



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. 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 problems. Children 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 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 marked to teach the small steps on the White Rose Maths scheme of learning.

Yearly Overview

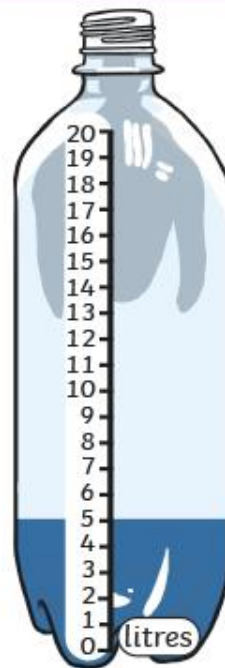
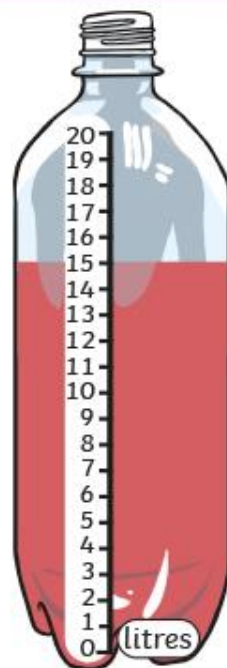
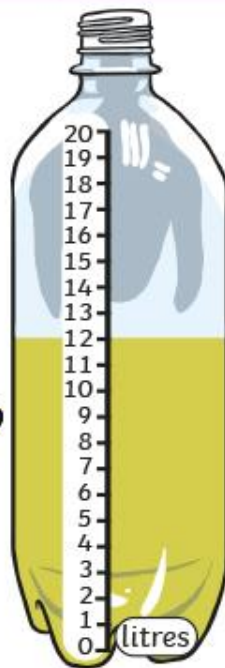
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number: Place Value		Number: Addition and Subtraction					Measurement: Money		Number: Multiplication and Division		
Spring	Number: Multiplication and Division		Statistics		Geometry: Properties of Shape			Number: 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.



Using Number Facts to Solve Measurement Problems



Aim

- To solve problems involving quantities and measures.

Success Criteria

- I can use objects, pictures or models to solve challenges.
- I can use written methods to solve challenges.
- I can use mental methods to solve challenges.
- I can read a scale.

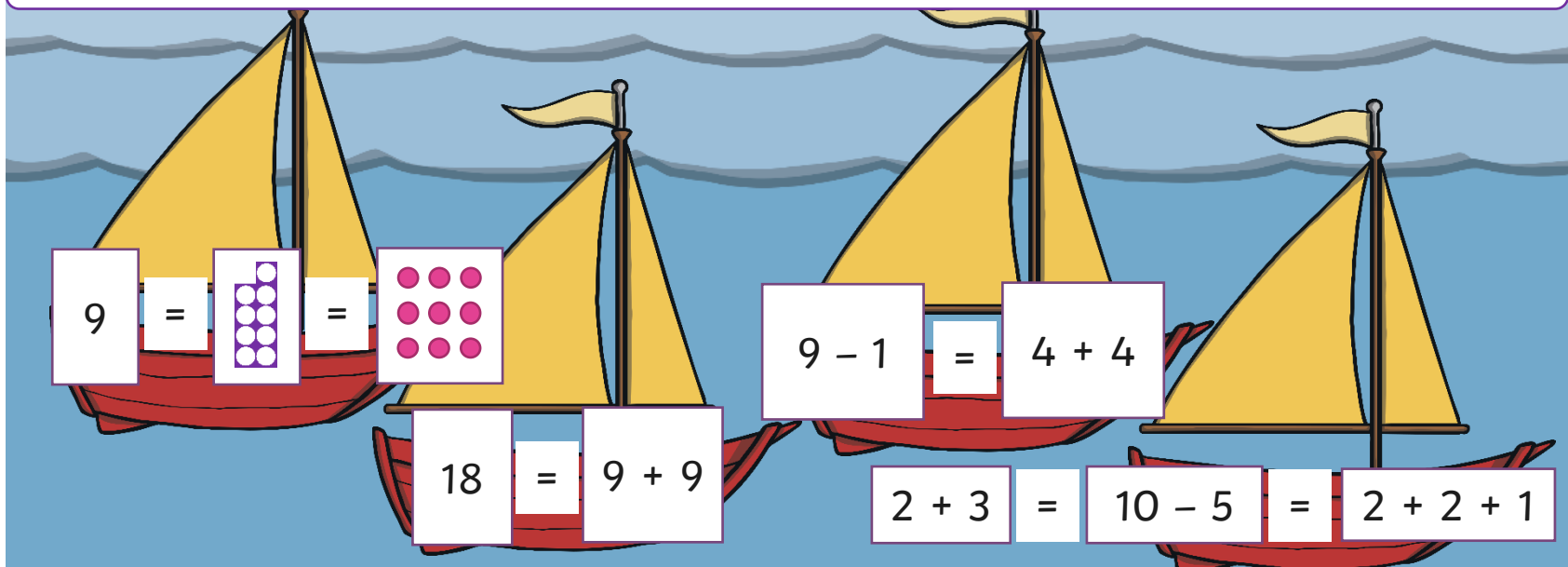
Remember It



Can you balance the boats?

The value at one side of the equals sign needs to be the same as the value of the other side or the boat will tip!

Here are some examples:



Can you make boats balance by adding or subtracting the numbers provided? Can you find different ways to solve them?

Remember It



Use each number only once. Use equipment to help you!

Any combination of
 $9 + 0$, $8 + 1$, $7 + 2$, $6 + 3$
and $5 + 4$.

Answer

0

1

2

3

4

5

6

7

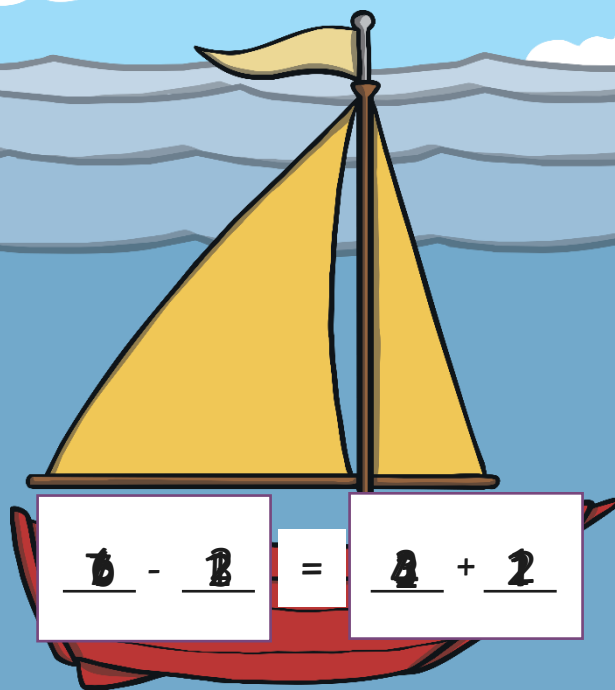
8

9

Remember It



Use each number only once. Use equipment to help you!



Keep
clicking
for
answers.

0

1

2

3

4

5

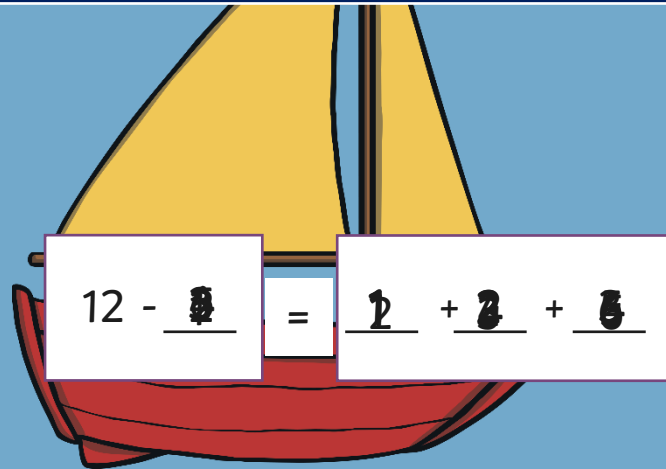
6

Remember It



Use each number only once. Use equipment to help you!

Did you find any different ways?



Keep
clicking for
answers.

1

2

3

4

5

6

7

8

9

10

11

12

The School Feast



Each class could make something to bring along.

We could have some competitions too!

The School Feast

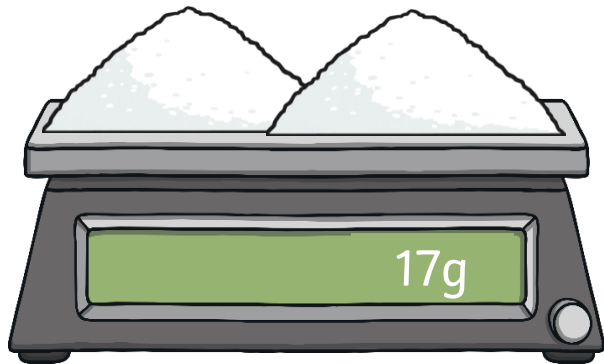


Preparations



Class One have been asked to do some baking.

Emma needs 20g of sugar. There is 17g sugar on the scales.
How much more does she need?



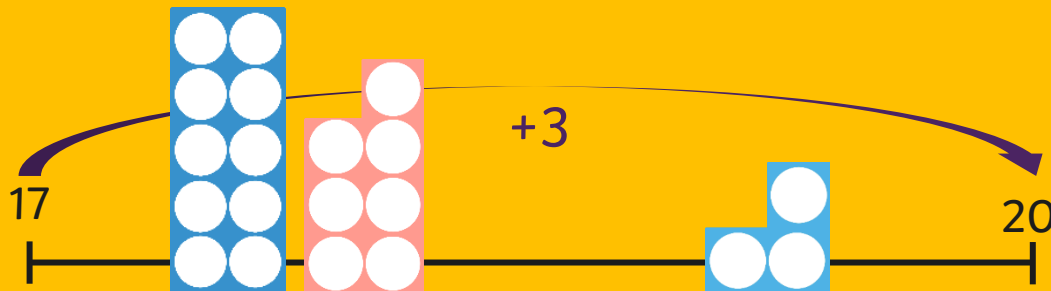
Sugar Needed:

20g

Amount on Scales:

17g

Amount Still Needed



We need 3g of sugar.

Preparations

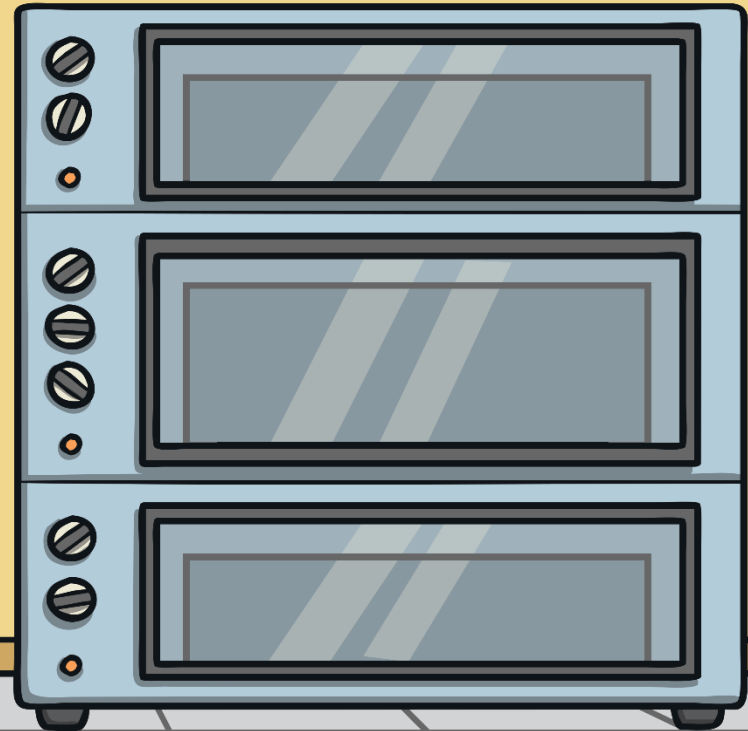


The cookie recipe said to cook them for 15 minutes.

Alma baked them for an extra 5 minutes. How long did they bake for?

$$15 + 5 = 20$$

They baked for 20 minutes.



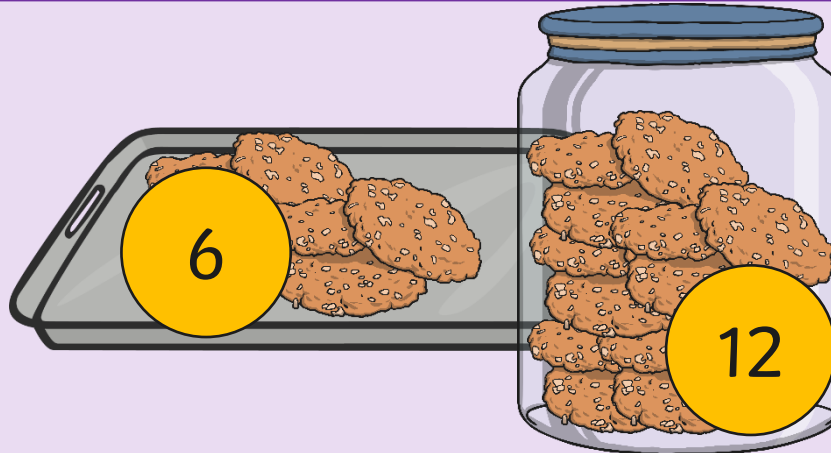
How many different ways did you find to represent this?

Preparations



After Hazma baked her cookies, she put 12 cookies into a jar.
There are 6 cookies left on her tray.

How many cakes did Hazma bake altogether?



$$12 + 6 = 18$$

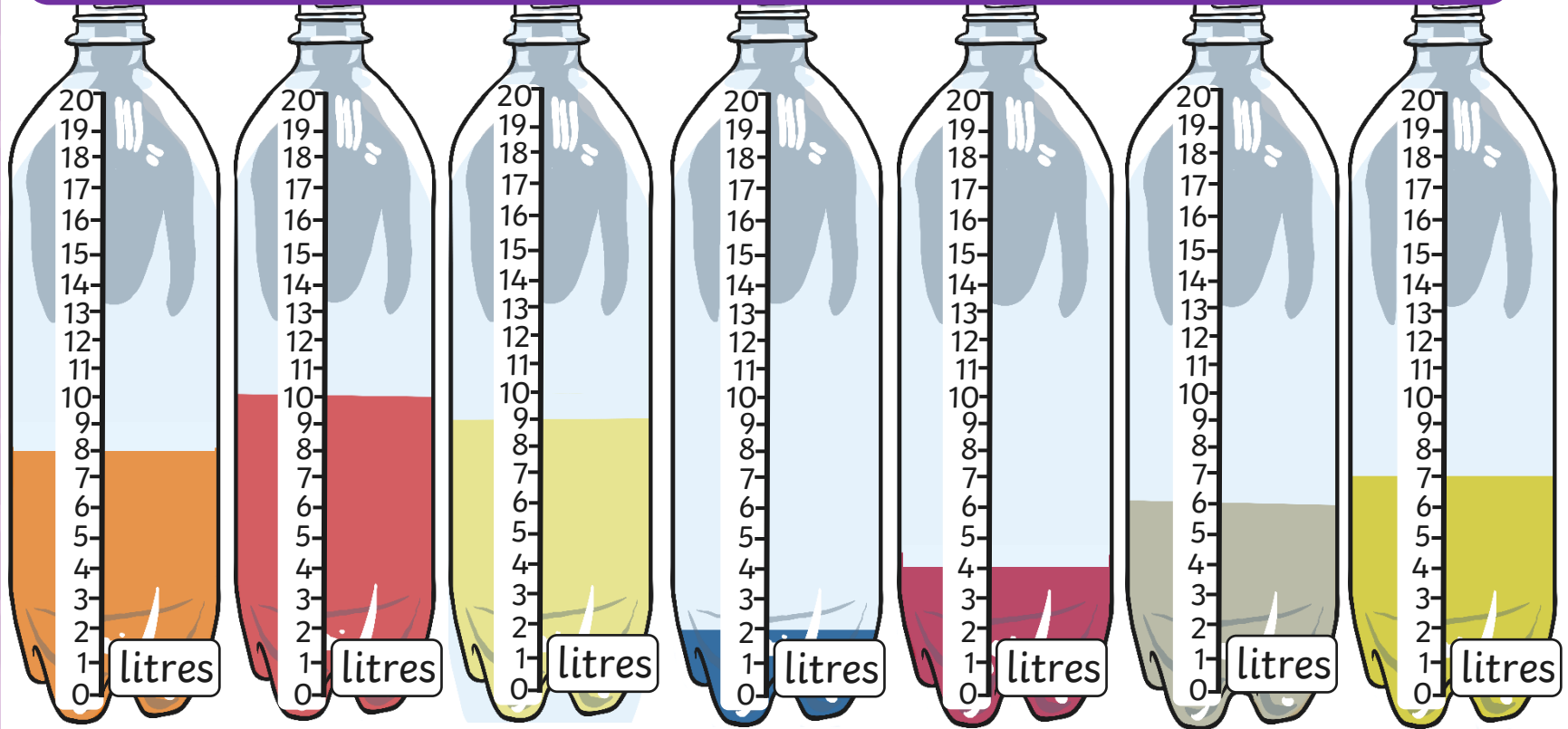
Hazma baked 18
cookies altogether.

How many different ways did you find to represent this?

Mixing Drinks

Class Two are in charge of the drinks.

They are going to make some interesting flavours!



Orange



Strawberry



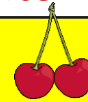
Lemon



Blueberry



Cherry



Apple



Banana



Mixing Drinks

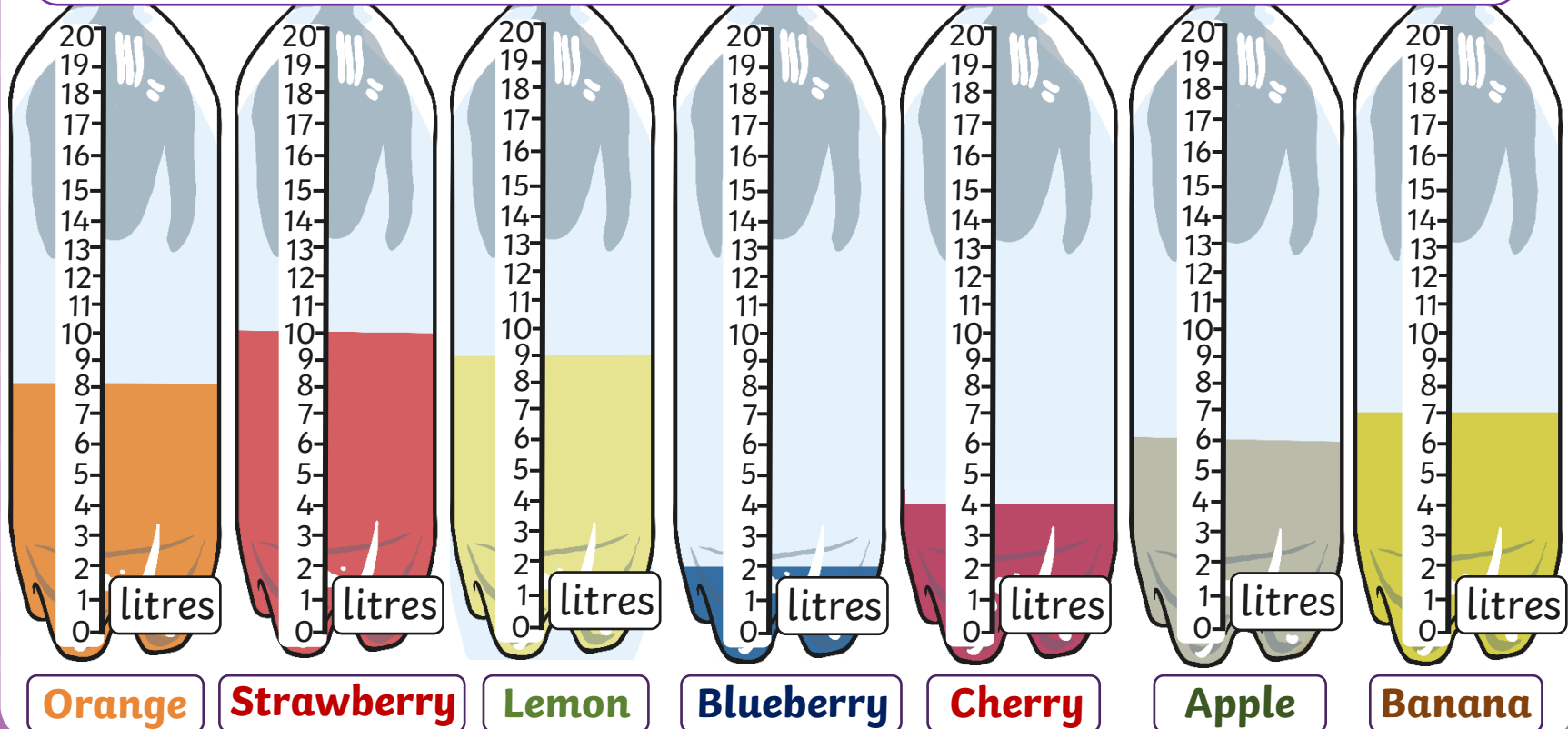


I'm going to use all the lemon and banana to make lemana flavour.



How much liquid will be in Aneesa's new drink?

How many different ways did you find to represent this?

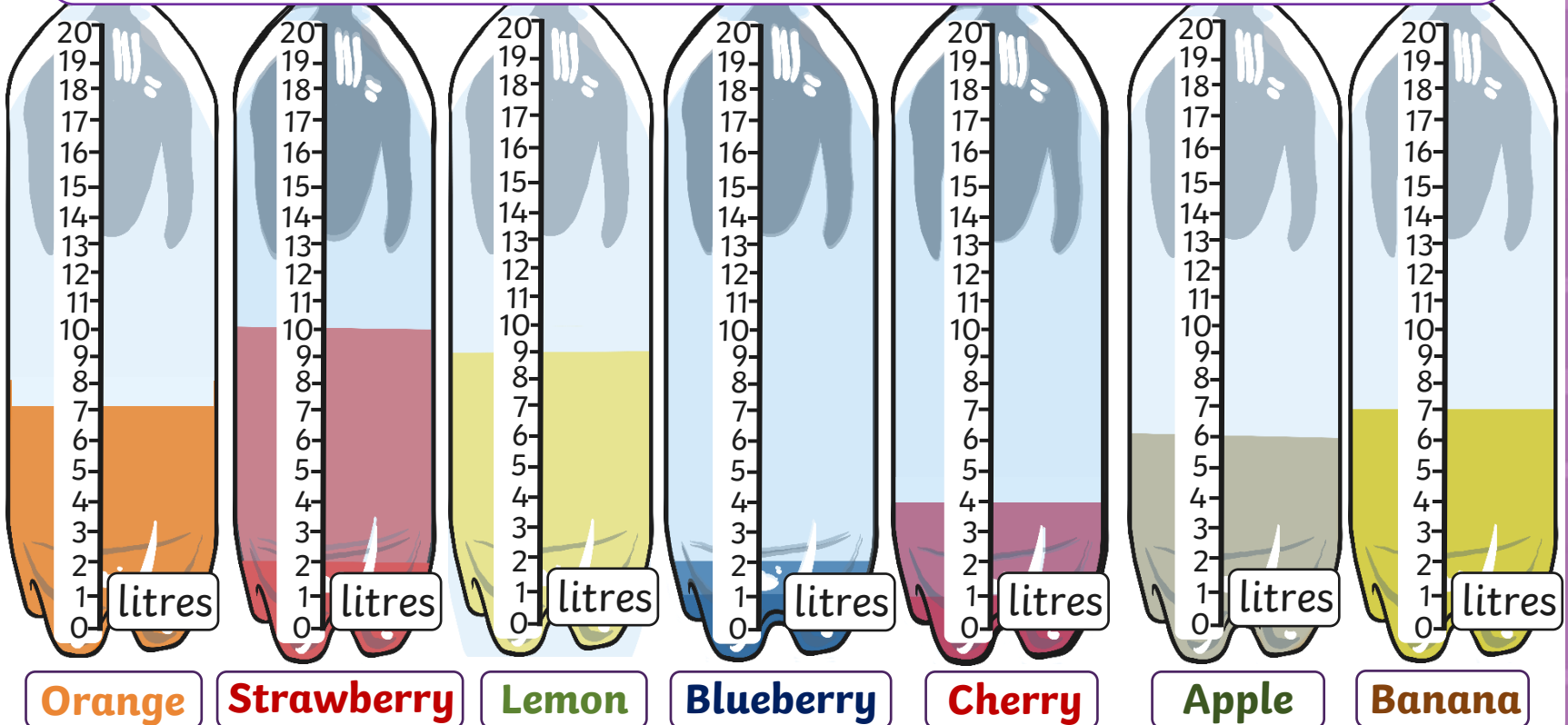


Mixing Drinks

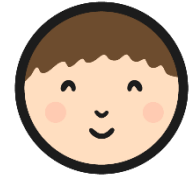


I used 3 litres of cherry, 8 litres of strawberry and 1 litre of blueberry to make bluecherryberry flavour.

How much liquid will be in 2 litres new drink?
Find different ways to represent this.



The School Feast



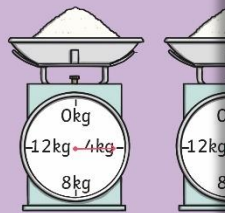
The School Feast

To solve problems involving quantities and measures.

The School Feast

5

How many kilos do the ingredients weigh in total?



6

In the flagpole competition, the classes used 3 sticks. They had to make the combined height of the sticks 21m. Which 3 sticks should they choose? Find 3 different combinations.



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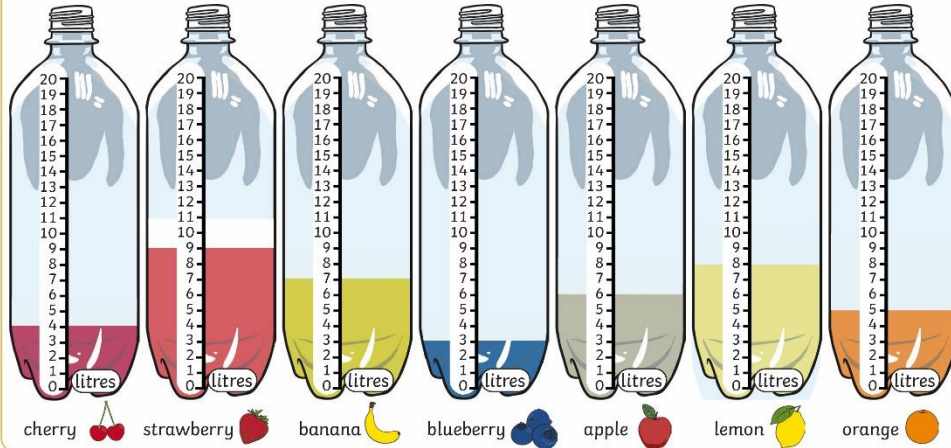
Maths | Addition and Subtraction | solve problems |
Lesson 3 of 4: Using Number Facts to Solve Measurement Problems

The School Feast

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How many different drinks of 20 litres can you create?

Can you make up names for your new flavours?



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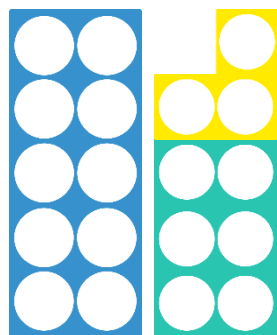
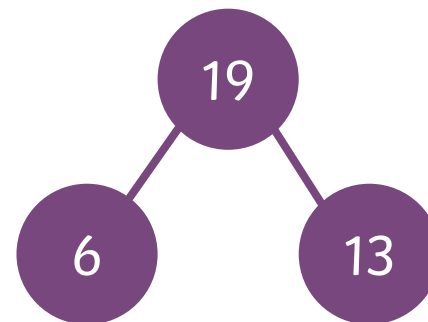
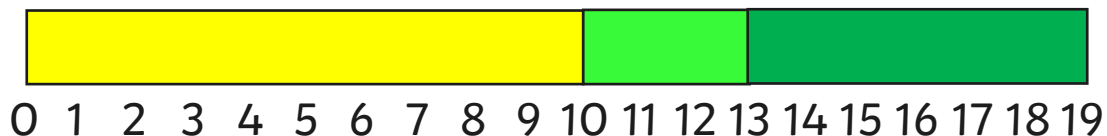
Maths | Addition and Subtraction | solve problems |
Lesson 3 of 4: Using Number Facts to Solve Measurement Problems

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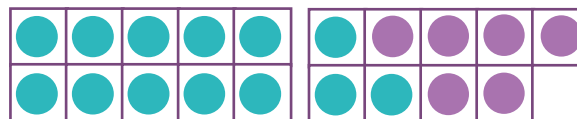
The School Feast



Represent your work in as many ways as you can.
Here are some suggestions:



Click the models to
hide them. Click [here](#) to
show them all.



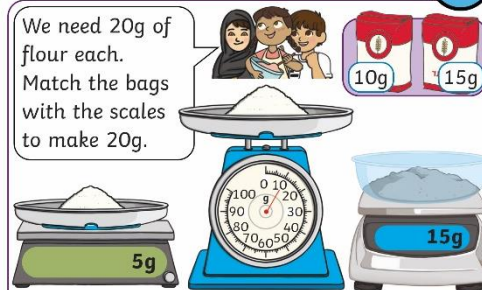
Diving into Mastery

Dive in by completing your own activity!



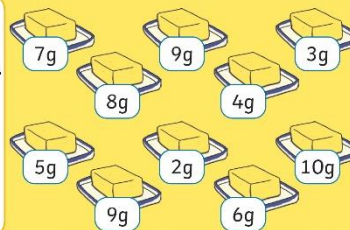
Using Number Facts to Solve Measurement Problems

We need 20g of flour each. Match the bags with the scales to make 20g.



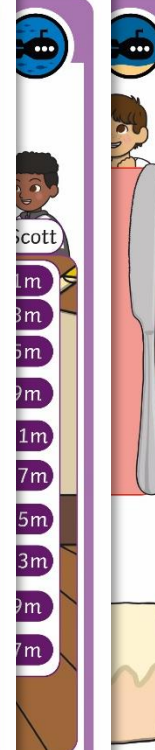
Label the bag of flour with the amount we need to add to the remaining scales.

We need 20g of butter each. Draw rings around the blocks of butter to make 20g.



Did you need all of the blocks?

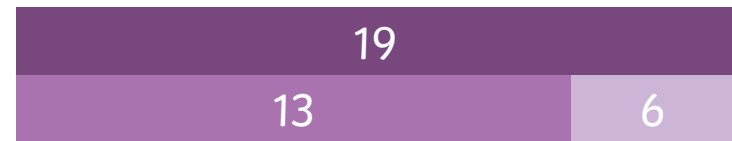
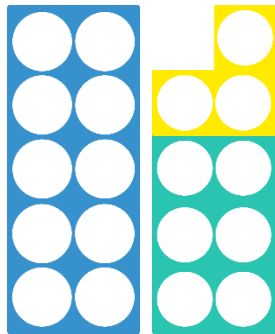
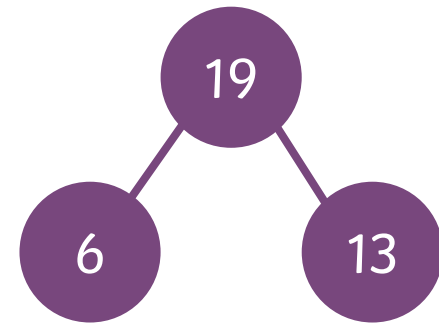
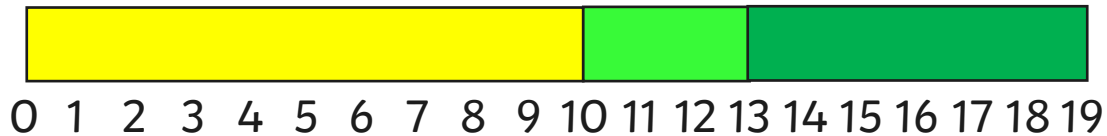
Can you find more ways to make 20 with these numbers?



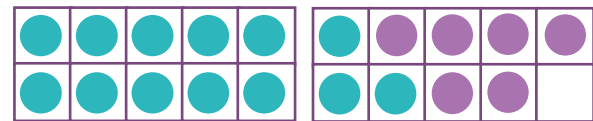
Models and Images



Which representations did you find most helpful?
Can you explain why?



Click the models to
hide them. Click [here](#) to
show them all.



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