

SmartMaths

Infant 1

SAMPLE



Rachel Telfer
Chantelle Felix

Consultant editor:
Penelope Furlonge

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Stage	Pupil's book	Boost eBook
SmartMaths Infant 1	9781036012052	9781036017552
SmartMaths Infant 2	9781036012069	9781036017569
SmartMaths Standard 1	9781036012076	9781036017576
SmartMaths Standard 2	9781036012083	9781036017583
SmartMaths Standard 3	9781036012090	9781036017590
SmartMaths Standard 4 and 5	9781036012106	9781036017606
SmartMaths Boost Teacher's Guide		9781036013417

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How to use this book

This Student's Book meets the content, skills, dispositions, outcomes and elaborations specified for Infant 1 in the primary curriculum for Trinidad and Tobago. It aims to make sure that, at the end of Infant 1, each student will be well prepared for the transition to Infant 2.

The mathematics curriculum is divided into four broad strands: Number, Geometry, Measurement and Statistics. Chapters are colour-coded to show which strand they belong to. The content for each strand appears in the same order in which it appears in the curriculum.

SECTION

1

Chapter 6 Subtraction

In this chapter, you will:

- solve simple subtraction problems using real things or pictures
- take away objects to show subtraction
- subtract in vertical and horizontal arrangements
- write subtraction sums using words and numbers
- make up number stories using the correct words.

Starting point

1 Look at the picture.

- a How many eggs did the hen lay?
Say the number.
- b Take away one egg from the hen.
- c Say how many eggs are left.



Describing subtraction

1 Look at the picture.



2 Four goats were in the field.
One goat ran away.

- a How many goats are **left**?
- b Say the number.

Take away means to **remove**.
The value of the number is **less**.

When we take away, the number gets smaller and the amount becomes less.



Key words

left
take away
remove
less

At the start of each chapter, you will find an **Objectives** box that lists key content and skills.

The **Starting point** activity stimulates discussion and curiosity.

Eye-catching photographs and illustrations stimulate students' interest.

Key maths idea boxes explain concepts and provide examples.

Key words boxes highlight the key vocabulary that students will need to know.

1 Here are four animals.



- a Cross out (X) the cats.

Numbered questions provide practice tasks for students.

As students work through the chapters, they will find the following features:

- **Mental maths:** This feature includes short questions for students to work out mentally (in their heads).
- **Problem solving:** This feature gives students a chance to apply their mathematical skills to problem-solving scenarios using the strategies they have learnt.
- **Hints:** This feature supplies additional background information, reminders or links to concepts that have appeared elsewhere.

Mental maths

1 Is the pattern rule below AB? Circle: Yes / No



2 What comes next in the ABC rule?
red yellow blue red yellow _____

Problem solving ?

Logical thinking

There are five girls in a grocery store. There are fewer boys in the grocery store than girls. Draw the girls, then draw the boys and create a number story.

Steps:

- 1 **Read:** We know there are 5 girls. There are fewer boys than girls.
- 2 **Plan:** Do a drawing in your exercise book.
- 3 **Solve:** Draw fewer boys than girls.
- 4 **Check:** The total number of children is more than 5.
What is the total number of children in your story?
_____ girls add _____ boys equals _____

The tallest building in Trinidad and Tobago is the Twin Towers!



Each chapter ends with a **Review** page, which comprises:

- **Key terms and concepts:** Vocabulary questions that check students understand the main terms and concepts presented in the chapter.
- **Quick check:** Short questions that revise the mathematics covered through the chapter.
- **Challenge and investigate:** Long questions or activities that can extend beyond the main curriculum for students who need to be challenged.

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for free access to the following:

- Additional content
- Answers
- Glossary
- Curriculum mapping

Section 1 Number Chapter 4 Number patterns

Review: Number patterns

Key terms and concepts

Circle the answer.

- 1 A **pattern / rule** is a group of things, like colours or shapes, that are put together in a special way.
- 2 A **repeating / non-repeating** pattern has elements that are different from the core.
- 3 The **ABC / AB** pattern rule is a repeating pattern that uses two different objects.

Quick check

- 1 Circle a leaf that comes next.



- 2 Write the pattern rule.



Pattern rule:

Challenge and investigate

Look at the picture.
Choose three objects and make an ABC pattern.

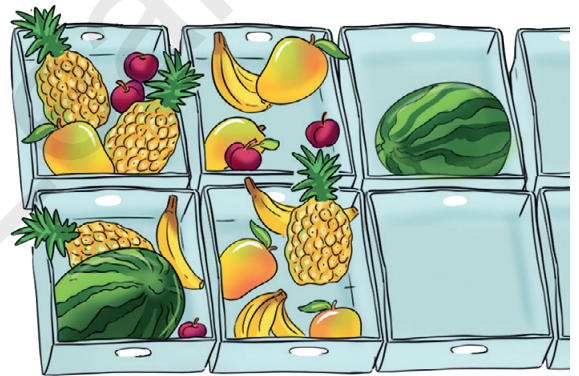


In this chapter, you will:

- sort objects into groups based on what they are like
- match one object with another to make pairs
- count to 20 in ascending and descending order
- count objects, and understand that each number represents one item.

Starting point

- 1** Look at the fruits at the grocery store. Circle the fruits that look the same, using the same-colour pencil.

**Same and different**

Some **objects** are the **same**, and some objects are **different**.

These objects are the **same**.

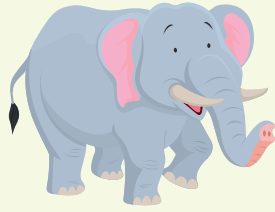
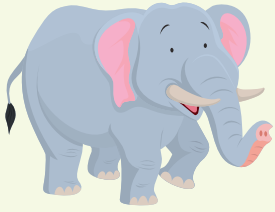


These objects are not the same. They are **different**.

**Key words**

objects
same
different





Same

They are both animals.
They have big ears.

Different

These are not the same fruits.
One is big and one is small.

1 Put a cross (X) on the item that is different.



2 Circle three differences on the cow on the right.



Sorting by colour

Sort the objects by **colour**.

Sorting is when you put objects into groups.

We can separate groups by **colour**, **shape**, size and **texture**.

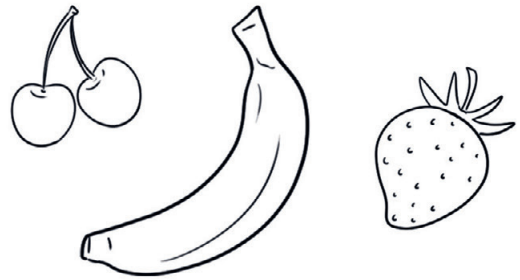
These vegetables are sorted by the colour green.



Key words

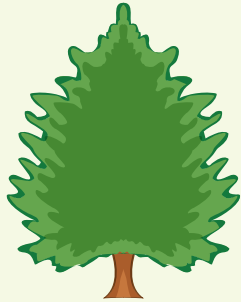
sort
colour
shape
texture

- 1** What colour are these fruits?
Colour each one red or yellow.
You have sorted the fruits by colour!



Sorting by size

We can sort objects by **size**. Objects can be **big** or **small**.



Key words

size
big
small

The Twin Towers are big.
The houses are small.
Circle the big buildings
in Port of Spain.



- 1** Draw a big building and a small building.

Big building



Small building



The tallest
building in
Trinidad and
Tobago is the
Twin Towers!



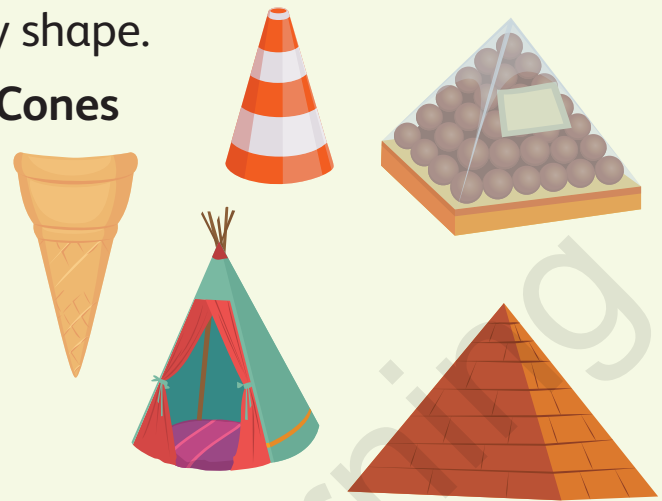
Sorting by shape

These objects have been sorted by shape.

Boxes



Cones



- 1 Circle all the objects in the 'Key maths idea' box that look like this: Δ

Key words

texture
soft
hard
prickly
smooth
rough
bumpy

Sorting by texture

Texture is how something feels.

Objects can be **soft**, **hard**, **prickly**, **smooth**, **rough** or **bumpy**.



soft



hard



prickly



smooth



rough



bumpy

- 1 The kitten, bear and blanket have the same texture.

Circle that texture.

prickly

rough

soft

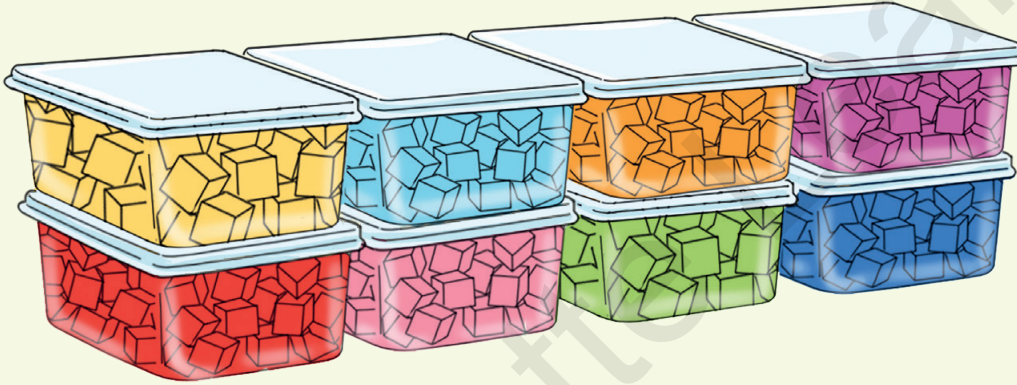
smooth

hard

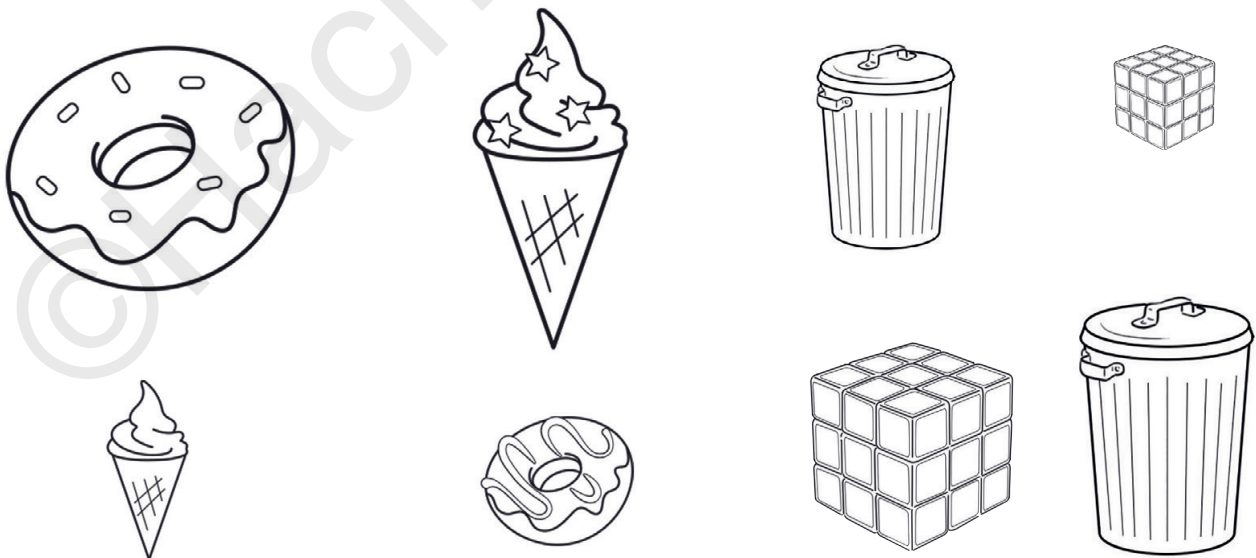


Sorting by colour and shape

We can sort objects according to what they are like.
These blocks are sorted by colour and shape.



- 1 Colour the items to sort them by colour and shape.



Sorting by texture and size

We can sort objects by how big or how small they are and how they feel.

The cats and dogs are all small and soft.



1 Cross out (X) the animal that is not prickly or small.



Hedgehog



Octopus



Thorny lizard

Same and equal to

We can match objects in groups.

There are three medals and three trophies.

There are **as many** medals **as** there are trophies.



Key words

as many as

- 1** Draw a line from each superhero to each doll to match the figures with the same pose. Count out loud as you match.



More than and fewer than

Key words

more than
fewer than

Some groups can have **more** items or **fewer** items **than** others. **Fewer** means not as many.



Nigel



Priya



Tyrone



Lara



Ato

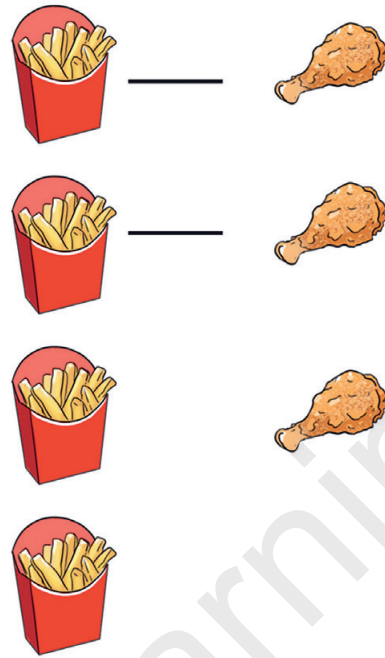
There are **more** boys **than** girls.

There are **fewer** girls **than** boys.

- 1** Match the objects by drawing lines.
Circle in red the group that has **more** items **than** the other group.



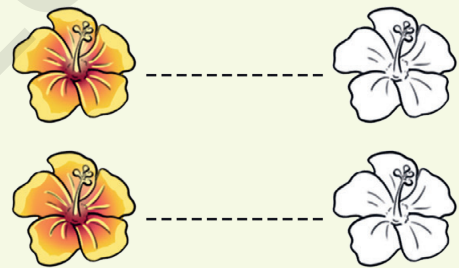
- 2** Match the objects by drawing lines.
Circle in blue the group that has **fewer** items **than** the other group.



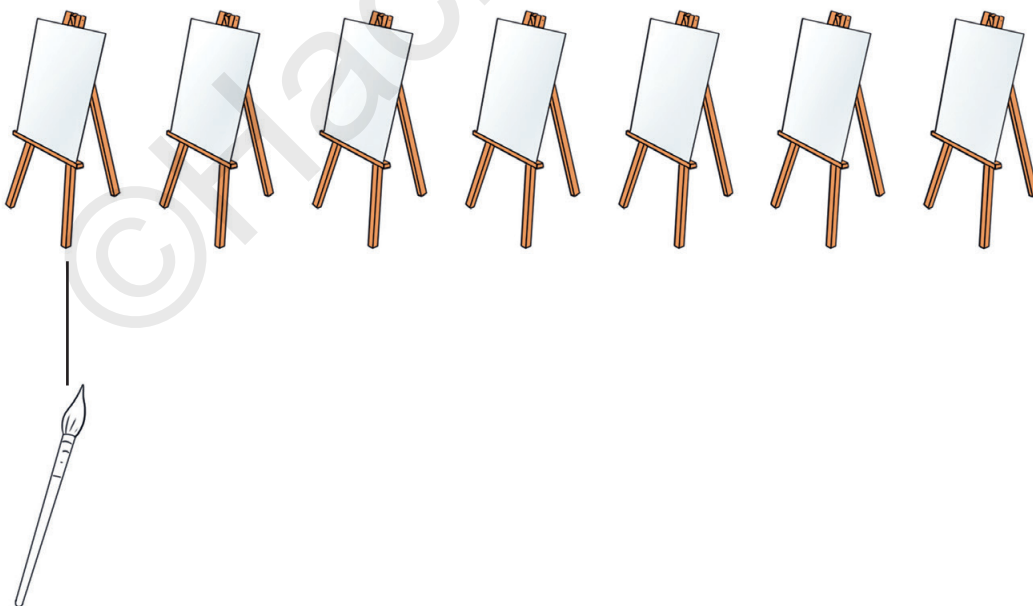
As many as

As many as means the same number.

There are **as many** hibiscus flowers on the left **as** on the right.



- 1** Draw a paintbrush to match each easel.



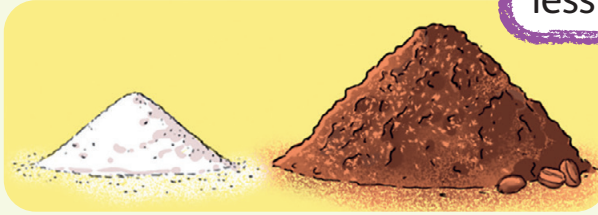
There should be **as many** paintbrushes **as** easels.



Less than

Less means not as much.

There is **less** sugar **than** coffee.



Key words

less than

1 Use counters to show **less** money **than** the bank has.

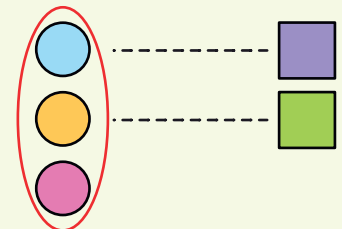


Comparing objects

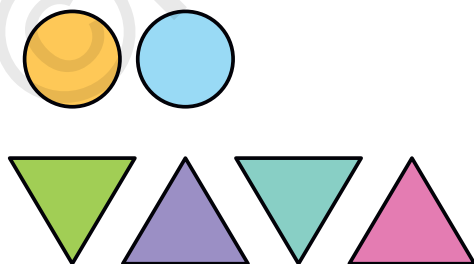
When we compare two groups, we use **more** and **fewer**.

A group may have **more** objects or **fewer** objects **than** another group.

There are **more** circles **than** squares.



1 Circle the group with more objects.



2 Cross out (X) the group with fewer objects.



Most and least / fewest

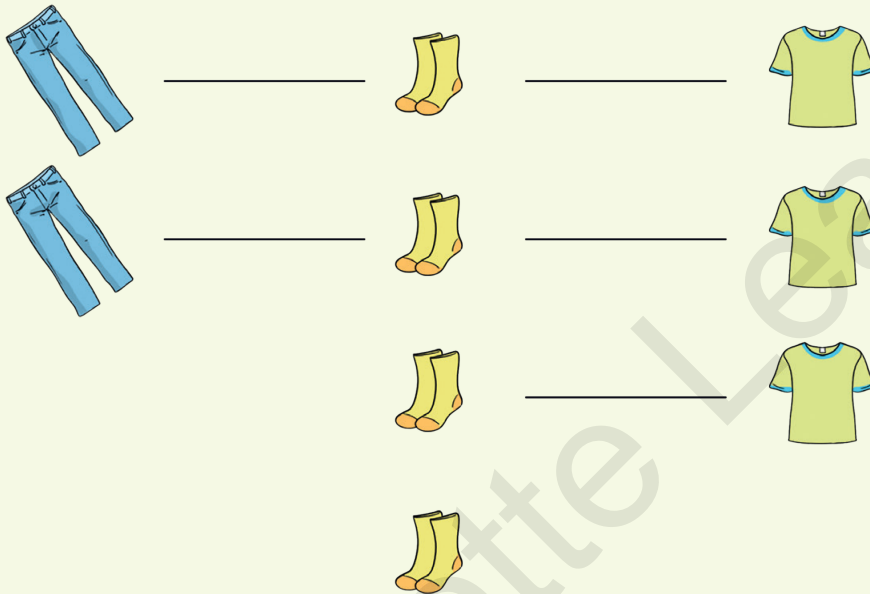
When we compare more than two groups, we use **most** and **least / fewest**.

The group with more than the other groups has the **most**.

The group with less or fewer objects than the other groups has the **least / fewest**.

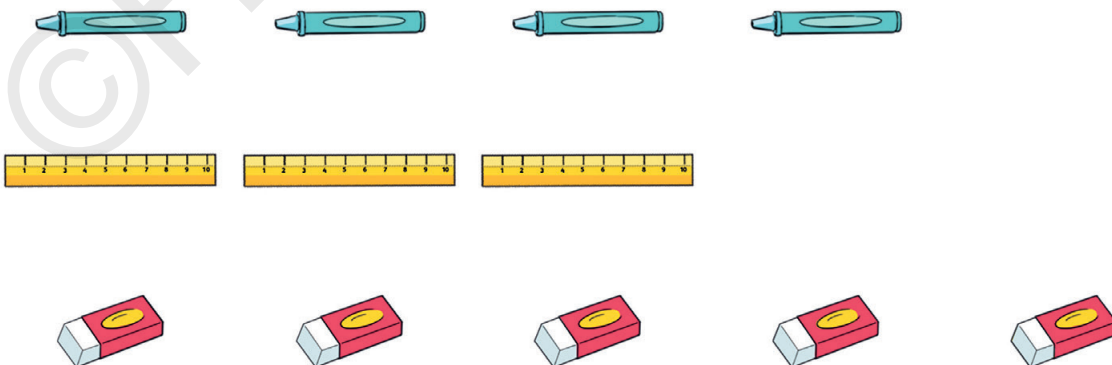
Key words

most
least
fewest



The group with the **fewest** items is the pants. The group with the **most** items is the socks.

- 1** Draw lines to match the groups. Circle in blue the group with the **fewest** items. Circle in red the group with the **most** items.



Problem solving



Use a model

Draw a line to match the correct group of buttons to the number of buttons on the shirt.



Steps:

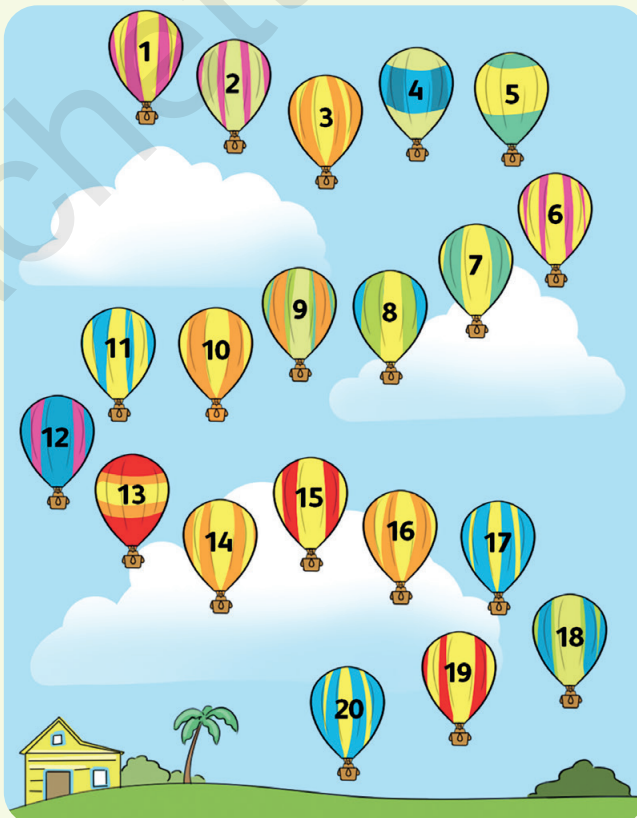


- 1 **Read:** Look at the buttons on the shirt. Find out which set matches.
- 2 **Plan:** Match buttons to the shirt.
- 3 **Solve:** Draw lines to match the buttons.
- 4 **Check:** Are the other buttons too many or too few?

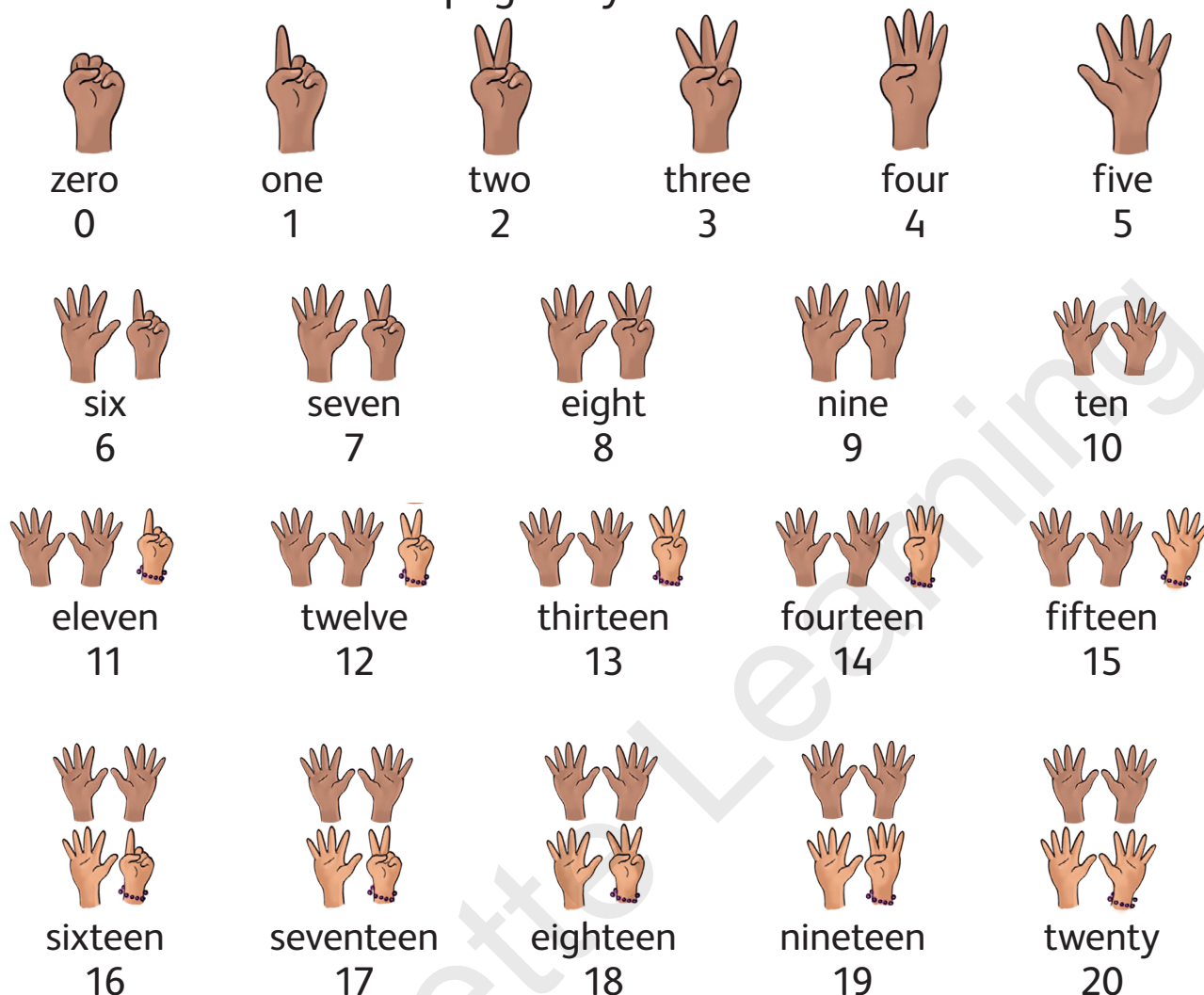
Counting to 20

Look at the balloons. Point to each balloon as you **count** out loud.

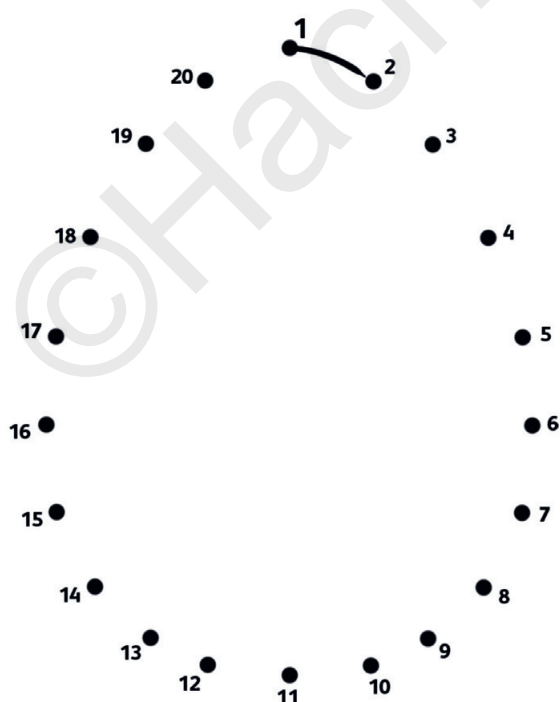
Key word
count



1 Touch each hand on the page as you count on aloud.



2 Connect the dots as you count on to make an egg.



Counting back from 20

Touch each hand on the page as you count back aloud.



twenty
20



nineteen
19



eighteen
18



seventeen
17



sixteen
16



fifteen
15



fourteen
14



thirteen
13



twelve
12



eleven
11



ten
10



nine
9



eight
8



seven
7



six
6



five
5



four
4



three
3



two
2

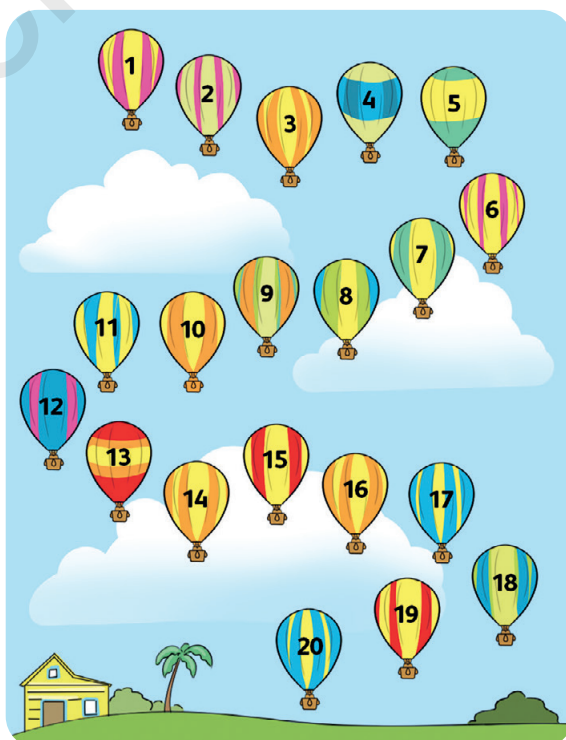


one
1

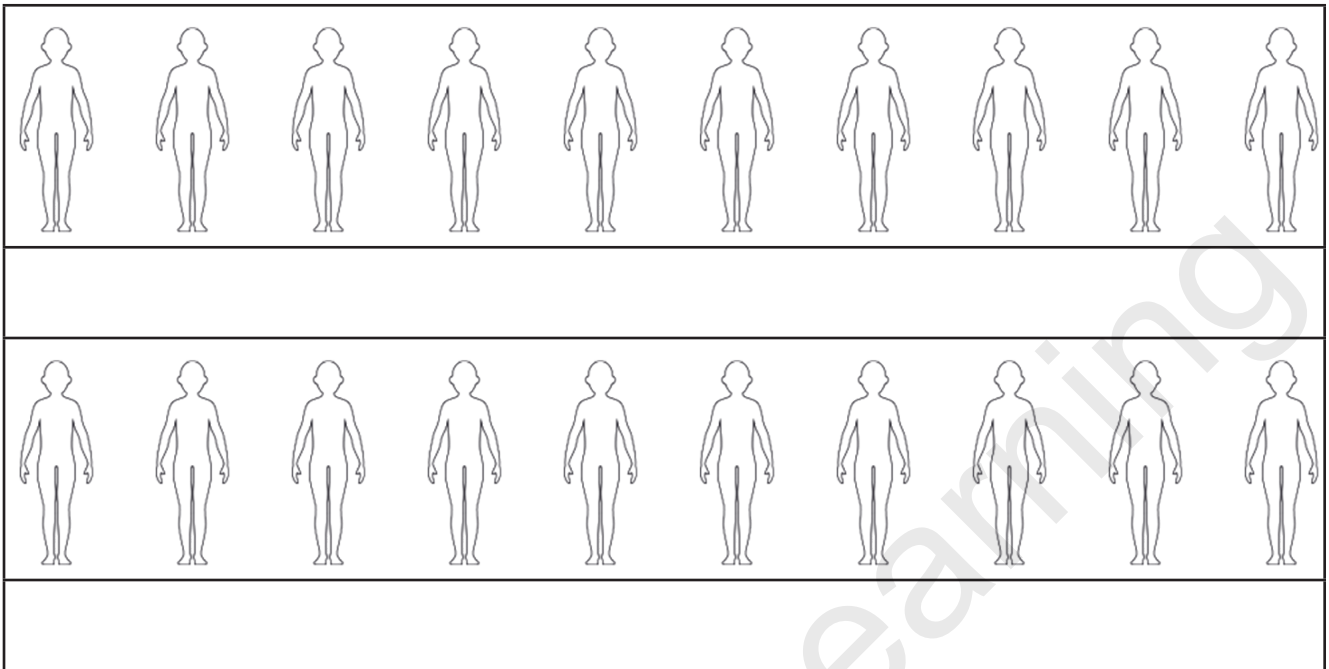


zero
0

- 1 Place a counter on each balloon. Take off the counter from each number as you count back from 20.

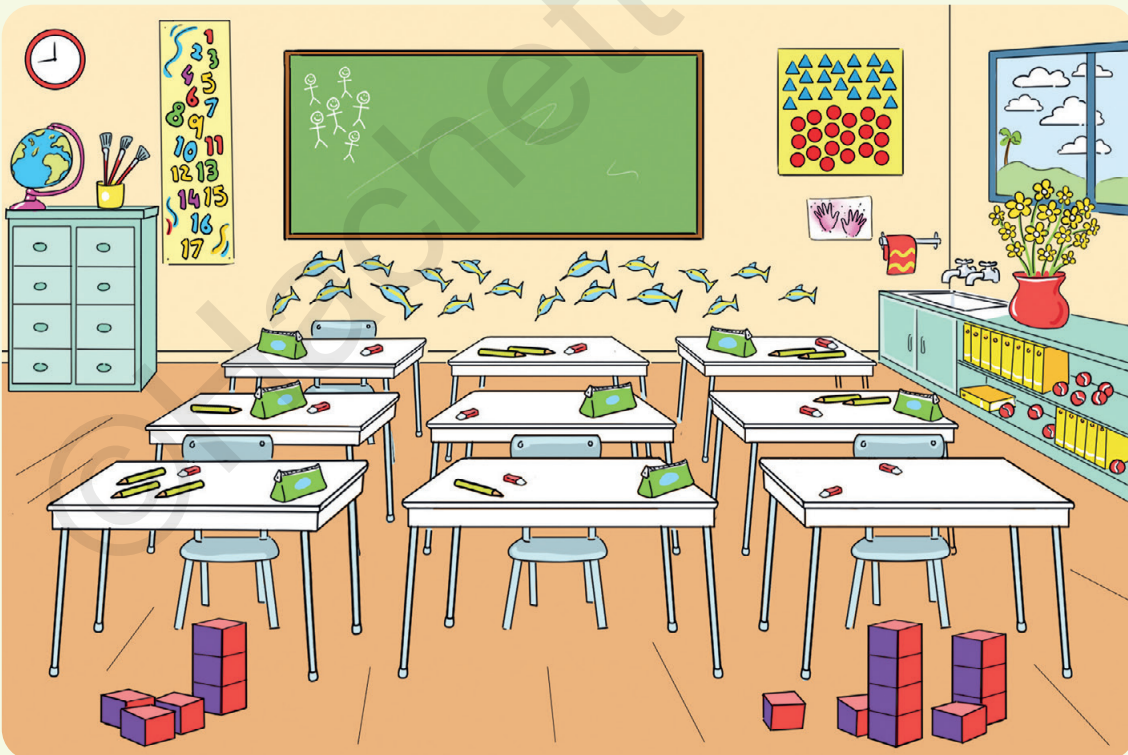


- 2** There are 20 people. Place a counter under each person. Count them as you go.



Counting to 20: last count

Count the items in the classroom.



Put a tick (✓) on the objects that are also in your classroom.

1 Count the **days** on the calendar. Circle the last day.

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20

2 Colour numbers 1 to 5 in red.
 Colour numbers 6 to 10 in orange.
 Colour numbers 11 to 15 in green.
 Colour numbers 16 to 20 in purple.

Key word
 days

1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20

Counting on from 0

Counting on is when we continue counting from a number.
 Let us start from 0.

0	1	2	3	4	5	6	7
---	---	---	---	---	---	---	---

1 Use counters to fill in the space to count on from 3.

1	2	3	
---	---	---	--

2 Use counters to fill in the spaces to count on from 15.

14	15			
----	----	--	--	--

Counting back to 0

When we count backward, we start from a bigger number and count to the smaller numbers.





fifteen
15



fourteen
14



thirteen
13



twelve
12



eleven
11



ten
10



nine
9



eight
8



seven
7



six
6



five
5



four
4



three
3



two
2



one
1



zero
0

1 Count backward out loud with a friend using your fingers.

Problem solving



Act it out

Help the dog get to the ball by colouring in. You must begin at 1 and end at 20!

Steps:

- 1 Read:** Know that numbers begin at 1 and end at 20. Find out where to start and finish.
- 2 Plan:** Count and colour from 1 to 20
- 3 Solve:** Colour each number from the dog to the ball.
- 4 Check:** All numbers are coloured in.

		1	2	5	13	8
		9	3	8	15	6
7	13	11	4	5	6	9
19	18	10	9	8	7	12
13	7	11	12	17	20	3
8	15	14	13	6	5	4
20	16	17	9	11		
14	9	18	19	20		

Review: Pre-number

Key terms and concepts

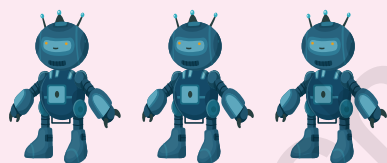
1 Circle the correct answer in bold.

- a** An orange is **the same colour as** / **a different colour to** a cherry.
- b** The group with more objects than any other has the **most** / **least**.

2 Fill in the blanks: 0, 1, ____, 3, ____, 5

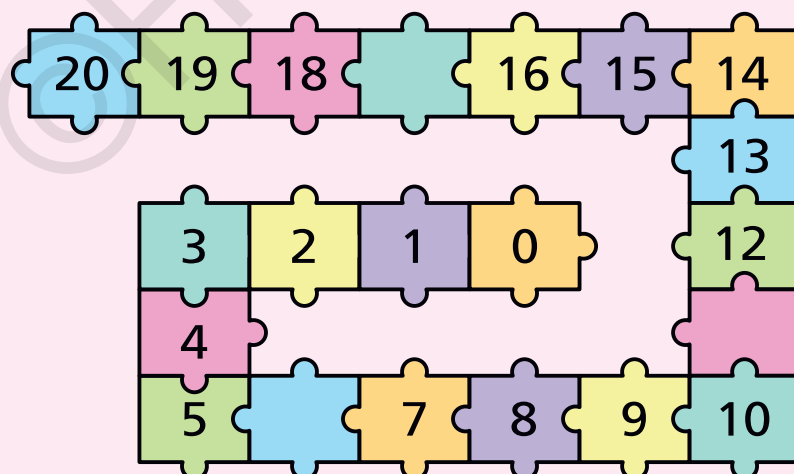
Quick check

1 Draw lines to match the bears and robots. Circle the group that has fewer objects.



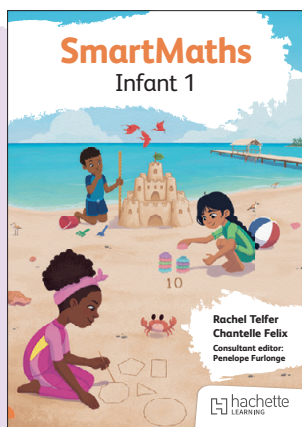
Challenge and investigate

1 Write in the missing numbers to count backward from 20.

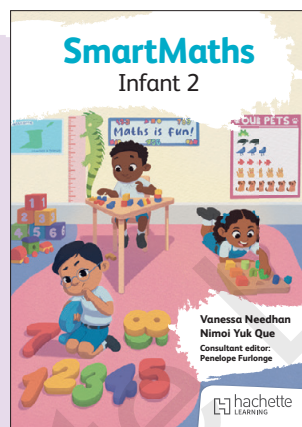


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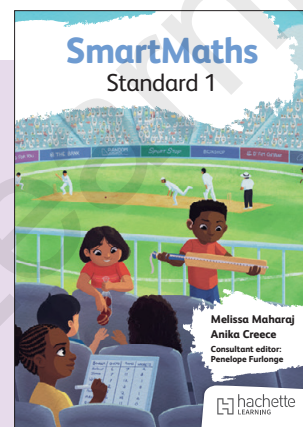
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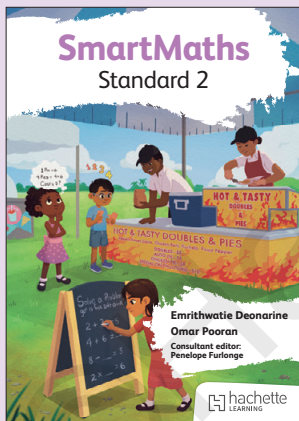
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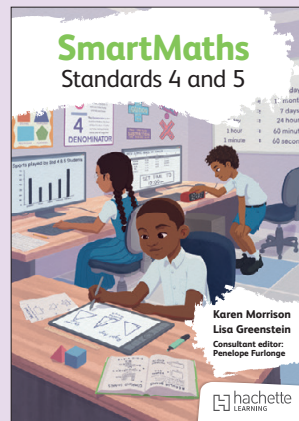
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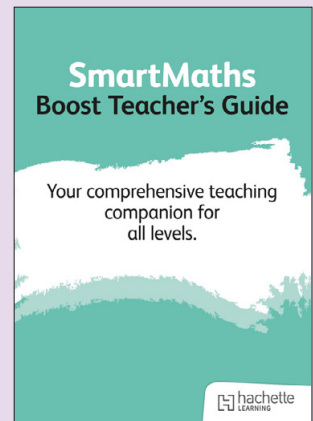
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Penny Roodal-Mohammed

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- The answers, glossary and curriculum mapping can be found online at www.hachettelearning.com/mathematics/smartmaths-infant-1.

Authors

Rachel Telfer has several years of teaching experience and is currently completing a Master's in Management Studies. Passionate about mathematics, she views numbers as both a challenge and a key to deeper understanding. She plans to expand her career in lecturing.

Chantelle Felix is the holder of a Diploma in Instructional Learning Design for Distance and Digital Learning and a Bachelor's in Special Needs Education. She is a creative, energetic and enthusiastic teacher who finds joy in making learning fun.

Consultant editor

Penelope Furlonge (Teacher's Dip, CertEd, BEd, MEd) has over 30 years of experience in Trinidad and Tobago serving as a primary and secondary teacher, head of department, vice principal, principal, mathematics curriculum facilitator and numeracy coach. She specialises in improving numeracy through her involvement in curriculum development, professional development workshops, testing and evaluation and national competitions.

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