



Maths

Addition and Subtraction

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 Planit Maths steps on the White Rose Maths scheme of learning although we have not aimed to mirror the exact order in which they are presented.

Recall and Use Facts (1): Number Facts up to 10

This computer game themed lesson is designed to help children secure their understanding of number facts. Children use a range of methods to investigate and check if they are correct. They use different representations to support their learning. This lesson includes Diving into Mastery activity cards with fluency resources.

NC Statement: Recall and use facts to 20 fluently and derive and use related facts up to 100.

Lesson Aim: To recall and use number facts up to 10.

Recall and Use Facts (2): Number Facts up to 20

This lesson teaches children to use familiar number facts to solve and create problems. Children are encouraged to use different representations to support their learning. This lesson includes Diving into Mastery activity cards with fluency resources.

NC Statement: Recall and use facts to 20 fluently and derive and use related facts up to 100.

Lesson Aim: To recall and use number facts up to 20.

Solve Problems (1): Using Different Representations to Solve Problems

Children learn to solve addition and subtraction problems using concrete objects and pictorial representations, including those involving numbers, quantities and measures, applying their increasing knowledge of mental and written methods. This lesson includes Diving into Mastery activity cards with fluency resources.

NC Statement: Solve problems with addition and subtraction using concrete objects and pictorial representations, including those involving numbers, quantities and measures, applying their increasing knowledge of mental and written methods.

Lesson Aim: To solve addition and subtraction problems using objects, pictures and models.

Introduction

In this unit, children will learn to recall and use addition and subtraction facts. They use a variety of different models, images and equipment to build their number sense, enabling them to use facts flexibly. They learn different strategies to help them add and subtract numbers efficiently, explaining their methods with concrete resources or jottings. Methods include: adding a unit to a ten, adding three single-digit numbers and adding and subtracting multiples of ten leading to pairs of two-digit numbers. They find the difference between numbers and reason about when it is quicker to find the difference or take away. They build up their understanding of commutativity and inverse relationships, using these to solve increasingly complex missing number problems. They apply their learning to problem-solving, and are able to ask questions, explain their choices and demonstrate their methods.

Resources

In addition to your standard maths resources, you will need:

- digital cameras

Assessment Statements

By the end of this unit;

children working towards the expected level will be able to:

- recall and use at least four out of six number facts to ten and derive their associated subtraction facts;
- add and subtract two-digit numbers and ones, and two-digit numbers and tens, where no regrouping is required;
- explain their addition and subtraction methods verbally, in pictures or using apparatus;
- understand that two numbers can be added in any order and the answer will be the same.

children working at the expected level will be able to:

- recall number facts to add and within ten and subtraction facts. Use these to derive number and within 20 and 100;
- add and subtract within 100: a two-digit number and ones, a two-digit number and tens, two two-digit numbers;
- add three one digit numbers using efficient methods;
- understand that addition is commutative but subtraction is not, and explain what this means;
- use the inverse relationship between addition and subtraction to solve problems and check their calculations;
- solve addition and subtraction problems in context of quantities and measures, using pictures and mentally.

Addition and Subtraction

Maths | Year 2 | Steps to Progression 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. Whenever possible, lesson packs have been matched to each of the small steps on the White Rose Maths scheme of learning.

Yearly Overview

| | 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 | Number: Addition and Subtraction | | | | | | Measurement: Money | Number: Multiplication and Division | | | | |
| Spring | Number: Multiplication and Division | | Statistics | | Geometry: Properties of Shape | | | Number: Fractions | Measurement: Length and Height | | Consolidation | | |
| Summer | Position and Direction | | Problem Solving and Efficient Methods | | Measurement: Time | | Measurement: Mass, Capacity and Temperature | | | | Investigations | | |

See our [Addition and Subtraction Steps to Progression](#) document.

Twinkl Planit is our award-winning scheme of work with over 4000 resources.



Subtract Two 2-Digit Numbers, Crossing Ten



Aim

- To subtract two 2-digit numbers crossing 10.

Success Criteria

- I can use number facts to subtract two 2-digit numbers crossing 10.
- I can use part-whole models to subtract two 2-digit numbers crossing 10.
- I can use number lines to subtract two 2-digit numbers crossing 10.

Remember It

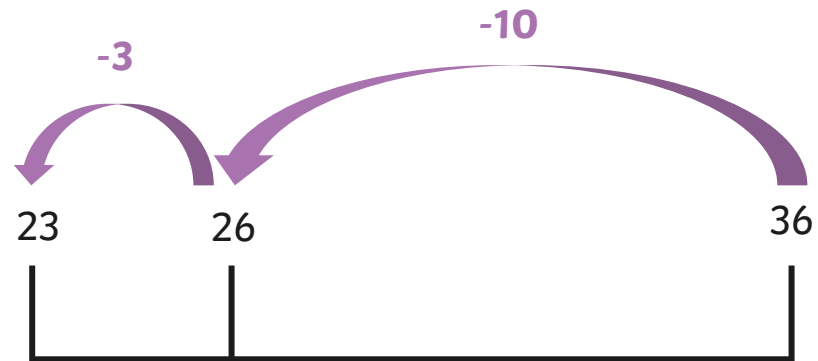


Do you remember how to use number lines to subtract two 2-digit numbers?

You can start by subtracting the tens like this.



$$36 - 13 = 23$$

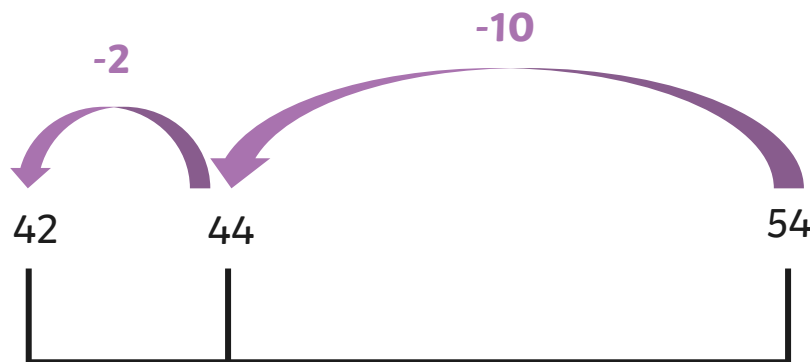


Remember It



Draw a number line on your whiteboard.
Use it to subtract these two 2-digit numbers.

$$54 - 12 = 42$$



Can you solve this by
subtracting the tens first?



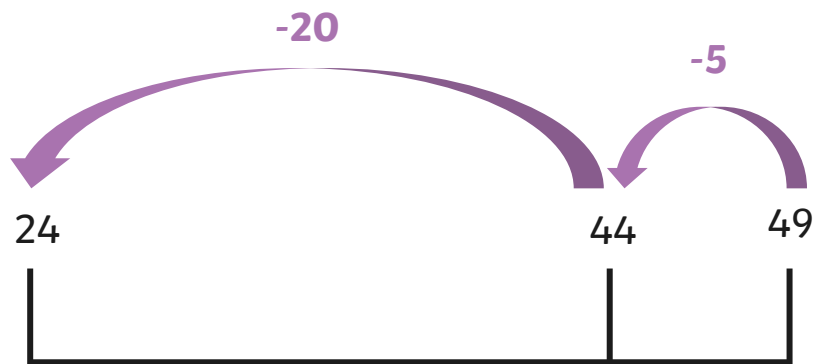
Remember It



Here's another way to use number lines to subtract two 2-digit numbers.

We can subtract the ones first.

$$49 - 25 = 24$$

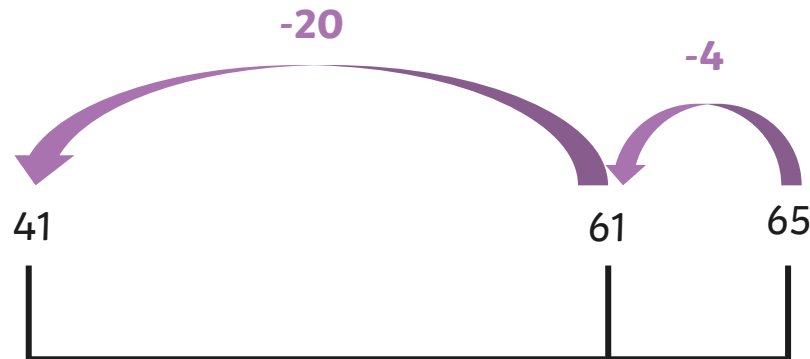


Remember It



Draw a number line on your whiteboard.
Use it to subtract these two 2-digit numbers.

$$65 - 24 = 41$$



Can you solve this by
subtracting the ones first?



Remember It



Draw a number line on your whiteboard.
Use it to subtract these two 2-digit numbers.

You can choose to subtract the ones or the tens first.



$$96 - 12 = 84$$

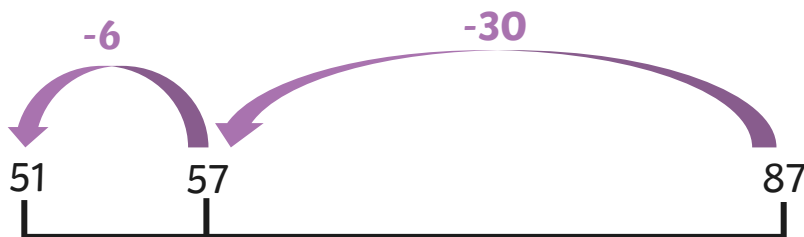


Remember It



Draw a number line on your whiteboard.
Use it to subtract these two 2-digit numbers.

$$87 - 36 = 51$$



You can choose to subtract
the ones or the tens first.



Jump-Back Jill



Do you remember Jump-Back Jill?



I can help you to subtract numbers when they cross ten.

She does amazing backflips along the number line!

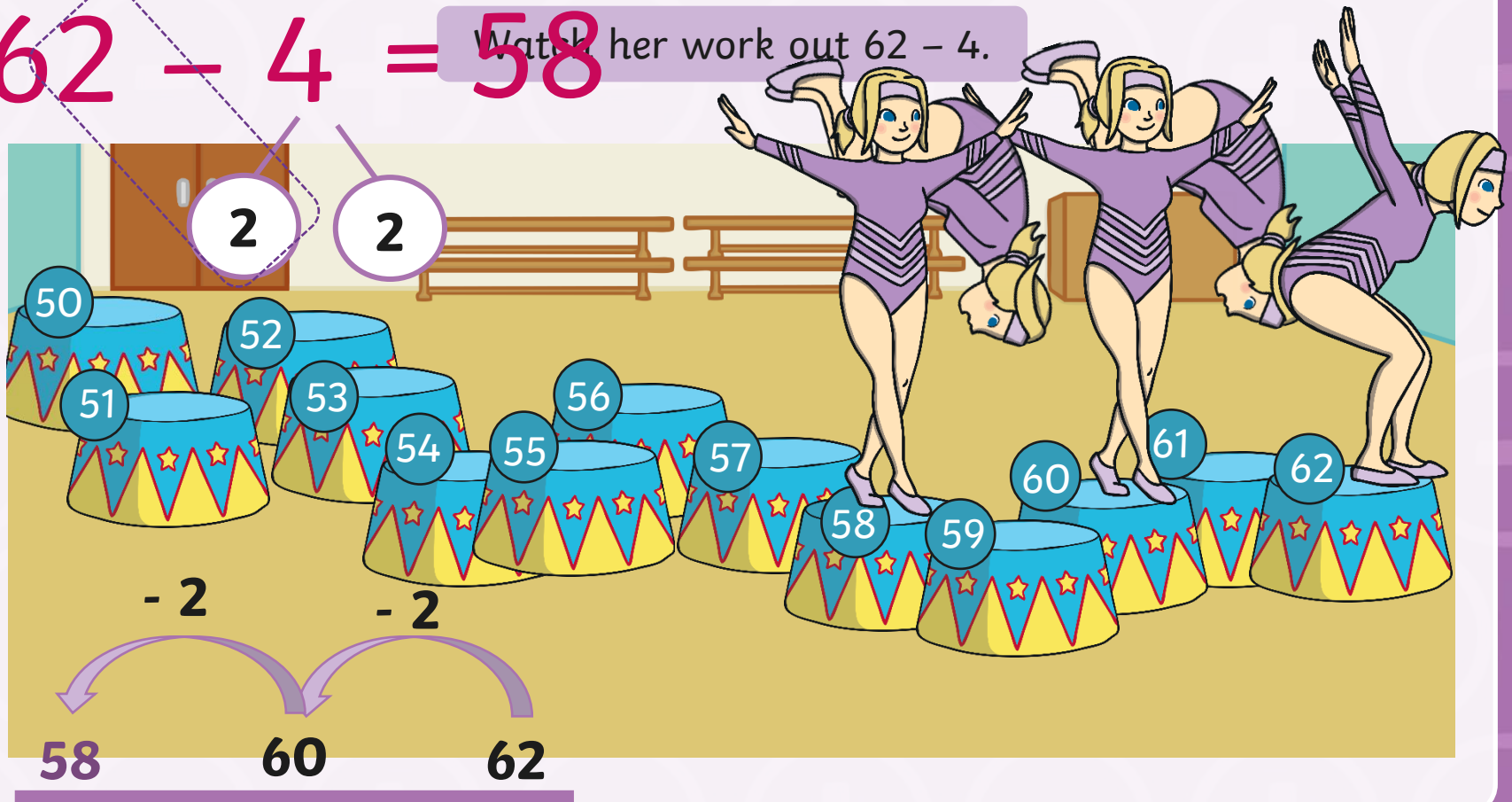
Jump-Back Jill



Jill jumped back to the nearest ten, then subtracted the rest of the ones.

$$62 - 4 = 58$$

Watch her work out $62 - 4$.



Jump-Back Jill



Where will Jill land?

$$34 - 7 = 27$$



27



30



34

- 3

- 4

Jump-Back Jill

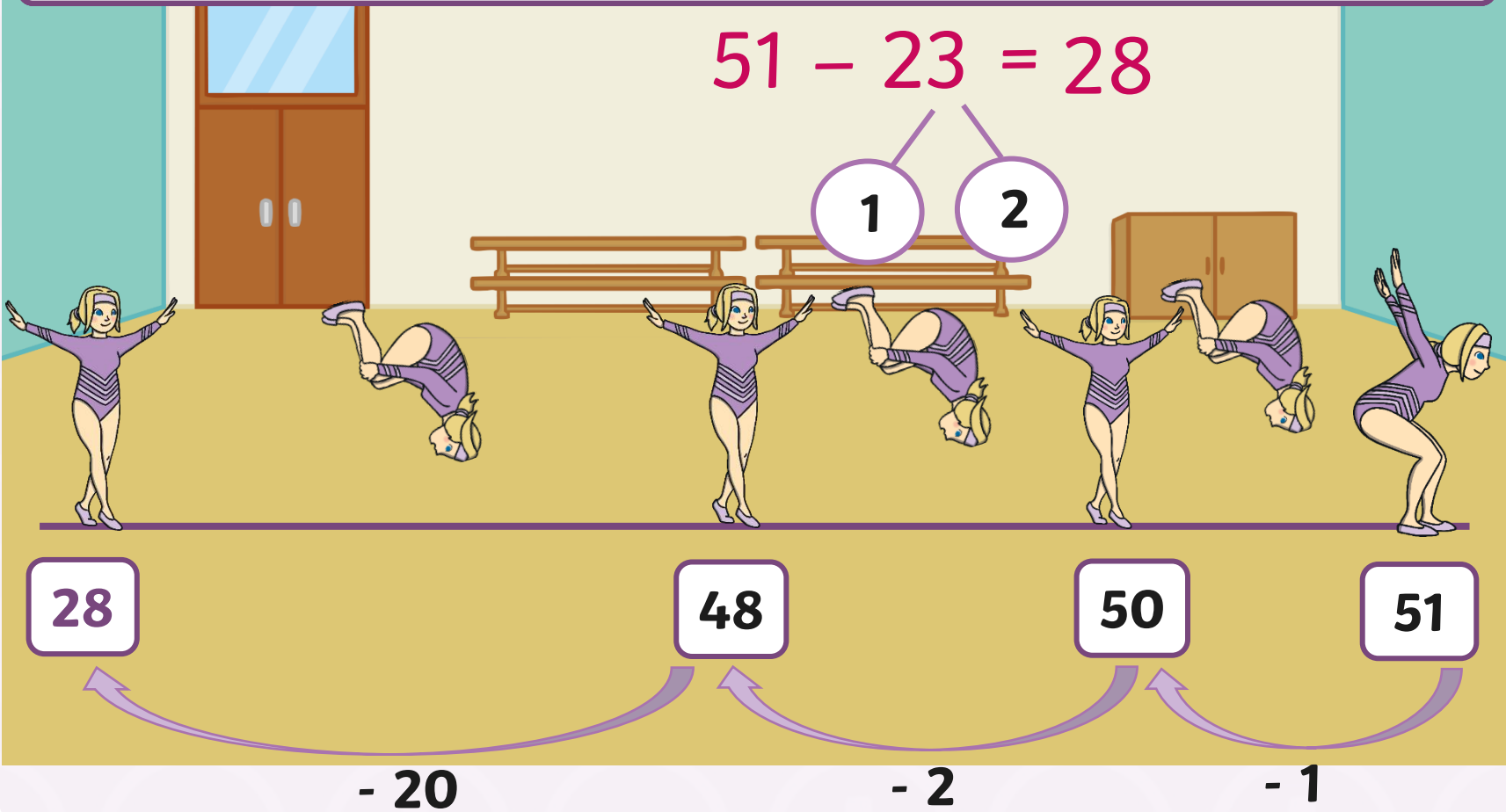


Where will Jill land?

$$51 - 23 = 28$$

1

2



Jump-Back Jill



Where will she land?

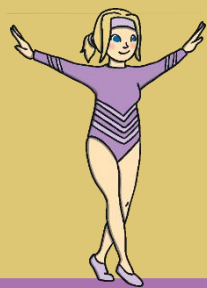
$$51 - 23 = 28$$

1

2



28



30



31



51

- 2

- 1

- 20

Jumping Further



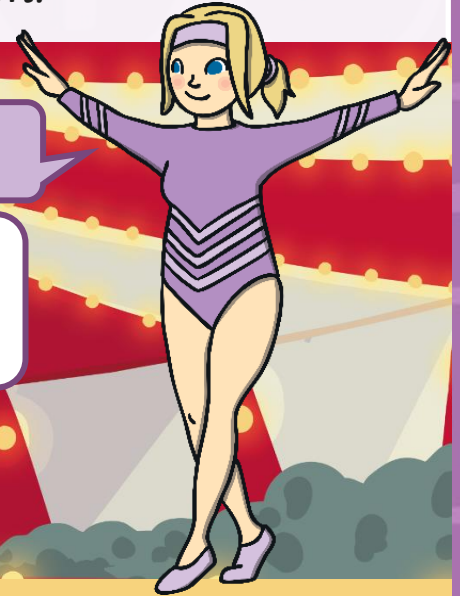
Use a number line to solve this calculation.

You can choose to subtract the ones or the tens first.

$$43 - 24 = 19$$

3

1



Jumping Further

Let's try one more.

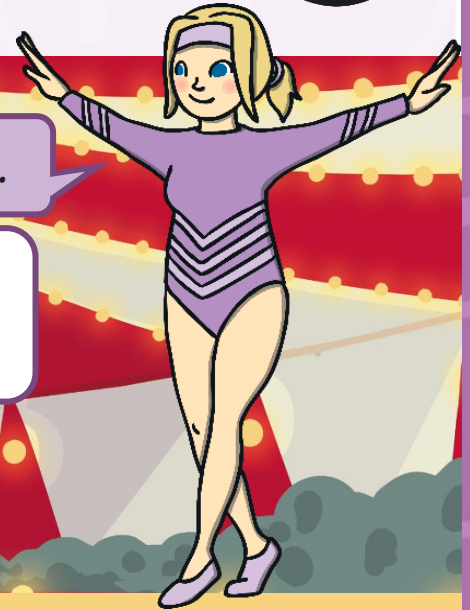


You can choose to subtract the ones or the tens first.

$$65 - 37 = 28$$

5

2



Activity Sheet



Subtract Two 2-Digit Numbers Crossing 10

I can subtract two 2-digit numbers crossing ten.



Help Jill solve these calculations.

Subtract the ones first.

Jump back to the nearest ten then subtract the rest of the ones.

$25 - 13 = \square$

$32 - 14 = \square$

Now try subtracting the tens first.

$43 - 26 = \square$

$51 - 23 = \square$

Will you choose to subtract the tens or the ones first?

$41 - 25 = \square$

Two 2-Digit Numbers Crossing 10

Two 2-digit numbers crossing ten.



Help Jill solve these calculations.

Subtract the ones first.

Jump back to the nearest ten then subtract the rest of the ones.

$50 - 14 = \square$

$60 - 14 = \square$

Now try subtracting the tens first.

$61 - 30 = \square$

$71 - 30 = \square$

Will you choose to subtract the tens or the ones first?

$71 - 30 = \square$

Two 2-Digit Numbers Crossing 10

Two 2-digit numbers crossing ten.



Help Jill solve these calculations.

Subtract the ones first.

Jump back to the nearest ten then subtract the rest of the ones.

$50 - 14 = \square$

$60 - 14 = \square$

Now try subtracting the tens first.

$61 - 30 = \square$

$71 - 30 = \square$

Will you choose to subtract the tens or the ones first?

$71 - 30 = \square$

Diving into Mastery

Dive in by completing your own activity!



Subtract Two 2-Digit Numbers Crossing Ten

Jill is teaching Jake how to subtract 2-digit numbers crossing ten.

Count back to the nearest ten, then subtract the remaining ones.

Let's practice subtracting the ones first.

$43 - 14 =$ 43

Now try subtracting the tens first.

$61 - 25 =$ 61

Will you choose to subtract the ones or the tens first?

$34 - 16 =$

$74 - 37 =$

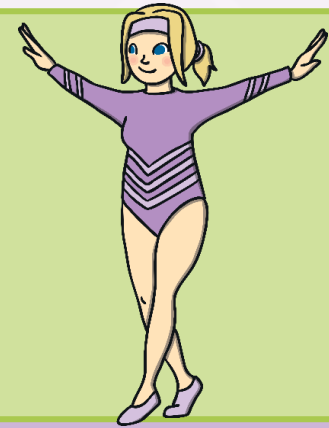
Jill's Challenge



Jill is working out where she would land if she jumped back 17.

Which strategy will you use?

$$73 - 17 = 56$$



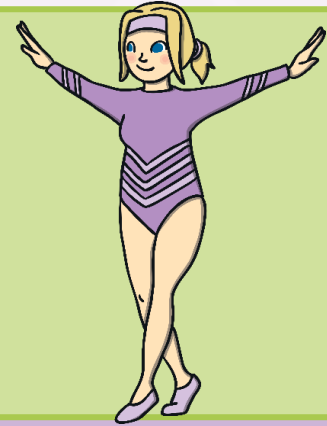
Jill's Challenge



Jill is working out where she would land if she jumped back 27.

Which strategy will you use?

$$73 - 27 = 46$$



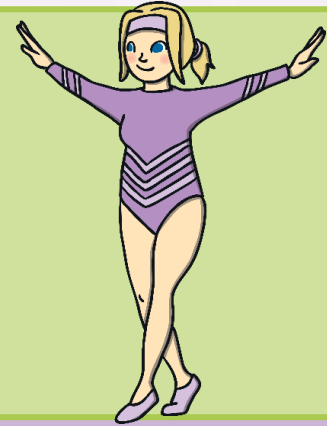
Jill's Challenge



Jill is working out where she would land if she jumped back 37.

Which strategy will you use?

$$73 - 37 = 36$$



Jill's Challenge



What would come next?

$$73 - 17 = 56$$

$$73 - 27 = 46$$

$$73 - 37 = 36$$

$$73 - 47 = 26$$

$$73 - 57 = 16$$

$$73 - 67 = 6$$



Jill's Challenge



Can you solve the calculation and continue the pattern?

$$61 - 12 =$$

$$61 -$$

$$61 - 32 = 29$$

$$61 - 42 = 19$$

$$61 - 52 = 9$$



Aim



- To subtract two 2-digit numbers crossing 10.

Success Criteria

- I can use number facts to subtract two 2-digit numbers crossing 10.
- I can use part-whole models to subtract two 2-digit numbers crossing 10.
- I can use number lines to subtract two 2-digit numbers crossing 10.

