Diving Deeper Maths challenges – Numbers to 50.

To stretch your learning in this unit you could try to answer some of these problem and reasoning questions. They require you to explain your thinking and give an explanation as to how you know the answer.
Try one or two per day if you are looking to stretch your mathematical thinking.

1)

Annie counts how many muffins she has.

I have 35 muffins.

| 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |

Do you agree with Annie?
Explain your answer.

2)
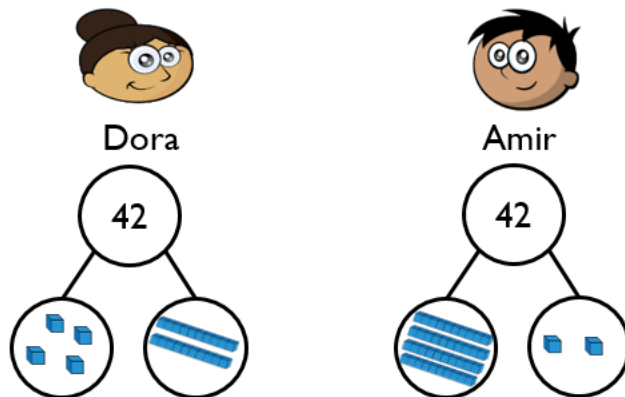
Eva is counting from 38 to 24

Will she say the number 39?
Will she say the number 29?
Will she say the number 19?

Explain how you know.

3)

Dora and Amir both try to build the same number.

Dora

Amir

42

42

Who is correct?
Can you explain the mistake that has been made?

4)

Always, Sometimes, Never…

When you find one more than a number, only the ones digit will change.

Convince me using some examples.

5)

Choose the correct numbers to make the sentences correct.

28 26 33 45

36 43 35 49

[   ]   is one less than 27

34 is one less than [   ]

[   ]   is one more than 44
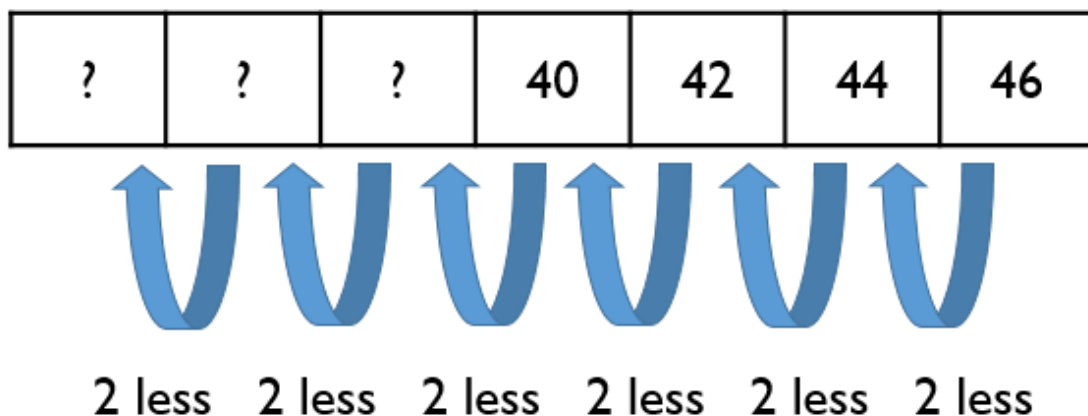
50 is one more than [   ]

6)

Teddy is comparing two numbers.

My number is larger than 19 but not one more than 19

23 >

What could Teddy's number be?
What can't it be?

7)

Count in 2s backwards to complete the number track.

| ? | ? | ? | 40 | 42 | 44 | 46 |

2 less   2 less   2 less   2 less   2 less   2 less

If you continue counting, will you say the number 25?

8)

Odd One Out

25   30

27   45

Which is the odd one out? Explain your answer.