

















# Number and Place Value:

## Representing Numbers up to 50 Using Objects

<b>Aim:</b> 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.  To recognise and represent numbers up to 50.	<b>Success Criteria:</b> I can read and write numbers up to 50.  I can count objects up to 50 in tens and ones.  I can use objects to represent numbers up to 50.	<b>Resources:</b> <a href="#">Lesson Pack</a>  Tens and ones equipment - for example, base ten blocks, number shapes or ten-frames
	<b>Key/New Words:</b> Say, read, object, count, forwards, backwards, tens, ones, represent.	<b>Preparation:</b> <a href="#">Number Cards to 50</a> - 1 per pair/group  <a href="#">Diving into Mastery Activity Cards</a> - as required

**Prior Learning:** It will be helpful if children can count, read and write numbers up to 50 confidently as taught in [Read and Write Numerals to 50](#).

### Learning Sequence

	<b>Remember It:</b> Use the <a href="#">Lesson Presentation</a> to show a selection of number sequences. Ask the children to spot the missing numbers. They could record these numbers on whiteboards. Encourage the children to explain how they worked out the missing number. <b>Can the children read and write numbers up to 50?</b>	
	<b>Lemur's Lunch:</b> Introduce Lisa, a ring-tailed lemur. Discuss why the figs are difficult to count. Explain that the figs can be represented by cubes and ask children how the cubes can be arranged to make them easier to count. Work as a class to count the cubes on the <a href="#">Lesson Presentation</a> . Start by counting them individually, but work towards recognising tens and ones. Repeat with the second example. Can the children count up to 50 objects by counting in tens and ones? Ask the children to reason about whether the zookeeper has counted Lisa's figs correctly. They can explain to a partner what mistake the zookeeper could have made.	
	<b>Feeding Time:</b> Introduce the other zoo animals shown on the <a href="#">Lesson Presentation</a> . Explain that their food is represented in different ways. Children decide which food goes with each animal. Look out for children who may confuse tens and ones - for example, 42 and 24.	
 	<b>Lemur's Lunch Game:</b> Children work in groups using the <a href="#">Number Cards 0-50</a> and tens and ones representations. They turn all the number cards over so that they are face down. One child selects a card at random and keeps this number to themselves. They make the number using their tens and ones representations and reveal it to the rest of the group. The rest of the group must then try to work out which number card the child has by looking at the number that has been represented and write their answer on a whiteboard. <b>Can the children use objects to represent numbers up to 50?</b>	
	<b>Diving into Mastery:</b> Schools using a mastery approach may prefer to use the following as an alternative activity. These sheets might not necessarily be used in a linear way. Some children might begin at the 'Deeper' section and in fact, others may 'dive straight in' to the 'Deepest' section if they have already mastered the skill and are applying this to show their depth of understanding. <ul style="list-style-type: none"> <li> Children count representations of numbers up to 50.</li> <li> Children reason about whether objects are easier to count when randomly arranged or neatly lined up.</li> <li> Children count base ten blocks up to 50 and solve place value true or false statements.</li> </ul>	
	<b>Reflect:</b> Children show what they have learnt by recognising numbers to 50 shown with different representations on the <a href="#">Lesson Presentation</a> and counting on to 50 from that point. They could do this with a partner or individually on a whiteboard.	

<b>Explore it</b> <b>Findit:</b> Using <a href="#">Number Cards 0-50</a> , try to find objects around the room to represent numbers up to 50. <b>Paintit:</b> Children use the top end of a paintbrush to create dots to show what written numbers up to 50 represent. <b>Bounceit:</b> Using <a href="#">Number Cards 0-50</a> and a ball, children select a card at random and then try to bounce the ball as many times as the number the card indicates. If the child is able to bounce the ball the correct number of times, they keep the card. The player with the most cards wins. <b>Learnit:</b> Children will find this visually exciting <a href="#">Knowledge Organiser</a> a useful tool for recognising numbers up to 50 in different representations.
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				<b>Delivered By:</b>			<b>Support:</b>		
<b>Success Criteria</b>	<b>Me</b>	<b>Friend</b>	<b>Teacher</b>	<b>T</b>	<b>PPA</b>	<b>S</b>	<b>I</b>	<b>AL</b>	<b>GP</b>
I can read and write numbers up to 50.				<b>Notes/Evidence</b>					
I can count objects up to 50 in tens and ones.									
I can use objects to represent numbers up to 50.									
Next Steps									
) _____									
) _____									

<b>T</b>	Teacher	<b>I</b>	Independent
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## Disclaimer/s

We hope you find the information on our website and resources useful.

### Animations

This resource has been designed with animations to make it as fun and engaging as possible. To view the content in the correct formatting, please view the PowerPoint in 'slide show mode'. This takes you from desktop to presentation mode. If you view the slides out of 'slide show mode', you may find that some of the text and images overlap each other and/or are difficult to read.

To enter slide show mode, go to the **slide show menu tab** and select either **from beginning** or **from current slide**.

# Maths

## Number and Place Value

# Need a coherently planned sequence of lessons to complement this resource?

**Lesson Breakdown**

Below is our suggestion for the most coherent and progressive sequence to teach this area of Place Value, steps on the White Rose Maths scheme of learning although we have not aimed to mirror the exact order in which the lessons are presented.

**Count Up and Back from 20 (1): Counting to 20**

This engaging holiday-themed lesson has been designed to help children learn numerals. The lesson provides differentiated activities where children count forwards and backwards, beginning with 0, 1, or from any given number. Children also have the opportunity to develop fluency, reasoning and problem-solving skills. Finally, children apply their learning and work together to solve a problem.

**NC Statement:** Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number.

**Lesson Aim:** To count up to 20.

**Count Up and Back from 20 (2): Counting Back from 20**

This exciting space-themed lesson has been designed to help children learn numerals. The lesson includes differentiated activities where children count forwards and backwards, beginning with 0 or 1, or from any given number. Children also have the opportunity to develop fluency, reasoning and problem-solving skills. Finally, children apply their learning and work together to solve a problem.

**NC Statement:** Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number.

**Lesson Aim:** To count back from numbers to 20.

**Count, Read and Write Numbers in Numerals (1): Read and Write Numbers in Numerals**

This delightful Alice in Wonderland-themed lesson teaches children to count to twenty. The lesson includes differentiated games and activities where children also have the opportunity to develop fluency, reasoning and problem-solving skills. Finally, children apply their learning and work together to solve a problem.

**NC Statement:** Count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens.

**Lesson Aim:** To count, read and write numbers to 20 in numerals.

**Introduction**

In this unit, children gain confidence in counting, reading and writing numbers up to 100. They develop fluency in identifying and representing numbers in different representations and in applying these skills in different contexts. Children practise using the language of 'less' and 'least', 'more' and 'most', and 'equal to' to compare numbers in different representations. They also learn to count in steps of two, five and ten, and write numbers up to twenty in numerals and words. These lessons include Diving into Mastery cards which include fluency, reasoning and problem-solving activities.

**Teacher Note:** The year 1 place value objective count, read and write numbers to 100 in numerals, count in multiples of twos, fives and tens is closely linked to the year 1 multiplication and division objective solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher. Please head over to the Multiplication and Division Topic Area to find some more super lessons to support counting in twos, fives and tens.

**Resources**

A range of sensory material, such as foam, sand, water and fabric.

**Assessment Statements**

By the end of this unit:

children working towards the expected level will be able to:

- Count forwards up to 100
- Read and write numbers up to and beyond 50 in numerals.
- Read and write numbers from one to twelve in words.
- Count in twos, fives and tens up to 50 using objects.
- Say one more or one less than a number up to 20.
- Identify and represent numbers in different ways.
- Provide simple explanations of mathematical concepts.

children working at the expected level will be able to:

- Count up to and beyond 100, forwards and backwards.
- Count, read and write numbers up to 100 in numerals.
- Read and write numbers from one to 20 in words.
- Count in twos, fives and tens up to the tenth.
- Say one more or one less than a given number up to 100.
- Compare numbers using the language: equal to, less than, fewer, most, least.
- Identify and represent numbers up to 100 words.
- Use their knowledge of place value to explain the number.
- Use number and place value skills fluently to solve a variety of problems.

**Yearly Overview**

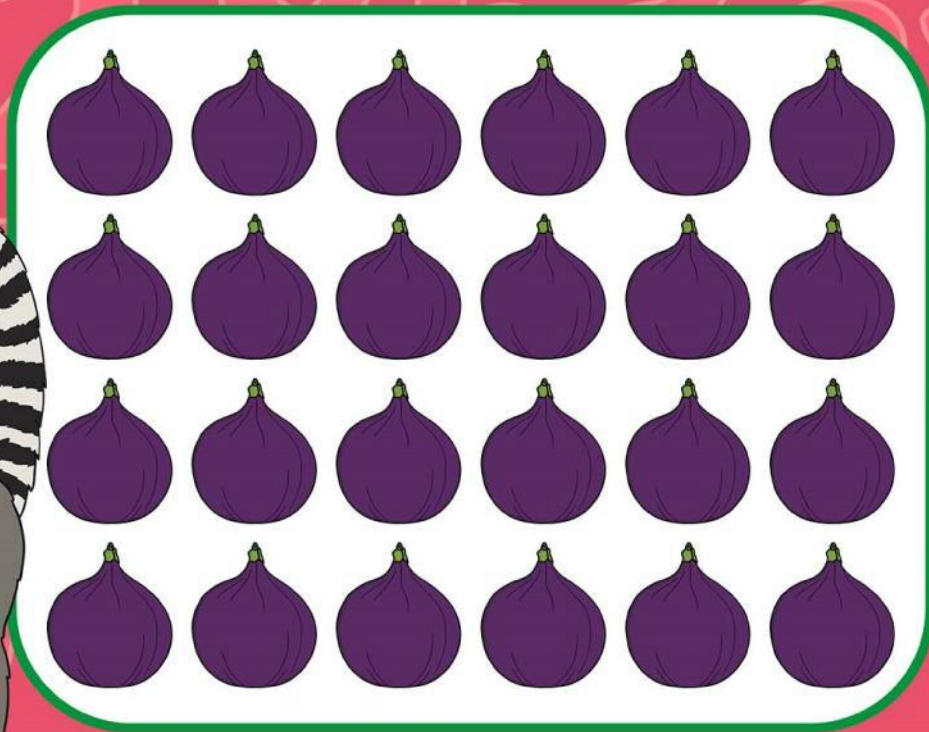
The aim of this overview is to support teachers using PlanIt Maths to show the most coherent and progressive sequence to teach each area of maths. We also want to fully support teachers who use the White Rose Maths scheme of learning to make full use of the resources available within PlanIt Maths. Wherever possible, lesson packs have been matched to each of the small steps on the White Rose Maths scheme of learning.

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number: Place Value (within 10)			Number: Addition and Subtraction (within 10)								
Spring		Number: Addition and Subtraction (within 20)			Number: Place Value (within 50) (Multiples of 2, 5 and 10 to be included)		Measurement: Length and Height			Measurement: Weight and Volume		Consolidation
Summer	Number: Multiplication and Division (Multiples of 2, 5 and 10 to be included)			Number: Fractions			Number: Place Value (within 100)	Measurement: Money				Consolidation

See our

document.

# Representing Numbers up to 50 Using Objects



## **Aim**

- To recognise and represent numbers up to 50.

## **Success Criteria**

- I can read and write numbers up to 50.
- I can count numbers up to 50 in tens and ones.
- I can use objects to represent numbers up to 50.

**Remember It**

Look at these counting sequences.

50, 49, 48, 46, 45, 44, 43

23, 24, 25, 26, 28, 29, 30

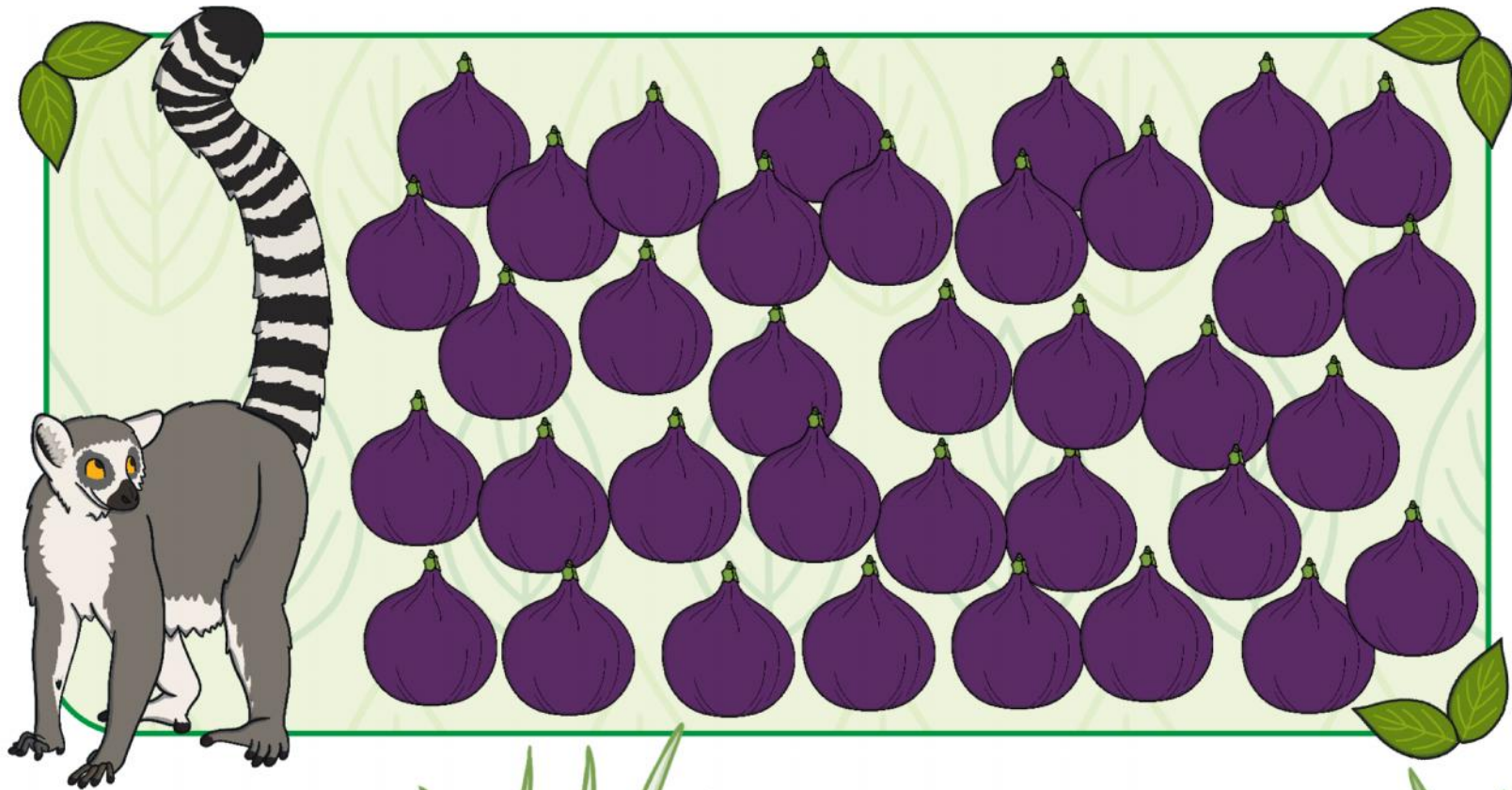
40, 38, 37, 35, 34, 33, 32

What's missing? How do you know?



## Lemur's Lunch

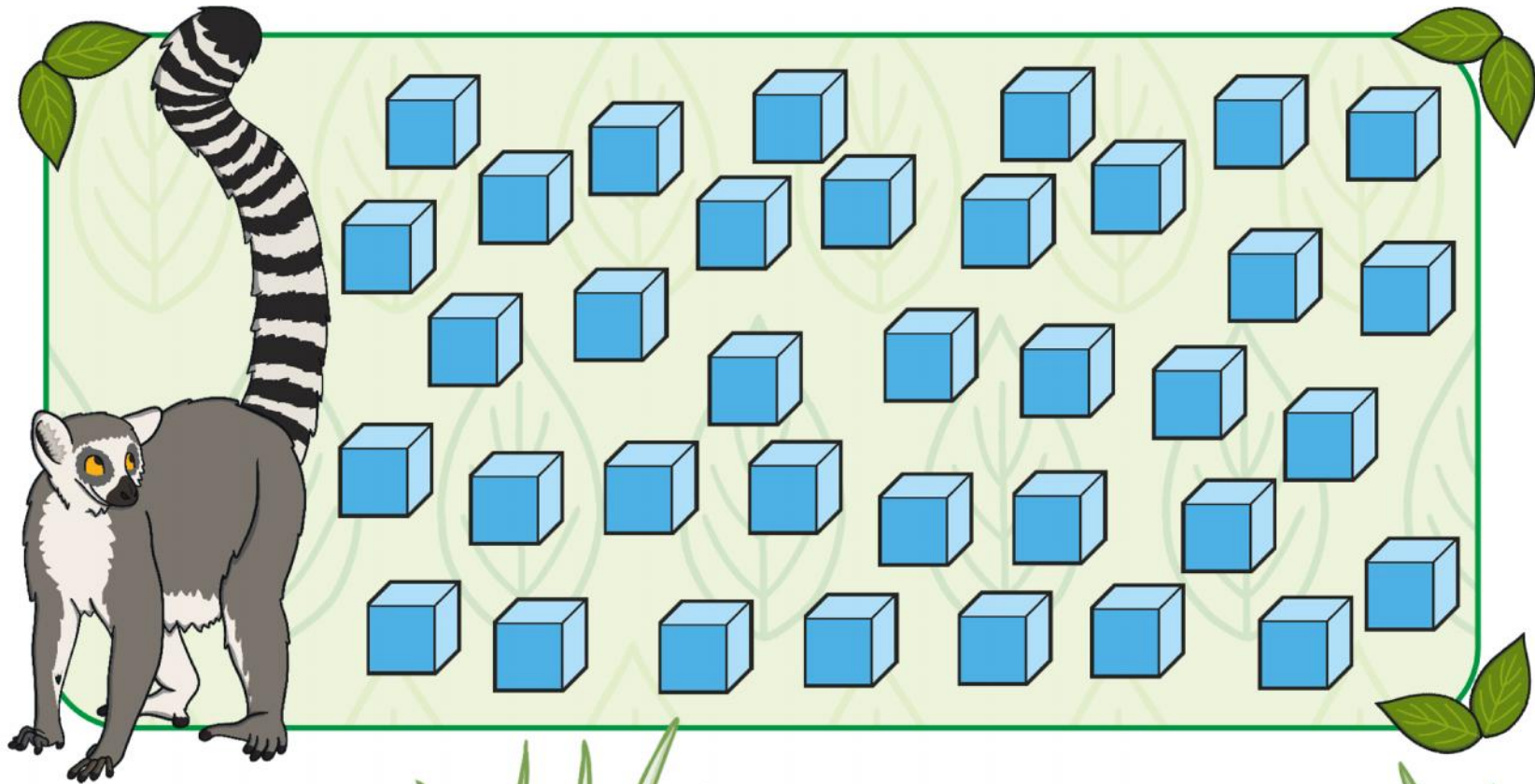
Meet Lisa, a ring-tailed lemur. Her favourite food is figs.  
On Monday, she ate this many figs.



What makes the figs difficult to count?

## Lemur's Lunch

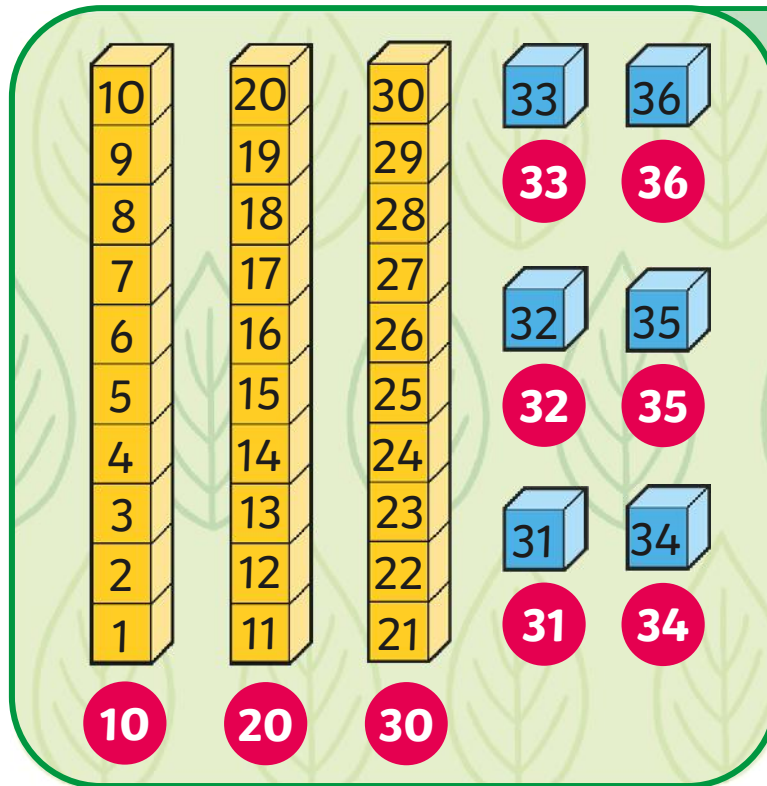
We could use a cube to represent each fig.



How could we arrange the blocks to make them easier to count?

## Lemur's Lunch

We could make groups of 10 cubes.

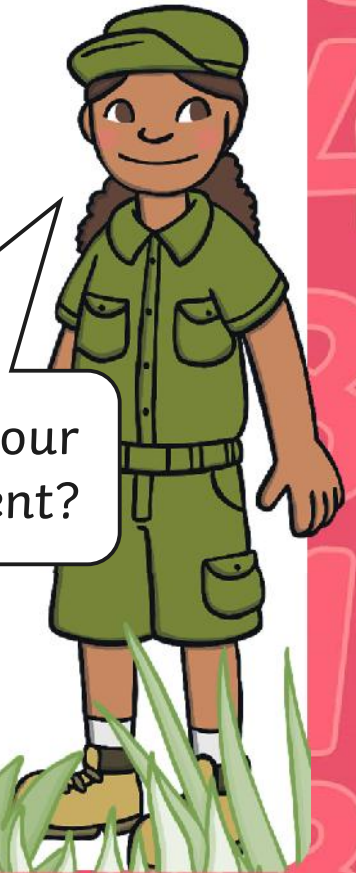


We could count every cube to find out the number of figs.

**Lisa ate  
36 figs.**

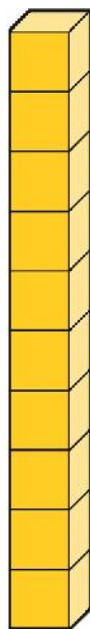
How could we make our counting more efficient?

We could count in tens and then ones.  
Why is this more efficient?

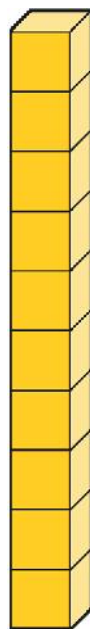


## Lemur's Lunch

Each cube represents a fig.  
How many figs did Lisa eat on Tuesday?



10



20



22



24



21



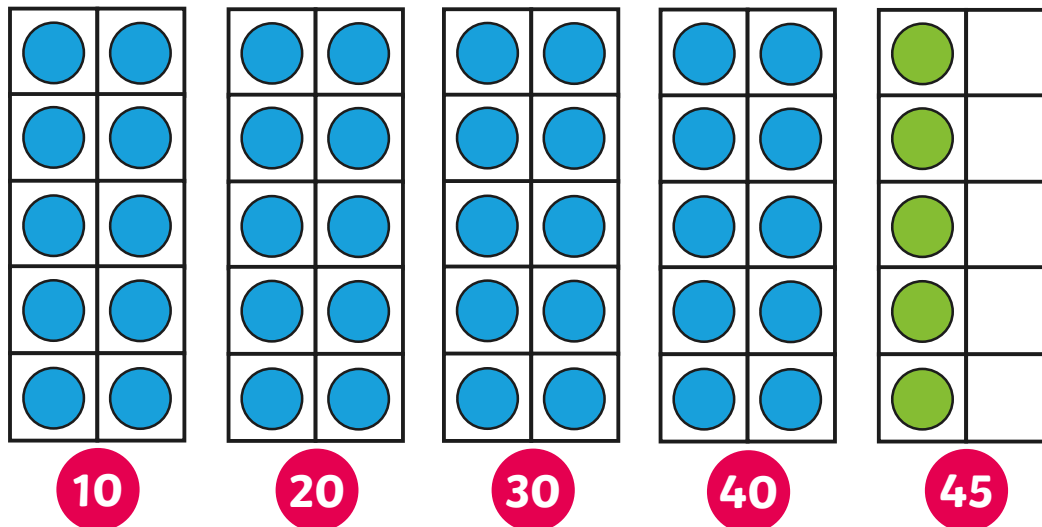
23

Lisa ate  
24 figs.

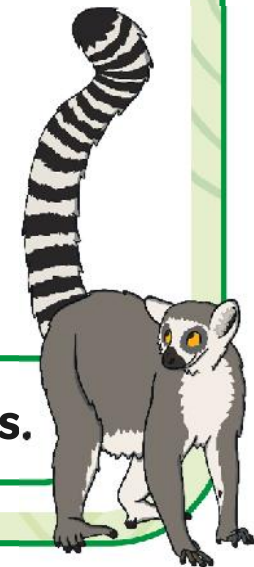
## Lemur's Lunch

On Wednesday, the zookeeper counted the figs Lisa ate. Do you agree with her? Explain to a partner.

Lisa ate 34 figs.

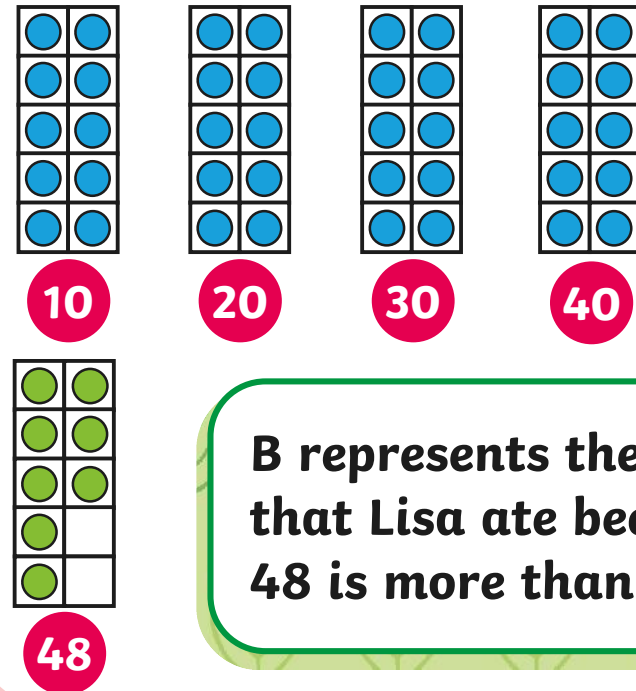
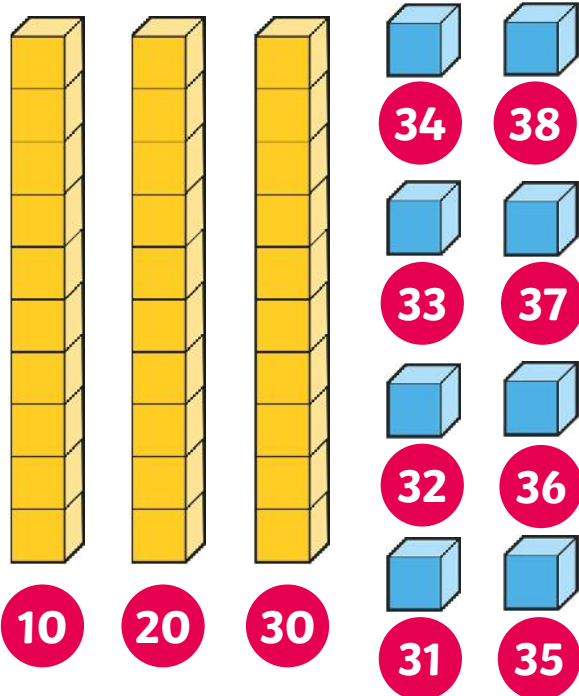


**The zoo keeper is incorrect because she ate 45 figs.**



Lisa ate more than 40 figs.

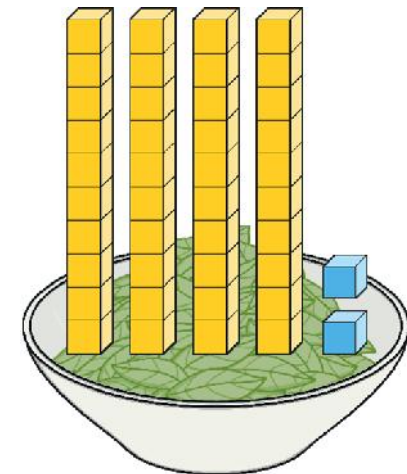
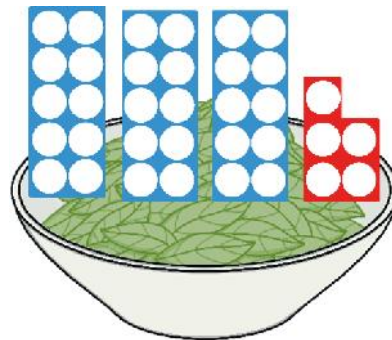
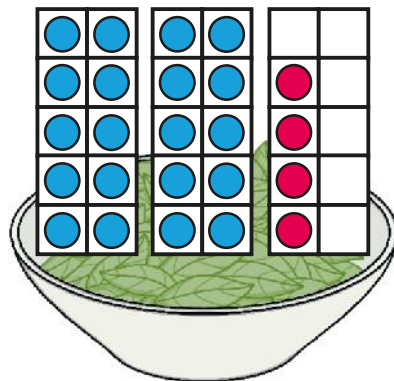
Which picture represents the figs that Lisa ate?  
**Convince me!**



**B represents the figs that Lisa ate because 48 is more than 40.**

# Feeding Time

Match the animals with their food.



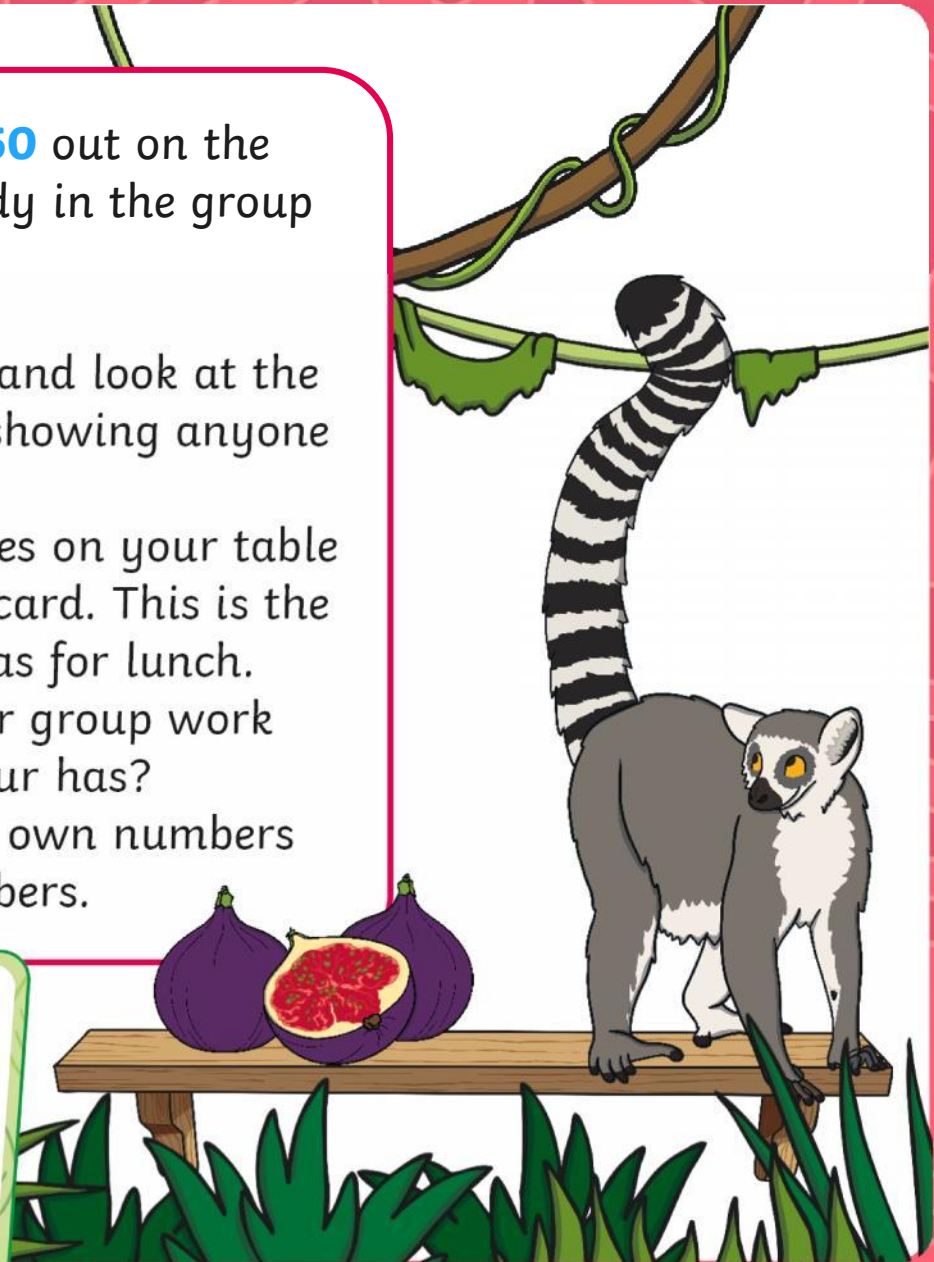
## Lemur's Lunch Game

- Put all the **Number Cards 0-50** out on the table face down so that nobody in the group can see them.
- Decide who will go first.
- On your go, turn over a card and look at the number on the card without showing anyone – it's top secret!
- Use the tens and ones resources on your table to make the number on your card. This is the number of leaves the lemur has for lunch.
- Can the other children in your group work out how many leaves the lemur has?
- Take it in turns to make your own numbers and guess other people's numbers.

48

49

50











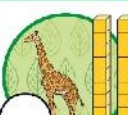

## Diving into Mastery

Dive in by completing your own activity!



Representing Numbers up to 50 Using Objects

Each cube represents one leaf.  
How many leaves did each animal eat?

 <input type="text"/>	 <input type="text"/>
 <input type="text"/>	 <input type="text"/>
 <input type="text"/>	 <input type="text"/>
 <input type="text"/>	 <input type="text"/>

40'

'37'

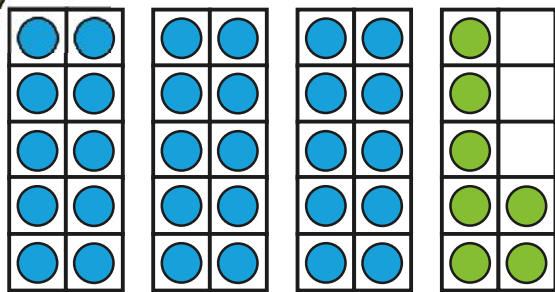
and tys.

A colorful activity board for a math exercise. It features a grid of animal icons (monkey, koala, panda, zebra, orangutan, camel, giraffe, rat) each with a corresponding bar graph made of yellow and blue cubes. To the right of the grid are several vertical columns of green leaves, a ruler with numbers 40 and 37, and a small character icon. The title at the top reads 'Representing Numbers up to 50 Using Objects' and the instructions state 'Each cube represents one leaf. How many leaves did each animal eat?'.

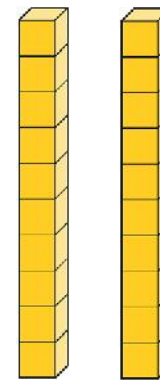
Reflect

What number does each picture represent?  
**Click** on each picture to reveal the total.

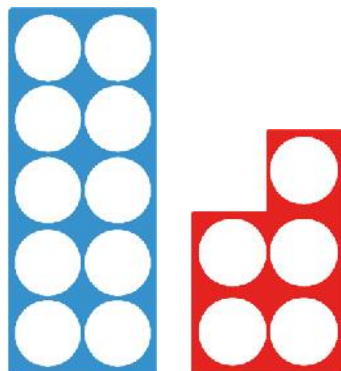
Can you count on to 50 from each number?



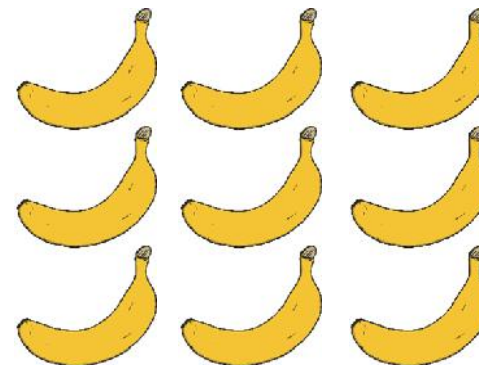
37



20



15



9

## **Aim**

- To recognise and represent numbers up to 50.

## **Success Criteria**

- I can read and write numbers up to 50.
- I can count numbers up to 50 in tens and ones.
- I can use objects to represent numbers up to 50.



**0**

**1**

**2**

**3**

**4**

**5**

**6**

**7**

**8**

**9**

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**12**

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**33**

**34**

**35**

**36**

**37**

**38**

**39**

**40**

**41**

**42**

**43**

**44**

**45**

**46**

**47**



**48**

**49**

**50**

Number and Place Value | Representing Numbers up to 50 Using Objects

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