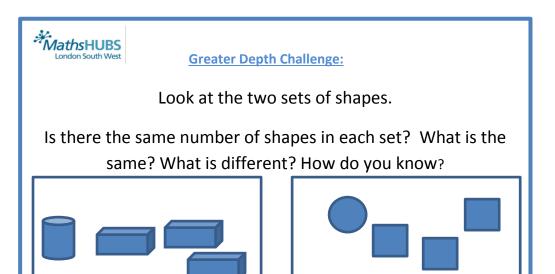


# Number & Place Value: Read, write and represent numbers to 100

Know that when objects are rearranged the number remains the same.

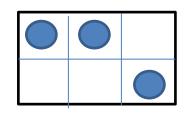




### **Greater Depth Challenge:**

Can you change the pattern but not the amount of objects?

Is it easier to see a number in one pattern than another?





#### **Greater Depth Challenge:**

Sam has these dominoes: Aliya has these dominoes:







Aliya thinks she has more spots on her dominoes than Sam.

Is she correct? Explain your answer.



### **Greater Depth Challenge:**

Practical – small amount of counting objects 0-10.

I have a pile a counting bears. Sam picks up a handful.

How many do you think there are now altogether? Why do you think this?

Start the sentence with 'I think there are....because.....'



Learning focus	2 Count forwards and backwards up to 100 in multiples of 2 from any multiple of 2.
	2 Count sets in the multiple, e.g., 8 socks on the line, count the pairs as 2, 4, 6, 8.
	Recognise some patterns in the number system, e.g., when counting in 2s from 0, the numbers always end in 0, 2,
	4, 6 or 8 and these are even numbers.



Elsa started counting in 2s and has reached number 20. She has said 10 numbers. What number did Elsa start counting from?

What if Elsa was counting forwards?

What if Elsa was counting backwards?



### **Greater Depth Challenge:**

A unicycle has one wheel. A bicycle has two wheels. Bob counted 13 wheels at the bike shop.

How many unicycles are there?

How many bicycles are there?

Explain how you worked out your answer.

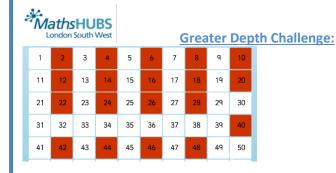


## **Greater Depth Challenge:**

Use book 'One is a snail, ten is a crab'

Sam was sunbathing on the beach. When he woke up he saw 18 legs. Which creatures could he see?

Is there only one answer? How many ways can you find? How do you know?



Have all the correct numbers been highlighted?

Can you prove to me that they have/haven't?



Learning focus	Count forwards and backwards up to 100 in multiples of 10 from any multiple of 5.
	Count sets in the multiple, e.g., sticks made from 10 Multilink, 10, 20, 30.
	Recognise some patterns in the number system, e.g., when counting backwards or forwards in 10s from 0 the
	numbers always end in 0.



Rob has counted aloud '10, 20, 30, 40, 50' using bundles of 10 sticks. Rob has 6 bundles.

Has Rob counted correctly?

It can't be.... because....
It should be....because....



### **Greater Depth Challenge:**

Scully says 'If I start at 15 and count in fives I will say 56.' Is he correct?

Explain your answer.

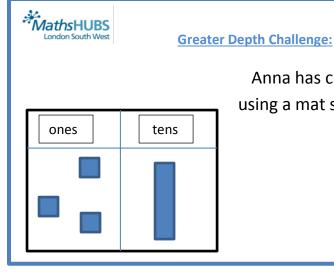
Dan says 'If I start at 25 and count on in 10 I will say 95.' Is he correct?

Explain your answer.



Learning focus

Use apparatus to make a teens number and record the tens and ones, e.g., they should know why they need to write 15 and not 51 for the number fifteen.



Anna has created the numbers 13 using a mat showing tens and ones.

Has she created her number correctly?

Explain your answer.



### **Greater Depth Challenge:**

Anna says there are 5 tens in 15. Is she correct? Explain your answer.

Jack says there are 15 ones in 15. Is he right or wrong? Explain your answer.



# Number & Place Value: Given a number, identify one more and one less.

Learning focus	Find the number that is one more or one less than a given number by adding / removing one object from a set then
	counting the new number.
	Know that, when counting forwards, each number is one more and the numbers get bigger; when counting back,
	each number is one less and the numbers get smaller.



## **Greater Depth Challenge:**

Look at the number 21.

Did you notice that the second digit is one less than the first digit?

How many other examples of this can you find from 10-50?



### **Greater Depth Challenge:**

Look at the number 12.

Did you notice that the second digit is one more than the first digit?

Can you find more double digits where this is also true?



### **Greater Depth Challenge:**

Dave says 'I have 48 counters and I add one more. I now have 58 counters'.

Is Dave right or wrong?

Explain your answer using a number sentence to prove it.



### **Greater Depth Challenge:**

Solve,

Fill in the number sentence below using the above sentences to help you.

Explain how you got your answer.



Learning focus	Identify a missing number in a spoken sequence (forwards / backwards), e.g., 44, 45, 46, (clap), 48.
	Find missing or covered numbers on a number track.



Jas was counting aloud in the playground. She counted '40, 38, 36, 32'. Was Jas right or wrong? Explain your answer.

I think Jas was ... because ...

Explain the rule.



### **Greater Depth Challenge:**

Jas said '11, 13, 15, ..., 19'. She forgot which number comes in between 15 and 19. Which number has Jas missed out?

It must be ... because ...

Explain the rule.



### **Greater Depth Challenge:**

24		28
	36	
		48

Fill in the missing numbers.

There is a mistake with this grid. Can you find what it is?



**Greater Depth Challenge:** 

70	60	50	40	

Fill in the missing numbers to make the sequence



<u>Number & Place Value:</u> Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least.

Learning focus Identify which of two sets contains more objects, by matching the objects and counting the number in each set.



#### **Greater Depth Challenge:**

Isha has a bag of even number cards.

Isha says '22 is the biggest number card and 2 is the smallest number card in my bag'.

How many cards are in Isha's bag?

What are the cards in Isha's bag?



### **Greater Depth Challenge:**

Isha has a bag of even numbers to 10.

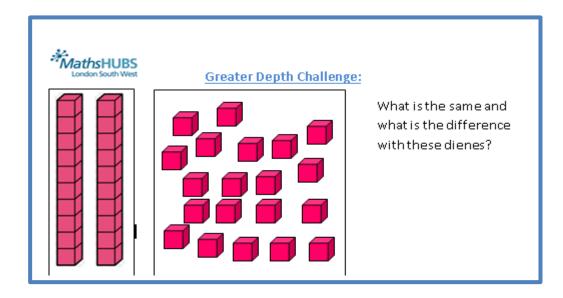
Andrew has a bag of odd numbers to 11. They add the number cards in their bags. Who will have the highest amount of cards?

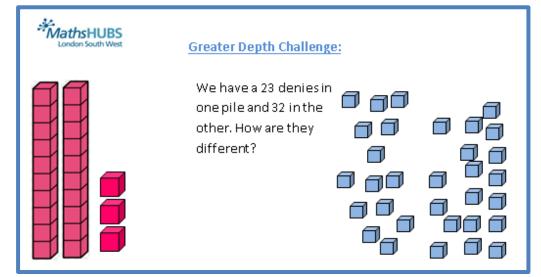
Explain your reasoning.



Learning focus

Understand the significance of the first digit in a two-digit number, supported by objects and pictorial representations, e.g., 23 is a smaller number than 32.







Learning focus

Understand place value in two-digit numbers and partition them into tens and ones, e.g., count 15 straws, and bundle 10 together with an elastic band leaving 5 as single straws and relate this to the way that 15 is written.



**Greater Depth Challenge:** 

Practical- give children large sets of objects to count.

Should we count these objects in ones or tens?

What difference does it make?

Explain your answer.



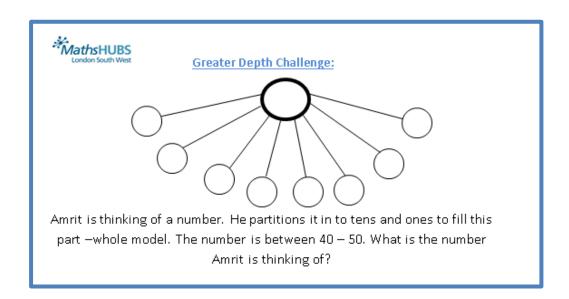
**Greater Depth Challenge:** 

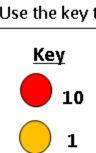
Practical- show children bundles of straws in 5's rather than 10s and 5 extra single straws.

How can you make 11?

How can you make 15?

How can you make 22?





MathsHUBS

Greater Depth Challenge:

Use the key to represent all the odd numbers from 1-21



Learning focus	Find and compare two numbers on a number track or number line using mathematical language.
	Compare numbers, knowing which is bigger / smaller using knowledge of where numbers lie on a number line, e.g.,
	find numbers lying between 15 and 25.



Look at this number line.

5

10

Harry has placed some numbers on the line.

Has he placed his numbers in the correct place?

Explain your answer.



## **Greater Depth Challenge:**

Sharan is looking at an incomplete number line.

She says the number before 45 is 5 less.

The number after 45 is 5 more.

What are the missing numbers?

Can you write the number sentences for the numbers that were missing?