number. They work out the next numbers in sequences on number lines. Children will then need to continue a sequence containing money.

What number is marked first on the number line?

What number is marked next?

What is happening to the tens digit/ones digit?

Are the numbers getting larger or smaller?

Can you spot a pattern?

What numbers are marked on the number line?

What comes before 88 if you are counting in tens?

Can you mark this on the number line?

What is happening to the tens digit/ones digit?

Can you spot a pattern?

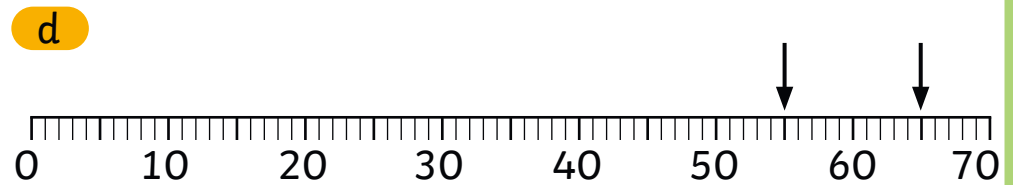
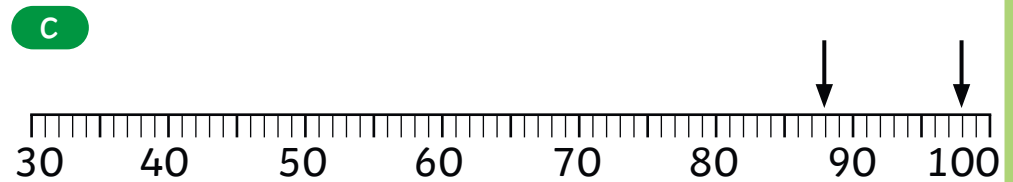
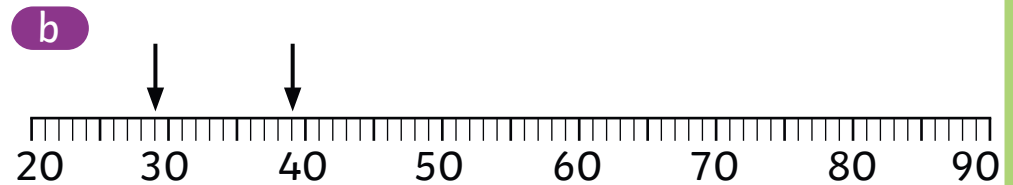
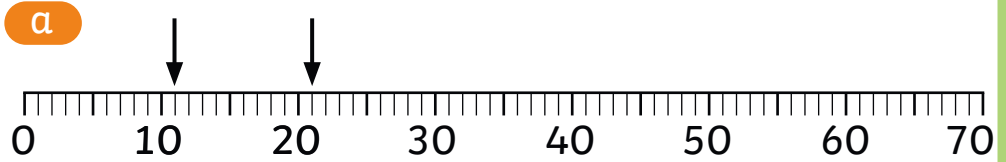
Are the numbers getting larger or smaller?

What would be the next number?

Counting in Tens



Count forwards and backwards in tens from the arrows. Mark the numbers on the number line.



Complete the number sequence:

14p 24p _____ _____ _____

Counting in Tens

Adult Guidance with Question Prompts



Children find the odd one out in sequences counting forwards and backwards in tens. They then use their understanding of counting in tens to correct the mistake.

What representations can you see here?

Can you read the sequence to yourself?

Are the numbers getting smaller or larger?

Can you spot a pattern?

What do you notice about the tens digit/ones digit?

Which one is the odd one out?

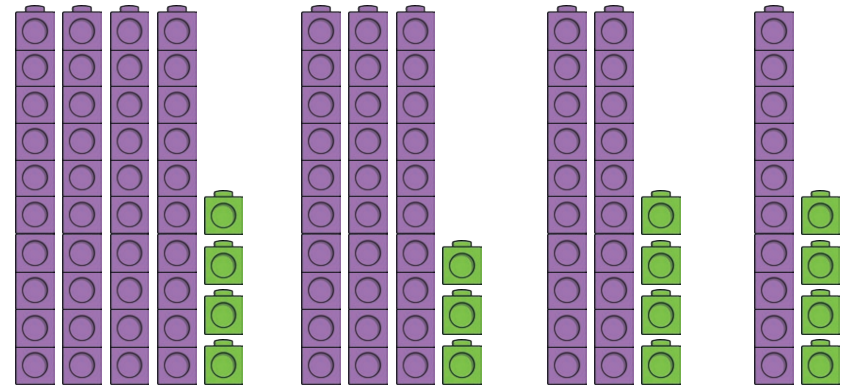
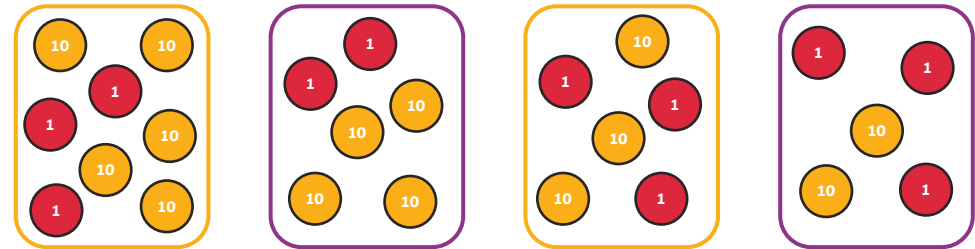
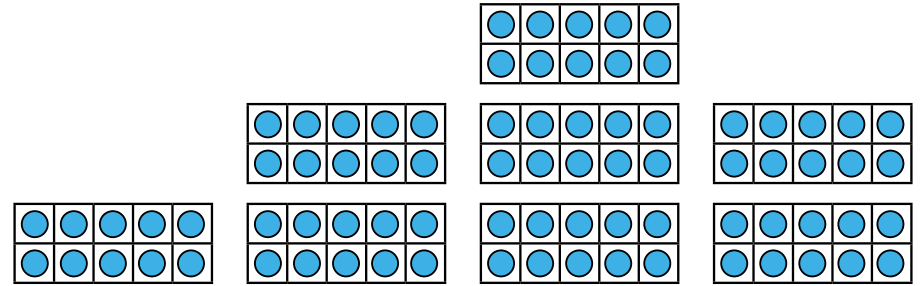
How do you know?

Can you correct the mistake?

Counting in Tens



Ring the odd one out in each sequence.



- 29
- 39
- 49
- 59
- 69
- 89

Explain how you would correct each incorrect number.

Counting in Tens

Adult Guidance with Question Prompts



Children count in tens to solve problems. They use concrete equipment (e.g. base ten blocks, hundred square, number shapes) or make drawings to help count in tens.

How can counting in tens help you solve this problem?

What equipment could you use to help?

Can you use a drawing to help?

Do you need to count forwards or backwards?

What number are you starting on?

Can you explain your answer?

Can you think of some of your own counting in tens problems?

Counting in Tens



Solve these problems by counting in tens.
Explain your reasoning for each one.

James and Debbie are both counting forwards in tens. James starts on 53 and Debbie starts on 32.



Will they say any of the same numbers?

Andrew has 4 doughnuts. The bakery sells doughnuts in packs of 10. He buys 4 more packs.

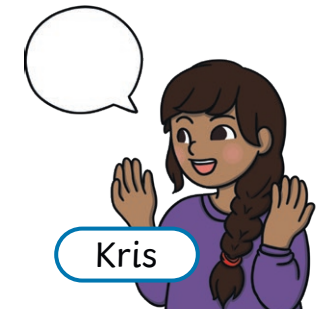


How many doughnuts does Andrew have altogether?

Shamina has 119p in her purse. She gives 5 friends 10p each.



How much money does she have left in her purse?



If I start on 140 and count backwards in steps of 10, will I say the number 100?

Think of your own problems that involve counting in tens. Can your friend solve them?

Counting in Threes

Adult Guidance with Question Prompts



Children count forwards and backwards in steps of three. They look for patterns and complete sequences that involve counting in threes. It will be useful if children have access to resources such as small manipulatives and number lines.

Which numbers are circled?

How many numbers are between each circled number?

In the first grid, are the numbers getting bigger or smaller?

In the second grid, are the numbers getting bigger or smaller?

What would be the next number in the sequence after 30?

How far can you continue?

What patterns do you see?

What is the same about the two sequences and what is different?

Counting in Threes



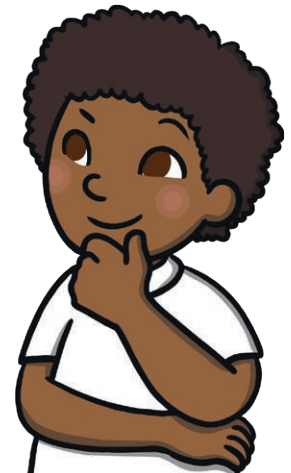
What do you notice about the numbers that are circled? Complete the sequences.

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

30	29	28	27	26	25	24	23	22	21
20	19	18	17	16	15	14	13	12	11
10	9	8	7	6	5	4	3	2	1

Can you explain any patterns to a partner?

What is the same and what is different?



Counting in Threes

Adult Guidance with Question Prompts



Children count forwards and backwards in steps of three. They spot and correct mistakes in sequences created through counting in steps of three. Children explain how they know if a number will be said when counting in steps of three from zero. It will be useful if children have access to resources such as small manipulatives and number lines.

Is the number track going forwards or backwards?

How can you identify the mistake?

Is 27 correct? Why?

Is 17 correct? Why not?

What have the children counted back in to get to 17?

What should 17 be?

How can you work out whether Joseph is correct or incorrect?

What numbers will he say that are close to 13 if he is counting forwards in threes from 0?

Counting in Threes



Joseph and Cara have been practising counting in threes.

Cara counted backwards in threes. Can you circle and correct her mistake on the number track?



Correction: _____



If I count forwards in threes from 0, I will say the number 13.

Is Joseph correct or incorrect?

Explain how you know.

Give your own statement about counting in threes and ask a partner to work out if it is correct or incorrect.

Counting in Threes

Adult Guidance with Question Prompts



Children count forwards and backwards in steps of three. With a partner, children take turns to use a spinner and follow the instructions involving counting in threes. It will be useful if children have access to resources such as small manipulatives and number lines.

If you are starting at 30, how will you work out what is three more/less?

What strategies could you use to count three more/less?

Could you use a number track to support you?

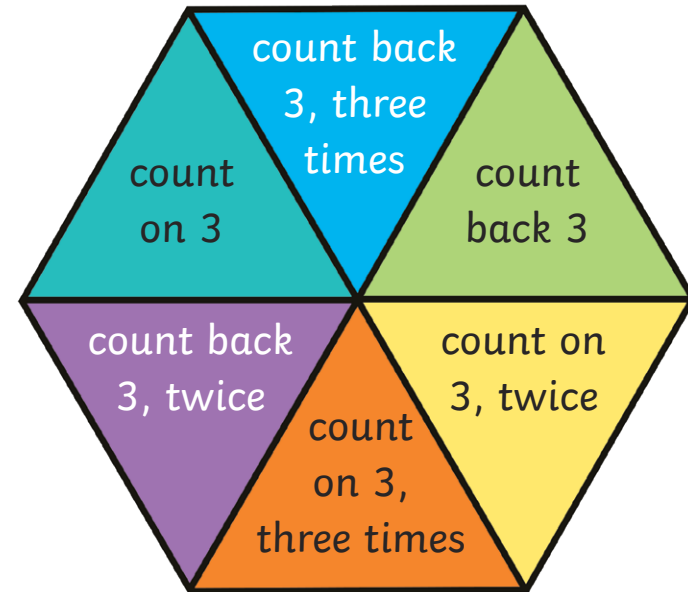
Could you use a number sentence to support you?

Children may need support through the activity keeping track of their total. They might write on the table on the activity card or record their counting in books or on a whiteboard. If children reach 0 and need to count back further, they should miss a turn.

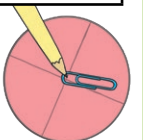
Counting in Threes



You and a partner each start with 30 points. Take turns with your partner to spin the spinner and count on or back from your total. After taking five turns each, the winner is the player with the greatest total.



Player 1	Player 2



Counting in Twos

Adult Guidance with Question Prompts



Children count on and back in twos from multiples of two. Children will need colouring pencils and number shapes for this activity.

What numbers are represented by the number shapes?

Is the sequence counting forwards or backwards?

What will come next?

How do you know?

Can you show me with number shapes?

Is the sequence counting forwards or backwards?

What numbers are missing from the sequence?

Can you continue the pattern on the section of the hundred square?

What pattern do you notice?

Is the sequence counting forwards or backwards?

What numbers are missing from the sequence?

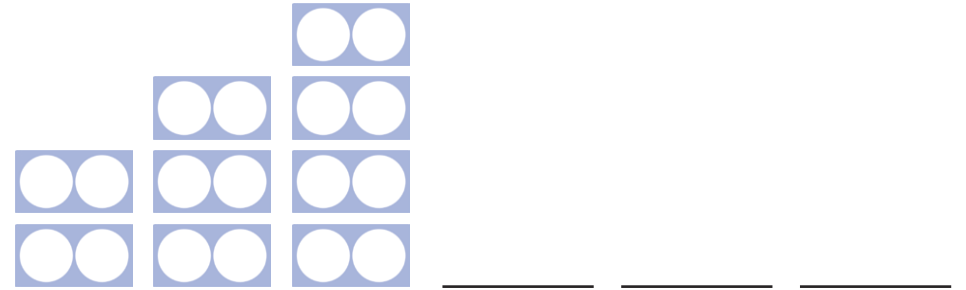
What was the same in these sequences?

What was different?

Counting in Twos



Continue these sequences by counting in twos.



90, 92, 94, _____, _____, _____

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

10, 8, 6, _____, _____, _____

What do you notice?

Counting in Twos

Adult Guidance with Question Prompts



Children count on and back in twos to solve a problem. Children will need concrete equipment and a number line to 30 for this activity.

What numbers will you say if you count in twos from 8 to 28?

Can you show me on a number line?

Did you say 16?

Did you say 32?

Why not?

How do we know if a number is odd or even?

Which numbers will you say when you count in twos from zero?

Look at the numbers. Are they odd, even or a mixture of both?

How do you know?

Can you show me with number shapes that all the numbers are even?

Do you think that this would always be true if you continued counting? Why?

Counting in Twos



Amira says,



When I count in twos from 8 to 28, I will say the numbers 16 and 32.

Do you agree with her?
Prove it using a number line.

When I count in twos from 0, I will only say even numbers.



Is she correct? Prove it using equipment.

Counting in Twos

Adult Guidance with Question Prompts



Children count on and back in twos to explore the numbers of monkeys at the zoo. Children may find it useful to use equipment such as number shapes to help them investigate different possibilities.

Could there be 24 monkeys at the zoo? Why not?

What equipment could you use to help?

What do you need to remember about how many monkeys are indoors?

Where would be a good place to start to make sure you work systematically to find all the answers?

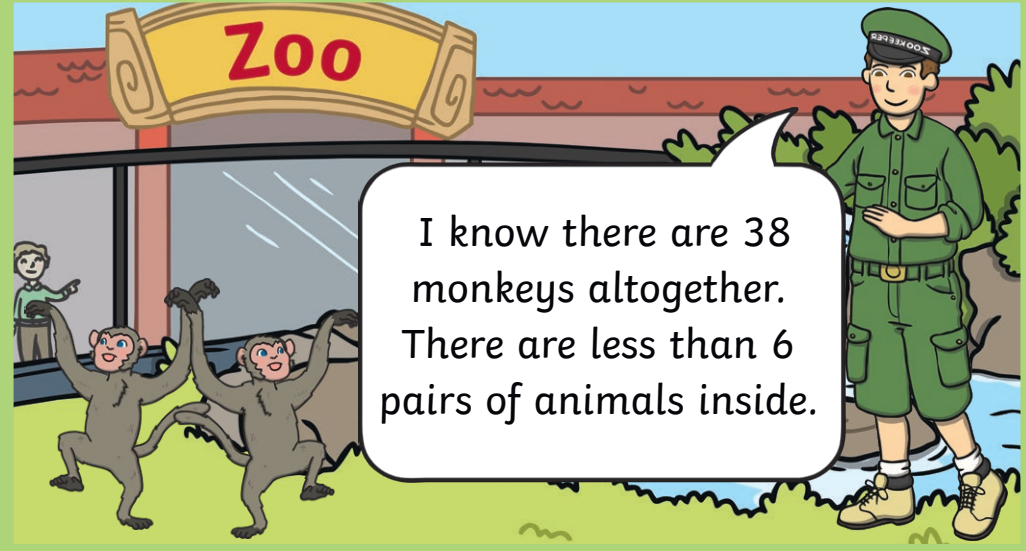
Is Lesley correct?

How do you know? Show me with equipment.

Counting in Twos



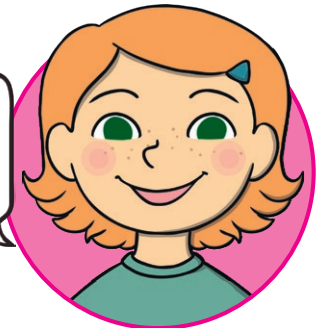
Zac is feeding his pairs of monkeys at the zoo. He wants to find out how many monkeys are inside and how many monkeys are outside.



Use the clues to find out how many monkeys are inside and how many monkeys are outside.

Lesley is counting in twos.

Two less than forty-eight is fifty.



Is Lesley correct? Prove it.

25	30	35	40	45	50
----	----	----	----	----	----

25	20	15	10	5	0
----	----	----	----	---	---

100	95	90	85	80	75
-----	----	----	----	----	----

55	60	65	70	75	80
----	----	----	----	----	----



There should be circles around: 55, 30, 5, 15, 60, 45 and 70.

These numbers represented in different ways.

Counting in fives will be quicker as there are less numbers to say to get to the total.

The children have 40 fingers in total (eight hands with five fingers on each).



A could be 50, 60, 70, 80 or 90.

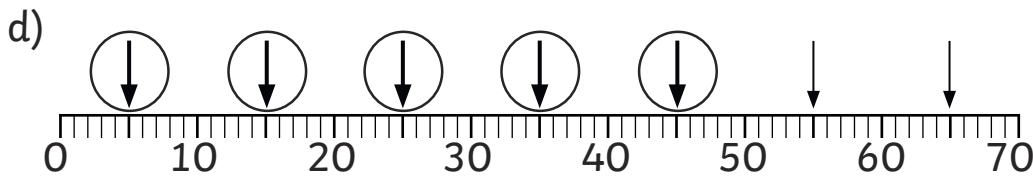
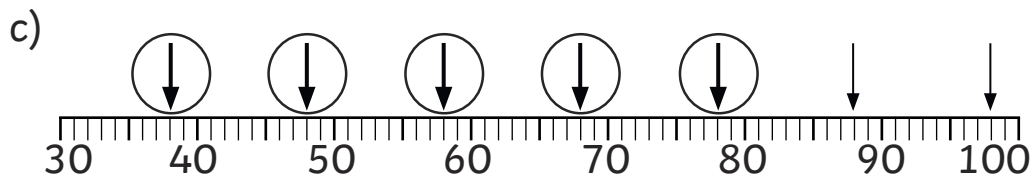
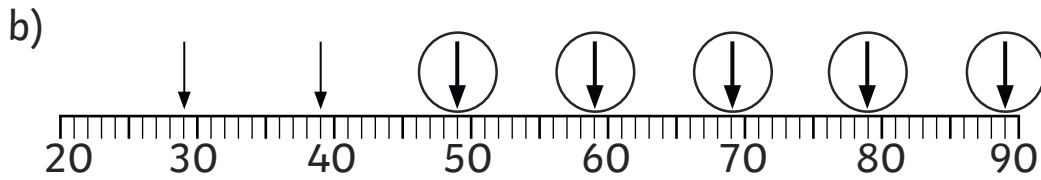
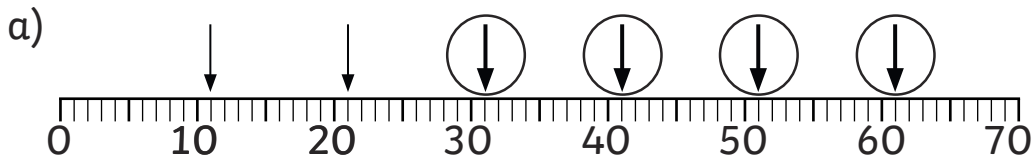
B could be 20, 30, 40, 50, 60 or 70.

C could be 5, 15, 25, 35, 45 or 55.

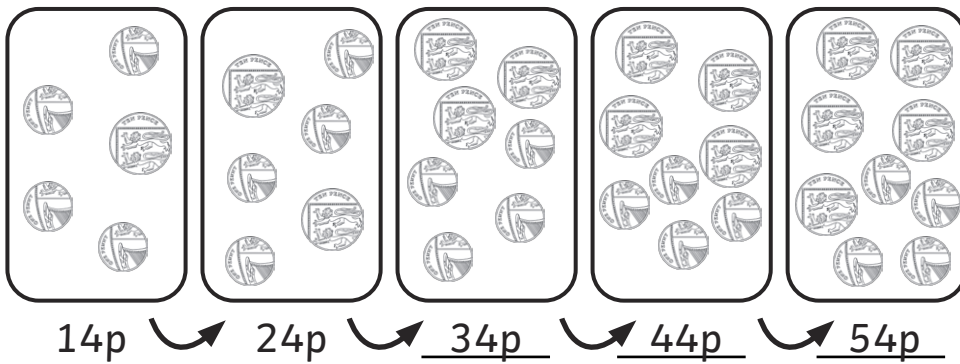


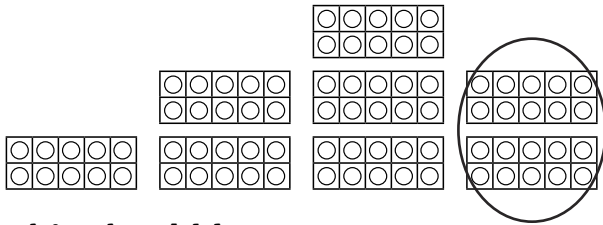


Count forwards and backwards in tens from the arrows. Mark the numbers on the number line.

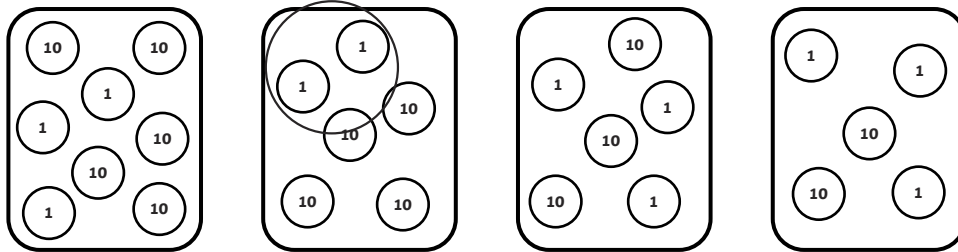


Complete the number sequence:

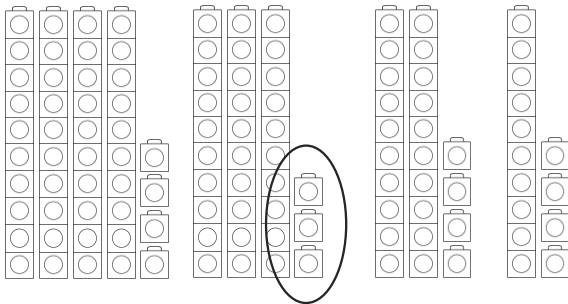




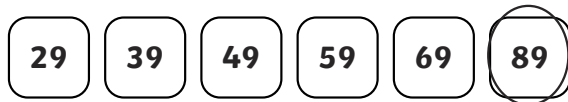
This should be 40.



This should show 43. There should be 3 ones instead of 2.



This should be 34. There should be 4 ones instead of 3.



This should be 79.

James and Debbie will not say the same numbers. James' numbers will always have a 3 in the ones column and Debbie's will always have a 2 in the ones column.



Andrew has 44 doughnuts.

Shamina has 69p left.

Kris will say 100 as he will go:

140, 130, 120, 100



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

30	29	28	27	26	25	24	23	22	21
20	19	18	17	16	15	14	13	12	11
10	9	8	7	6	5	4	3	2	1

Children's own responses. These may include: The numbers create diagonal patterns on both number grids. In the first grid, the numbers are getting bigger but in the second one, the numbers are getting smaller. The pattern alternatives between one odd number and then one even number.



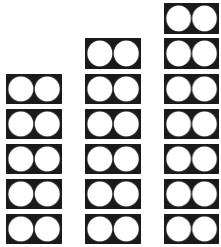
30	27	24	21	17	15
----	----	----	----	----	----

Correction: 18

Accept any correct explanation that shows that Joseph is incorrect. He will say the numbers 12 and 15 but not 13.



Accept any correct counting in threes from 30.



90, 92, 94, 92, 90, 88

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

10, 8, 6, 4, 2, 0

16 will come between 8 and 28 when counting in twos but 32 won't because it is greater than 28.



When counting from 0 in twos, you will only say even numbers.

Possible answers:



Monkeys Inside	Monkeys Outside
2	36
4	34
6	32
8	30
10	28

Lesley is incorrect as 2 less than 48 is 46. She did 2 more than 48 to get 50.

