



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

Recall and Use Facts (1): Number Facts up to 10
This computer game themed lesson is designed to help children secure enable mysterious eggs to hatch and grow into magical creatures. They number pairs. Children use a range of methods to investigate and check presentation, differentiated activity sheets and mastery cards to help children.

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 them calculate $12 \div 3$ and $13 \div 2$. They can also apply this to numbers begin are encouraged to use different representations to support their learning. differentiated activity sheets and mastery cards to help children develop fluency.

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, reasoning.

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 and within ten and subtraction facts. Use these to derive numbers 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 and subtraction is not, and explain what this means;
- use the inverse relationship between addition and subtraction to solve problems and check 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. Wherever 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				
Summer	Position and Direction		Problem Solving and Efficient Methods		Measurement: Time		Measurement: Mass, Capacity and Temperature		Measurement: Length and Height		Investigations	

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

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



Add Across Ten



Aim

- To add across 10.

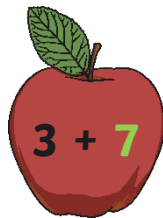
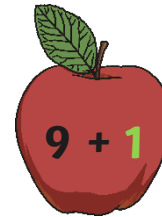
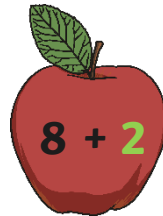
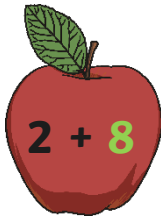
Success Criteria

- I can recall number facts of 10.
- I can use ten-frames to add across 10.
- I can use part-whole models to add across 10.

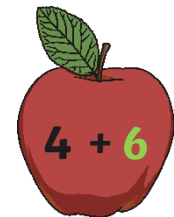
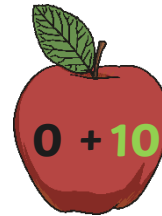
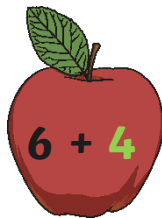
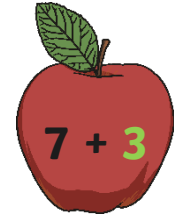
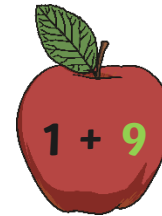
Remember It



Do you remember number facts of ten?
Pick an apple and hold up your fingers to show the missing part.



10



Click on the apple to reveal the answer.

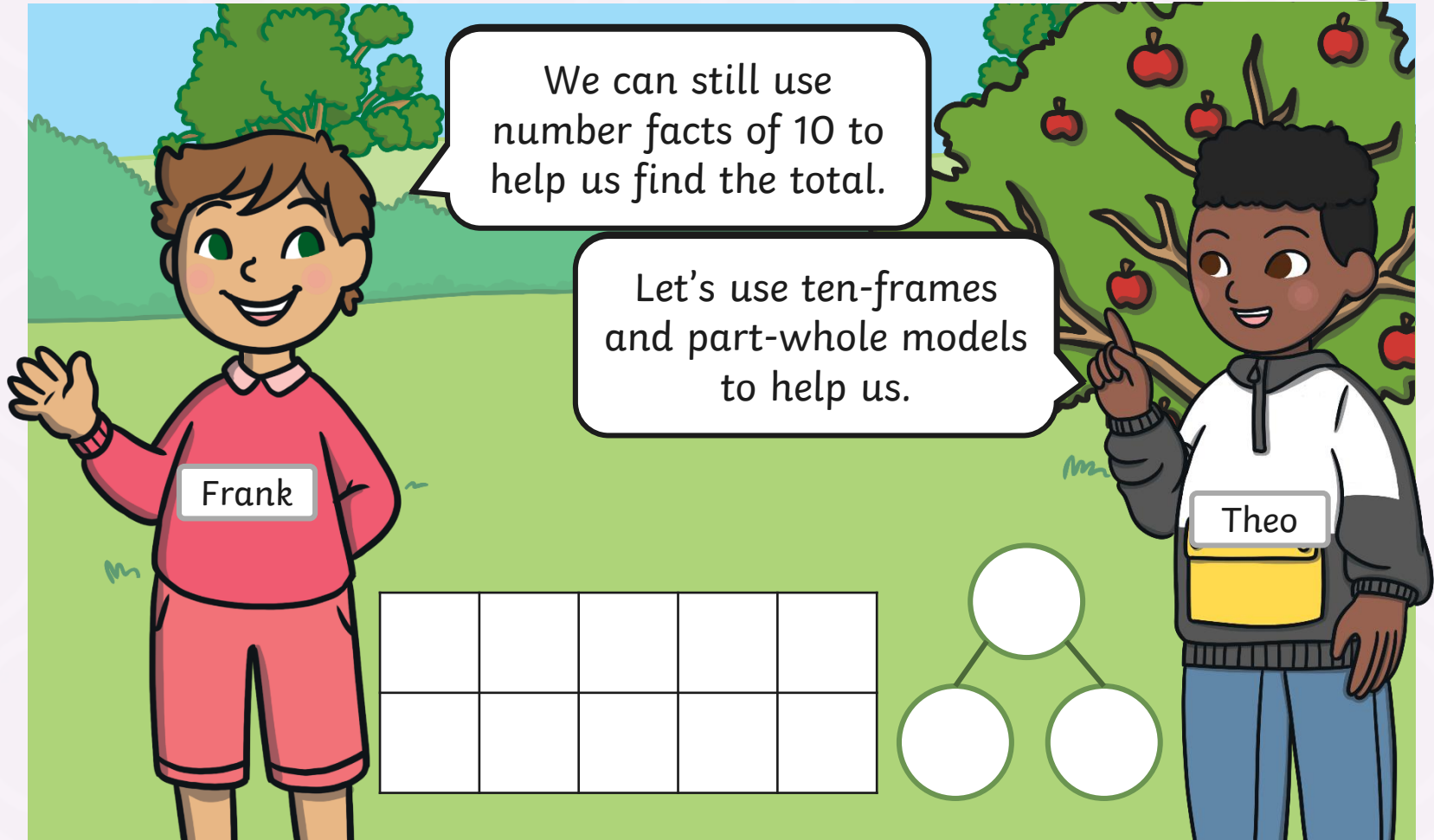


Pack It



We can still use number facts of 10 to help us find the total.

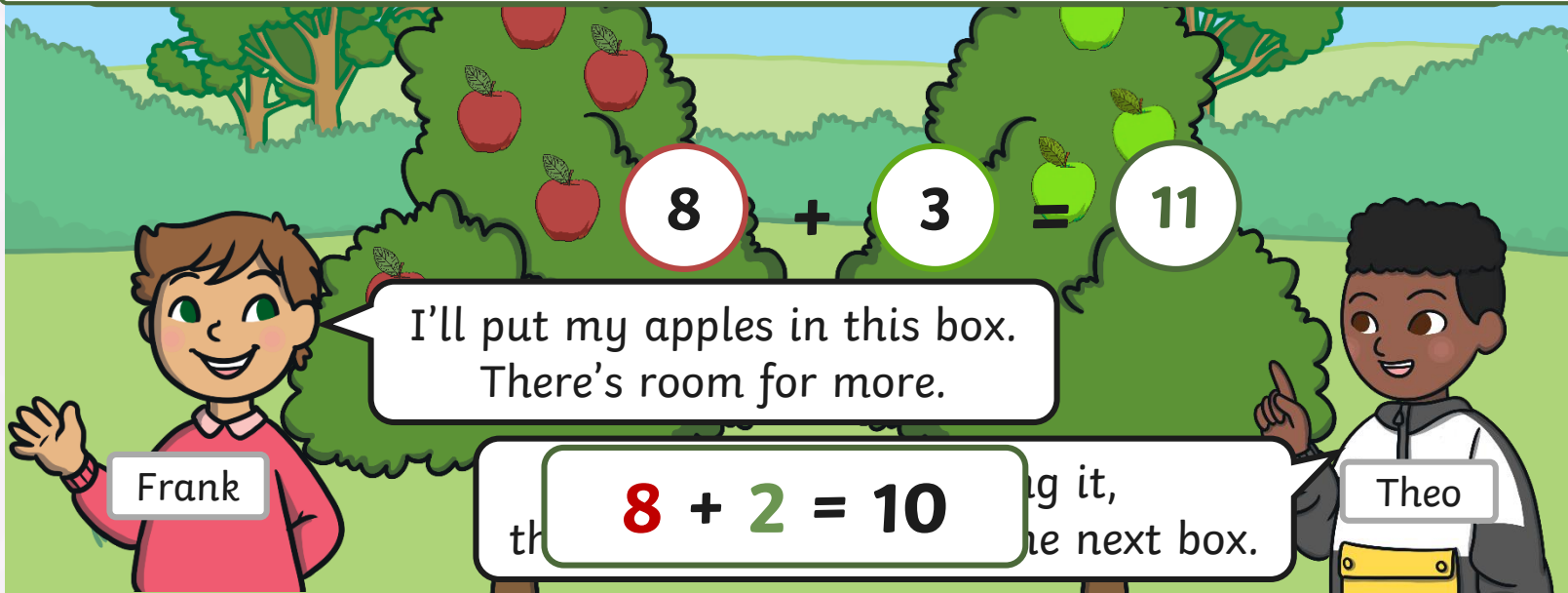
Let's use ten-frames and part-whole models to help us.



Pack It



Frank and Theo are picking apples. Each box can hold ten apples.



$10 + 1$

Pack It



Frank and Theo made a number fact of ten.

Then they added the other part.

$$8 + 3 = 11$$

Diagram showing the decomposition of 3 into 2 and 1. A dashed red box encloses the 8 and the 2. A green circle contains the 2, and another green circle contains the 1. Lines connect the 2 and 1 to the 3 in the equation above.



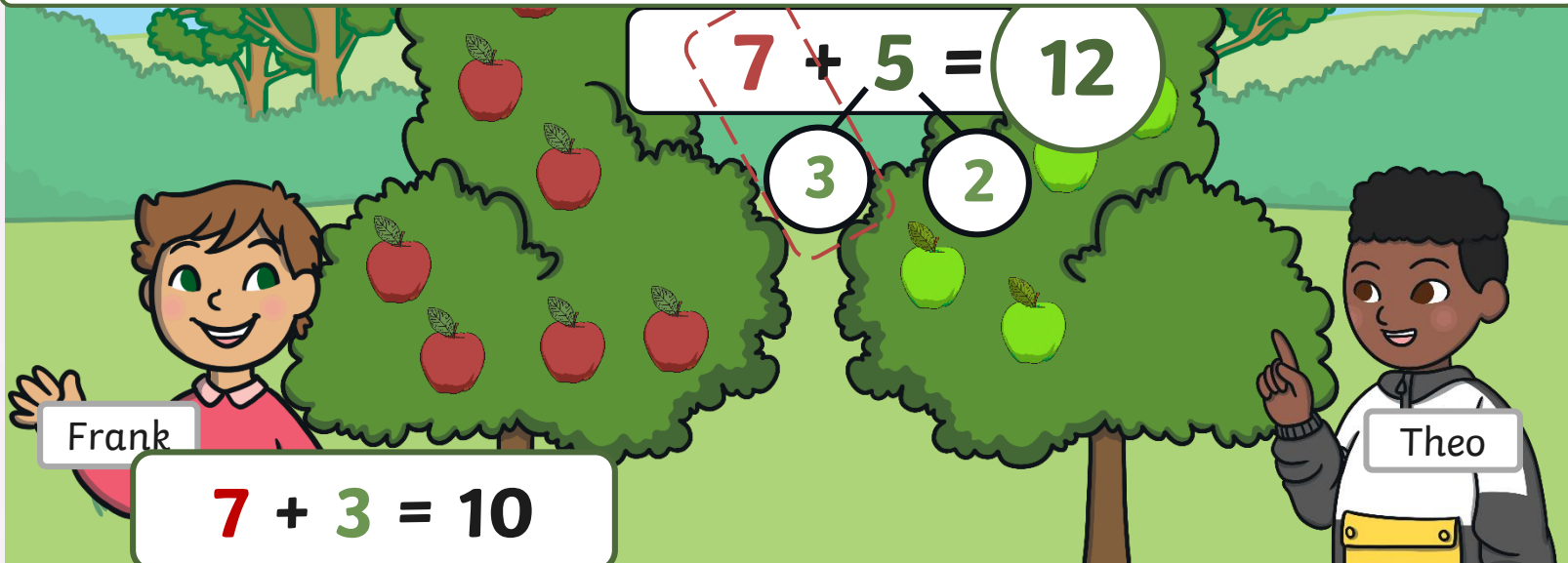
$$8 + 2 = 10$$

$$10 + 1$$

Pack It



They added across ten by making a number fact of ten then added the other part.

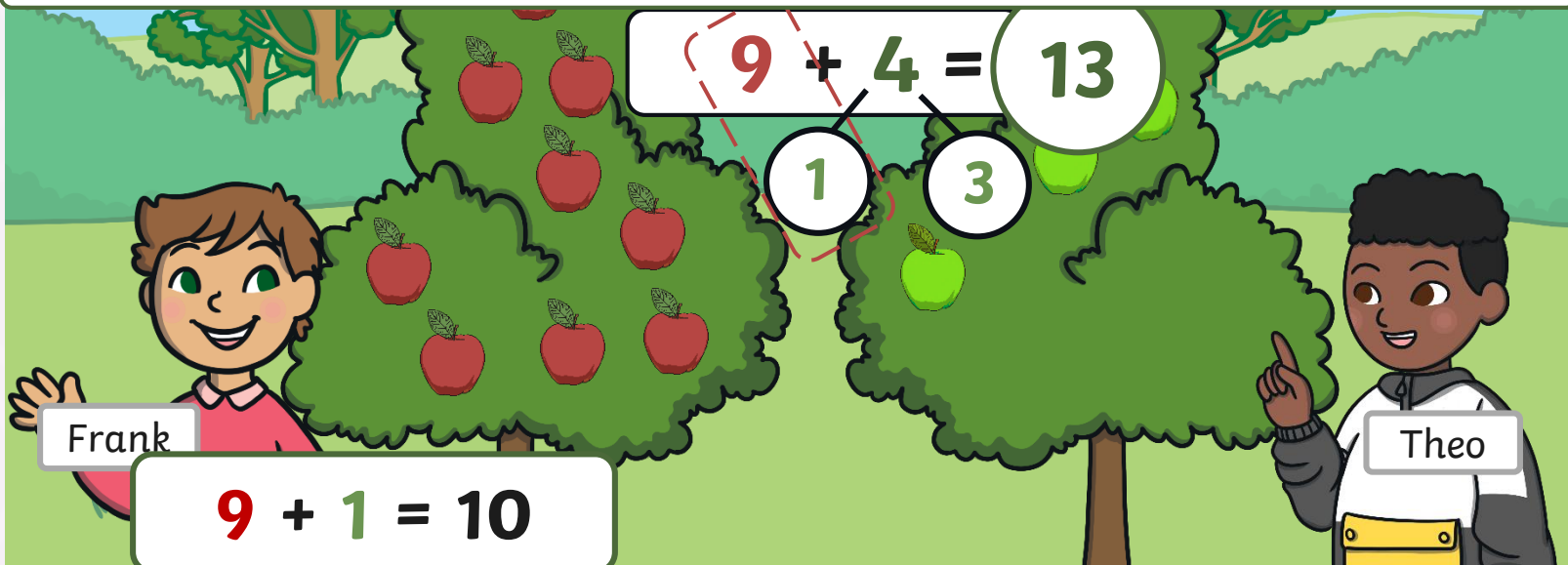


$10 + 2$

Pick It



They added across ten by making a number fact of ten.
Then they added the other part.

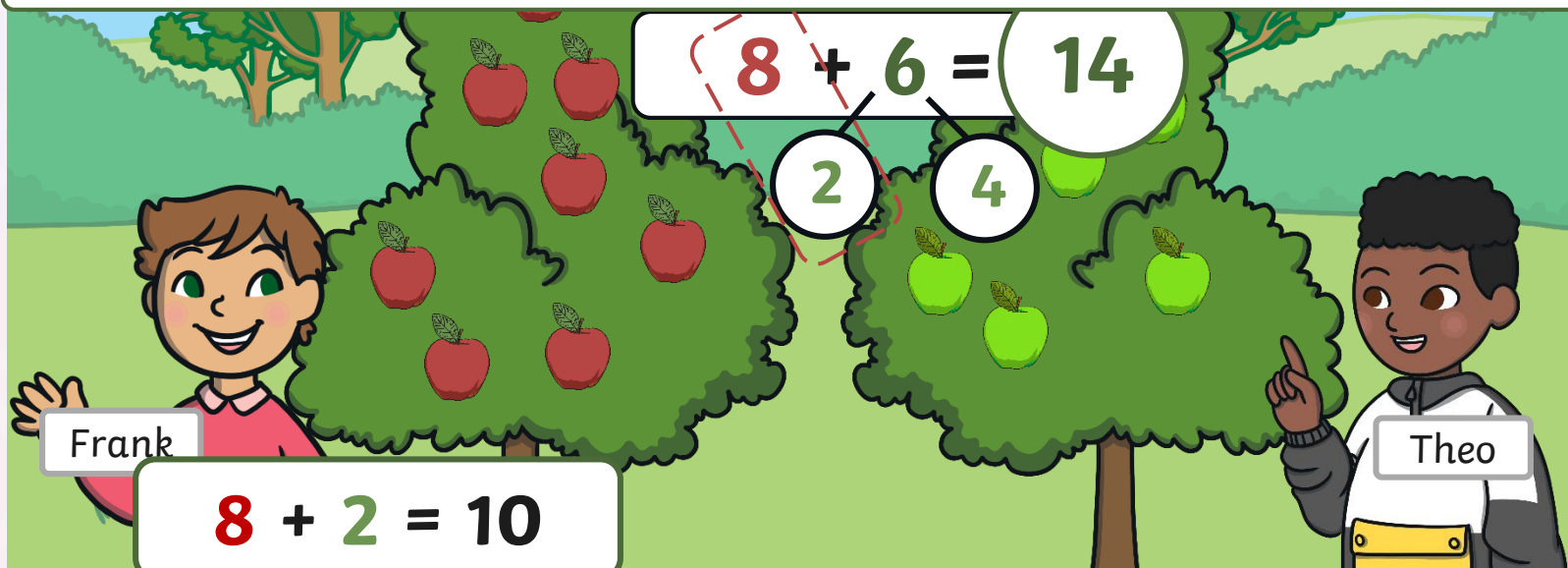


$10 + 3$

Pack It



They added across ten by making a number fact of ten and then added the other part.



$10 + 4$

Try It



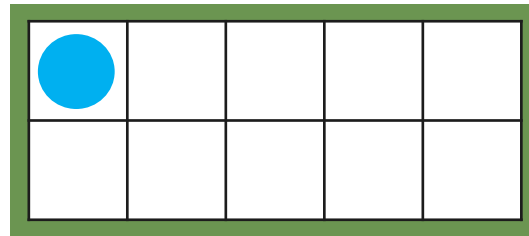
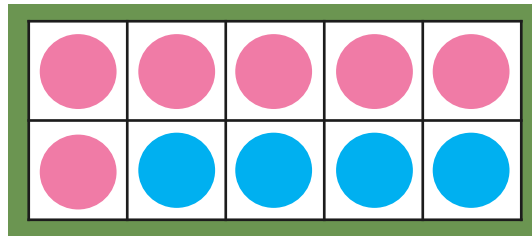
Find 6 counters in one colour and 5 counters in another colour.

$$6 + 5 = 11$$

Diagram showing the decomposition of 6 and 5. The number 6 is circled in blue, with a line connecting it to a smaller blue circle containing the number 4. The number 5 is circled in blue, with a line connecting it to a smaller blue circle containing the number 1.

Add 10 and 1 to find the total.
next ten frame.

$$10 + 1$$



Try It



Pick 8 counters in one colour and 7 counters in another colour.

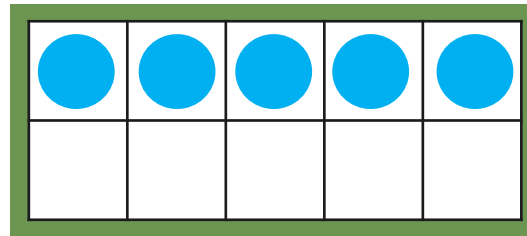
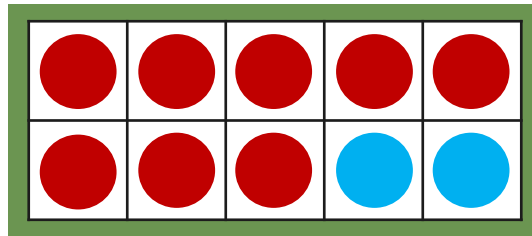
$$8 + 7 = 15$$



Add 10 and 5 to find the total.

next ten frame.

$$10 + 5$$



Try It

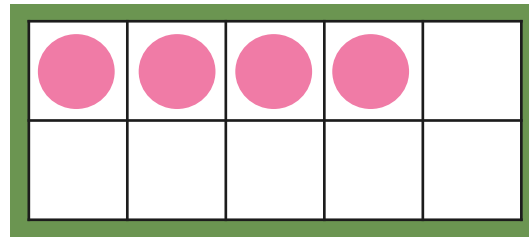
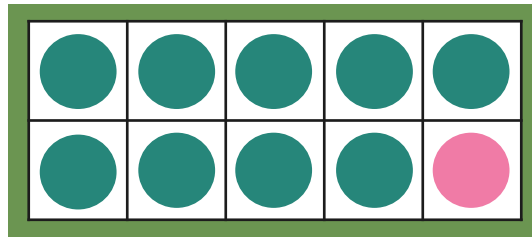


Pick 9 counters in one colour and 5 counters in another colour.

$$9 + 5 = 14$$

1 4

Put the remaining counters here.



Try It

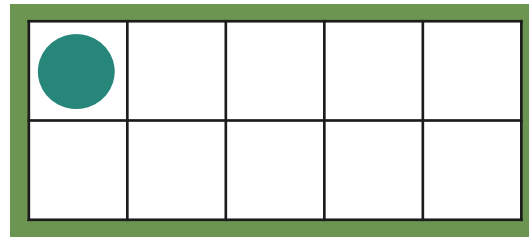
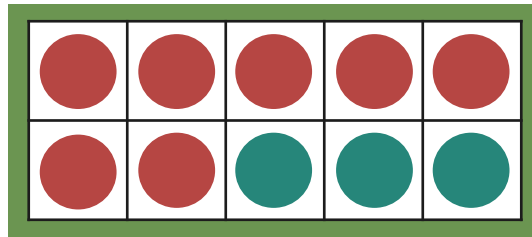


Pick 7 counters in one colour and 4 counters in another colour.

$$7 + 4 = 11$$

The number 7 is red and the number 4 is green. Below the 7 is a green circle containing the number 3. Below the 4 is a green circle containing the number 1. Lines connect the 3 to the 7 and the 1 to the 4.

Add the ten with the ones to find the total.



Add Across 10 Activity Sheets



Add across 10

I can add across 10.

$9 + 6 = 15$

1 5

Make ten, then add the ones.

$7 + 6 = \square$

$9 + 8 = \square$

$8 + 8 = \square$

twinkl planit ★★★

Add across 10

I can add across 10.

$9 + 2 = 11$

1 1

Make ten, then add the ones.

$7 + 5 = \square$

$9 + 4 = \square$

$8 + 8 = \square$

twinkl planit ★★

Add across 10

I can add across 10.

$8 + 3 = 11$

2 1

Make ten, then add the ones.

$9 + 2 = \square$

$8 + 4 = \square$

$6 + 5 = \square$

$9 + 3 = \square$

$7 + 4 = \square$

$6 + 6 = \square$

$8 + 5 = \square$

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Maths | Addition and Subtraction | Strategies | Lesson 3 of 13: Add Across 10

Diving into Mastery

Dive in by completing your own activity!

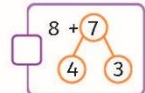
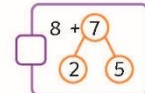
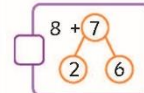


Add Across 10

Tick the part-whole model that matches the ten-frame.



$8 + 7 = \square$



Tick the ten-frames that match representation.



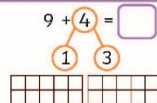
$7 + 6 = \square$



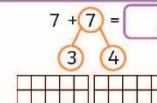
$3 + 3 = \square$



Complete the ten-frames to match the representation.



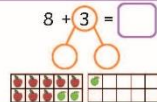
$9 + 4 = \square$



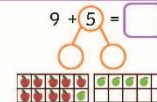
$7 + 7 = \square$



Write the missing numbers.



$8 + 3 = \square$



$9 + 5 = \square$



Try It



Match the calculations with the ten-frames.

$6 + 7 = 13$

$6 + 5 = 11$

$6 + 6 = 12$

Aim



- To add across 10.

Success Criteria

- I can recall number facts of 10.
- I can use ten-frames to add across ten.
- I can use part-whole models to add across ten.

