Mathletics

Series A Student

Operations with Number

My name

First edition printed 2009 in Australia.

A catalogue record for this book is available from 3P Learning Ltd.

ISBN 978-1-921860-01-0

Published 3P Learning Ltd

For more copies of this book, contact us at: www.3plearning.com/contact

Designed 3P Learning Ltd

Series A – Operations with Number

Contents

Series Author:

Rachel Flenley

Addition – to 5

How many are there altogether?

2 and 2 makes 4 altogether.

1 How many are there altogether?

☐ and ☐ makes ☐ altogether.

☐ and ☐ makes ☐ altogether.

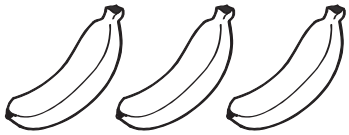
☐ and ☐ makes ☐ altogether.

☐ and ☐ makes ☐ altogether.

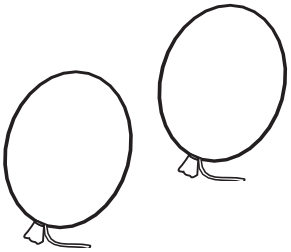
Addition – to 5

1 Draw more. How many are there altogether?

3 bananas Draw 2 more ☐ bananas altogether



2 balloons Draw 2 more ☐ balloons altogether



1 face Draw 3 more ☐ faces altogether

0 flowers Draw 3 more ☐ flowers altogether

Addition – to 5

1  Draw pictures or use counters to solve. Write how many are altogether.

3 great girls.

1 brave boy.

How many children are there altogether? ☐

2 black pups.

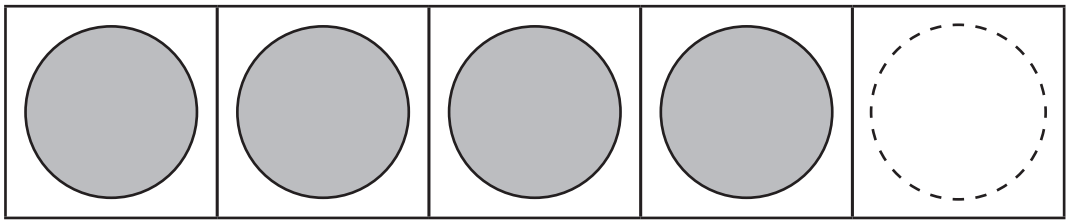
2 brown pups.

1 spotty pup.

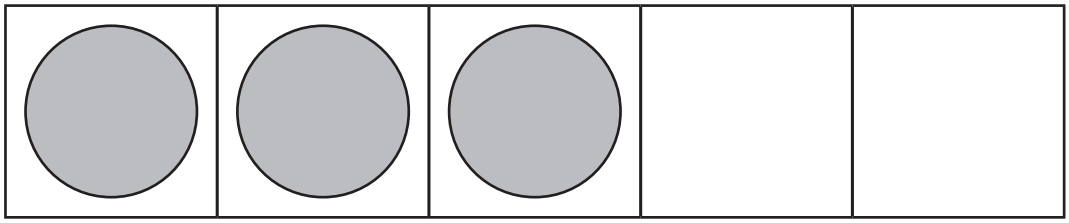
How many pups are there altogether? ☐

Addition – make 5

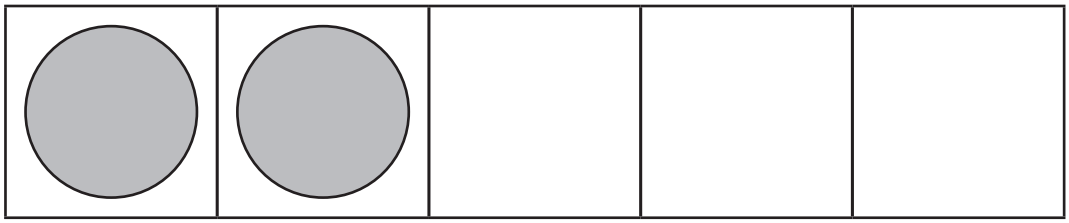
1 How many more to make 5?
Place counters in the empty squares to find out.



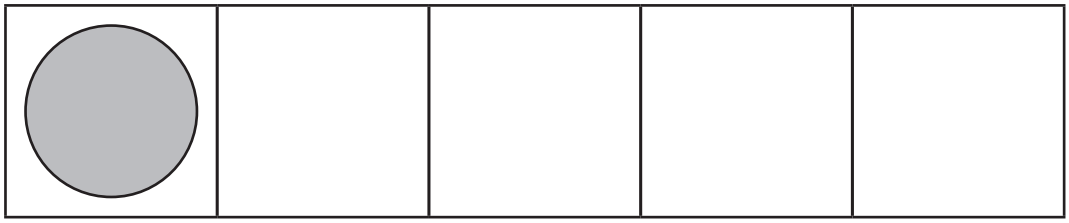
4 and 1 makes 5



and makes 5



and makes 5



and makes 5

Addition – make 5

group activity

You will need: partners chalk

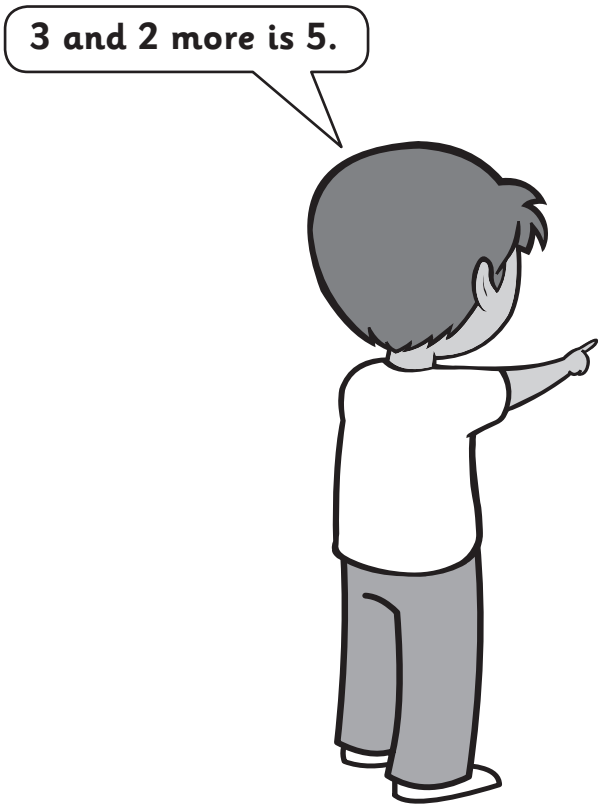
What to do:

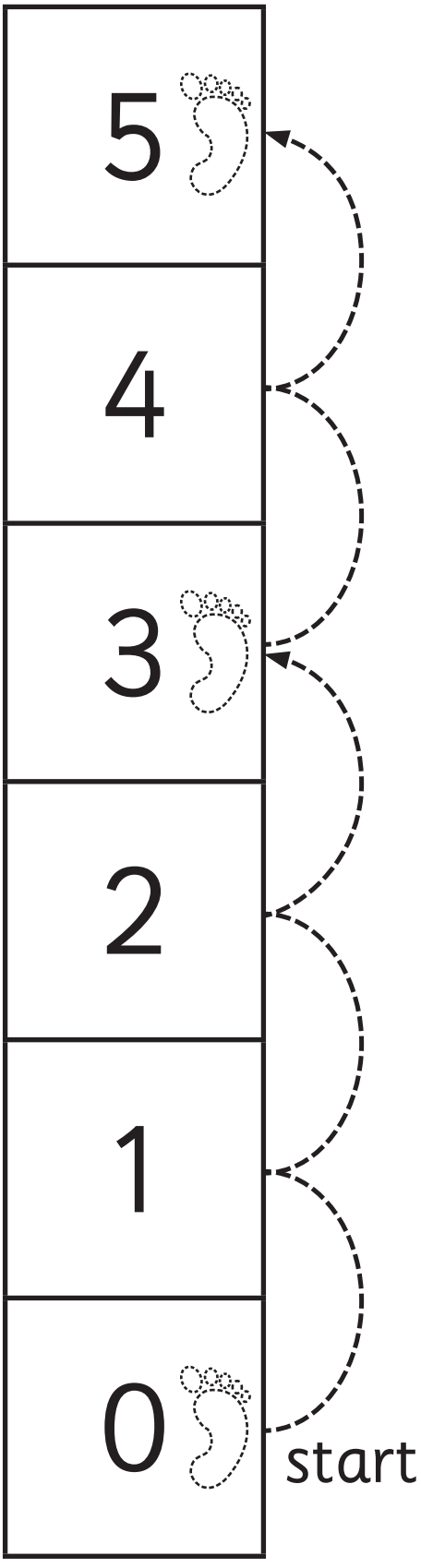
Use chalk to draw 6 number squares on the asphalt that are big enough to stand in.

Stand in 0. Your teacher or partners will say a number between 0 and 5. Take that number of steps.

Your job is to find out how many **more** steps to get to **5**. Count the steps you take until you are in 5.

Can you say the number fact you have made?





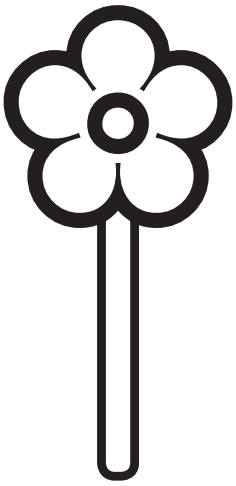
Addition – make 5

You will need: a partner, scissors, 2 cups, Blu-Tack, pencils or water colours, 5 popsticks

copy

What to do:

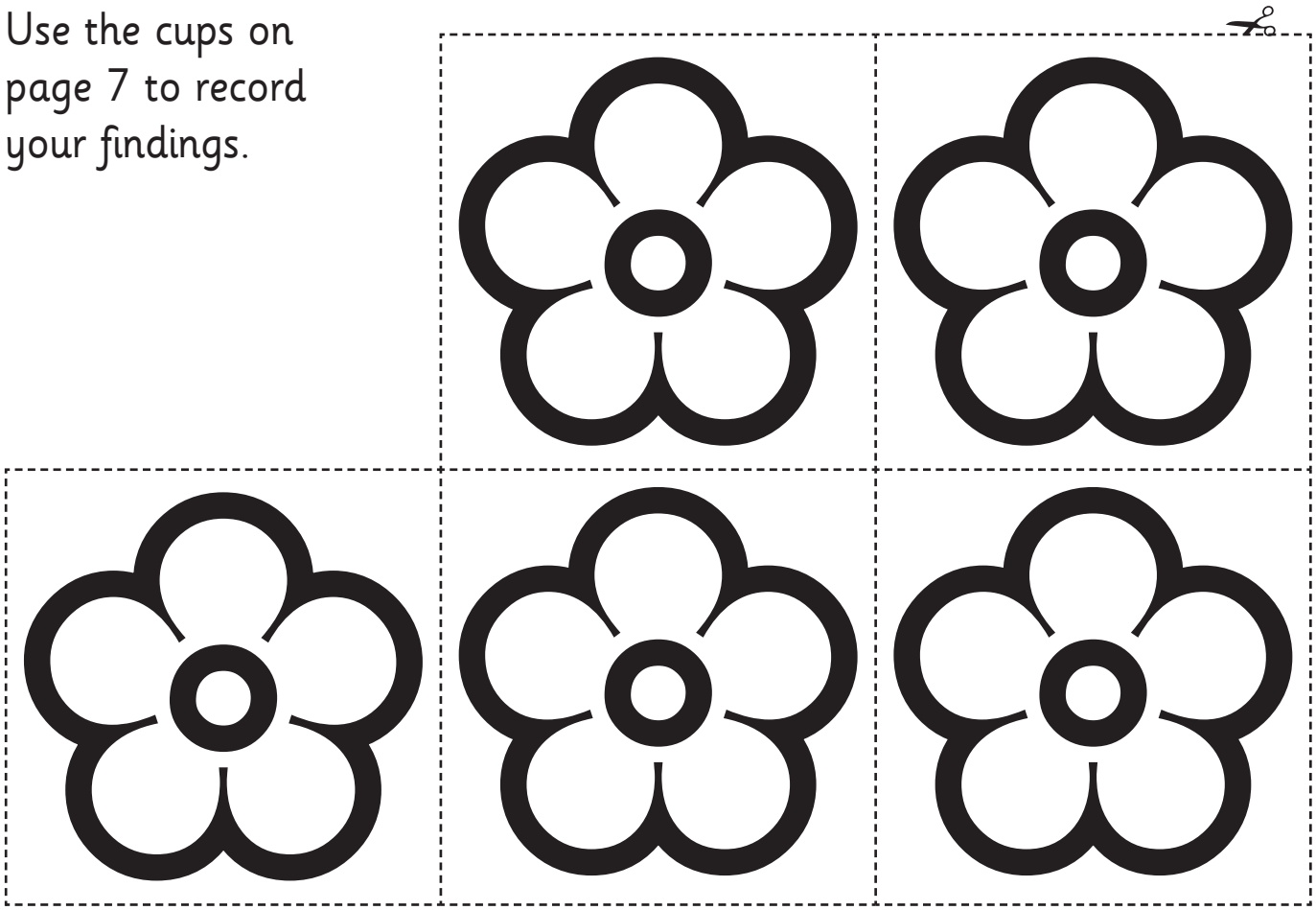
Colour or paint the flowers. Let them dry.
Cut them out and stick them onto the popsticks like this.



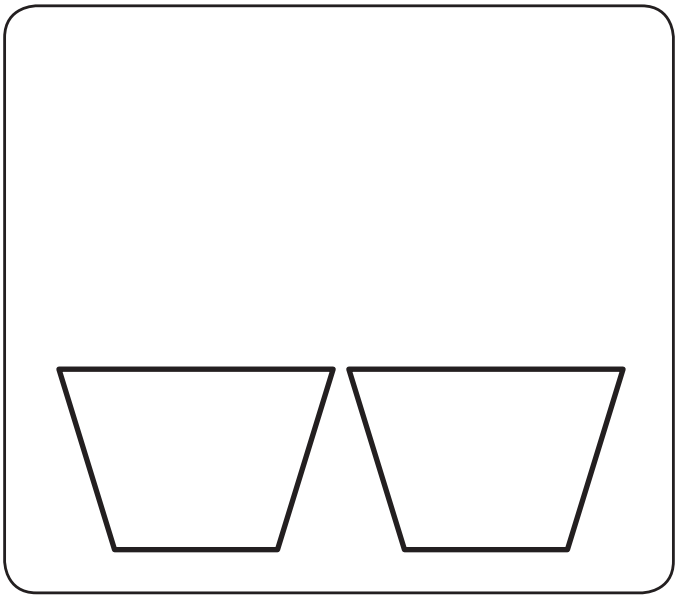
Put 1 flower in 1 cup and the rest in the other cup.
How many flowers are in the other cup?
Say the number fact out loud with your partner.
1 flower and **4** flowers makes **5** flowers altogether.

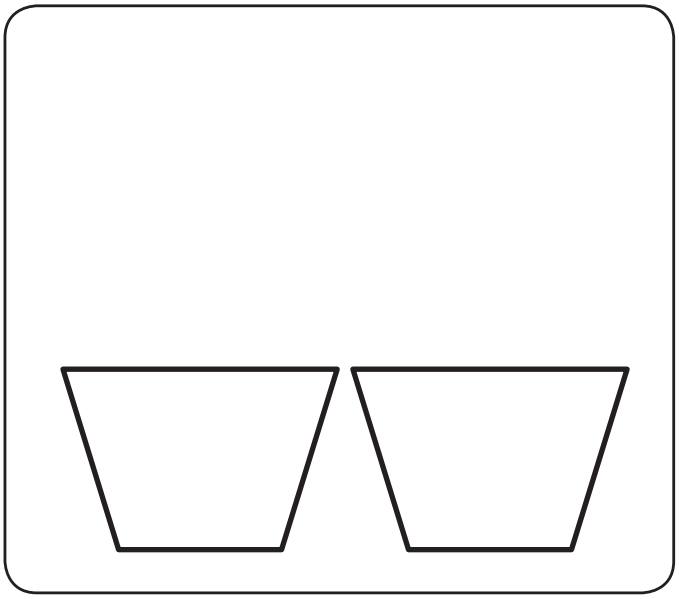
How many different ways can you find to arrange the flowers in the 2 cups? You will always make 5.

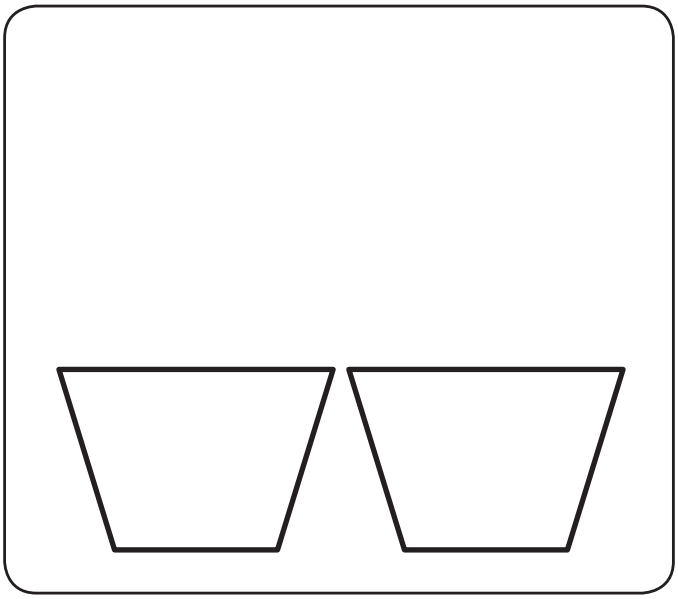
Use the cups on page 7 to record your findings.

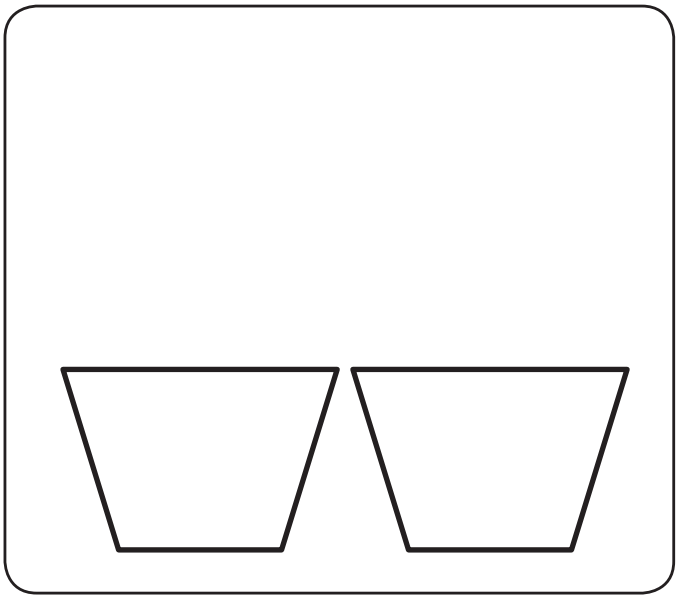


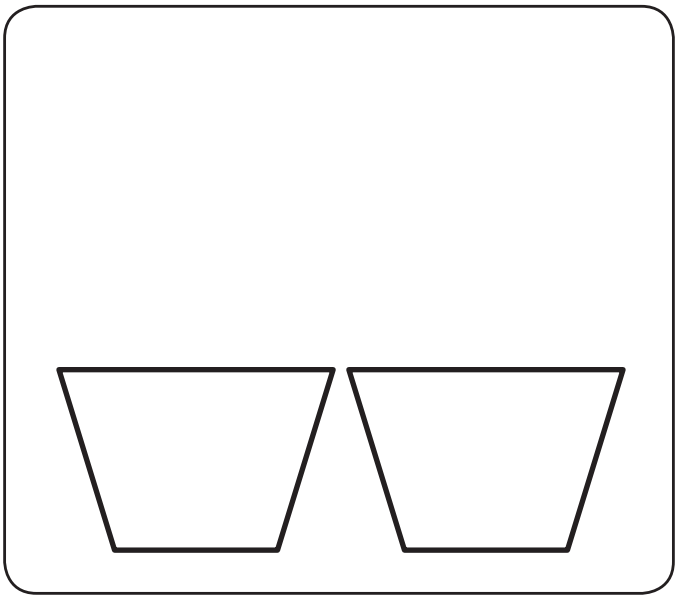
Addition – make 5

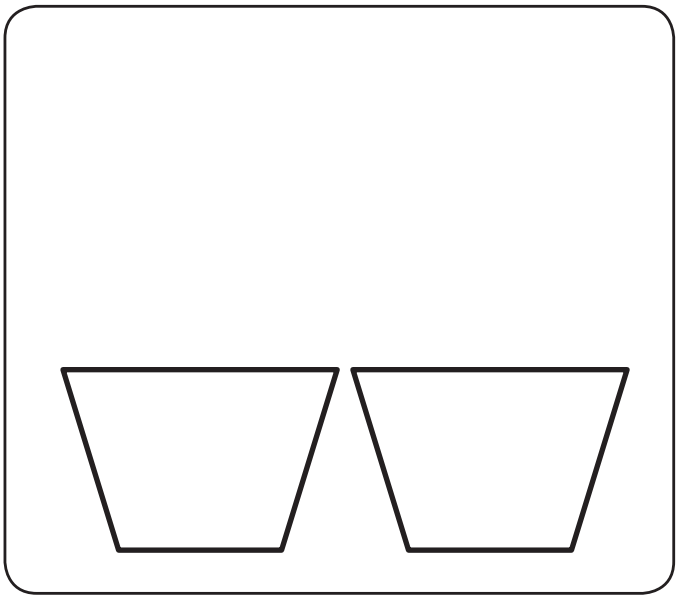








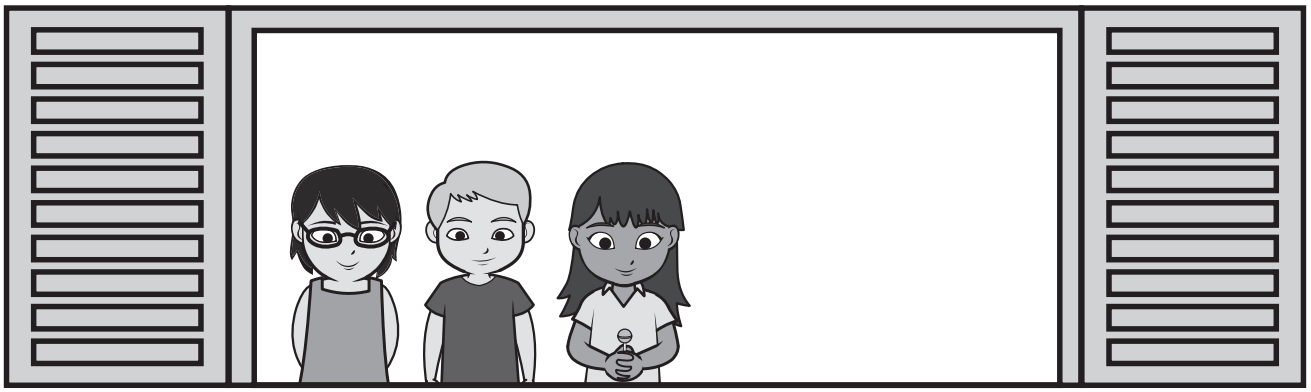




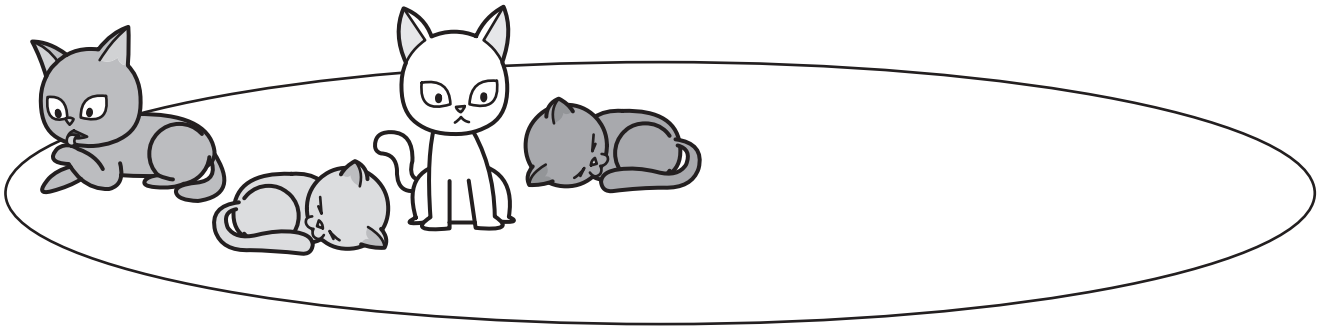
Addition – to 10

1 Draw more. How many are there altogether?

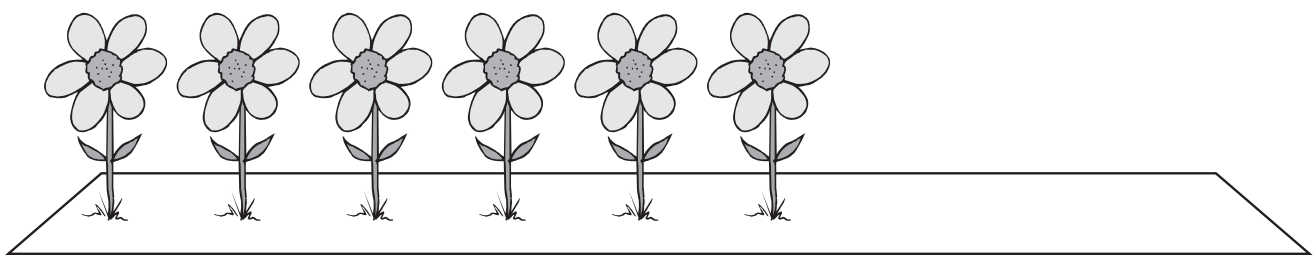
3 people Draw 2 more ☐ altogether



4 cats Draw 3 more ☐ altogether



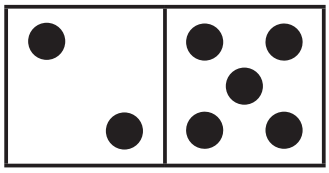
☐ flowers Draw 3 more ☐ altogether



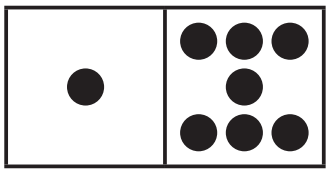
Addition – to 10

1 How many are there altogether?

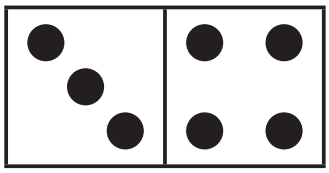
Say the number fact out loud to a partner.



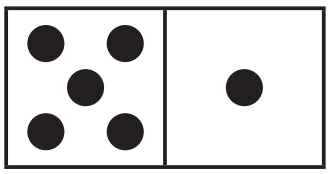
2 and 5 is 7 altogether.



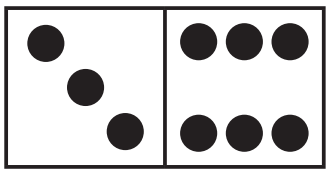
__ and __ is __ altogether.



__ and __ is __ altogether.



__ and __ is __ altogether.



__ and __ is __ altogether.

2 Draw your own dots on the domino.
Finish the number fact.

__ and __ is __ altogether.

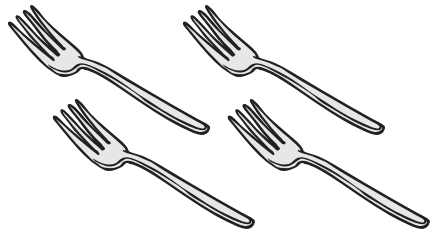
Addition – to 10

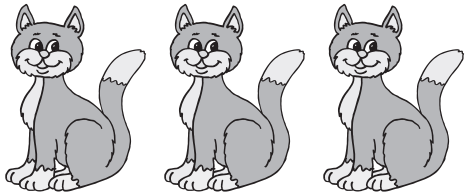
You will need: scissors glue stick

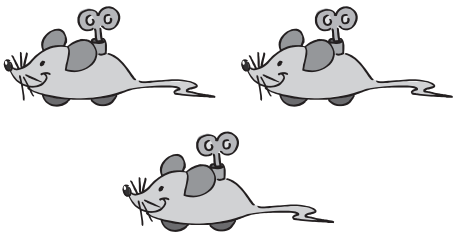
C copy

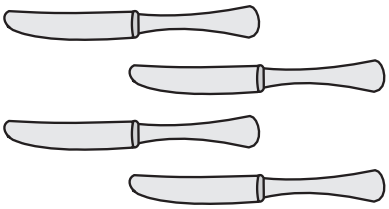
What to do:

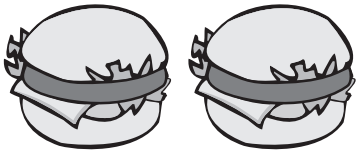
Cut out the boxes. Count and write how many are in each box. Find 2 boxes that match each other. How many things altogether?
Stick them together in your maths book.
Record or tell someone the number facts you have made.

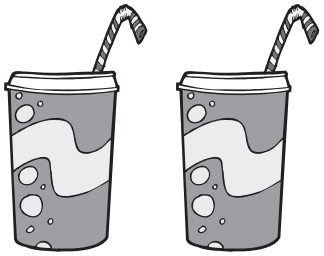










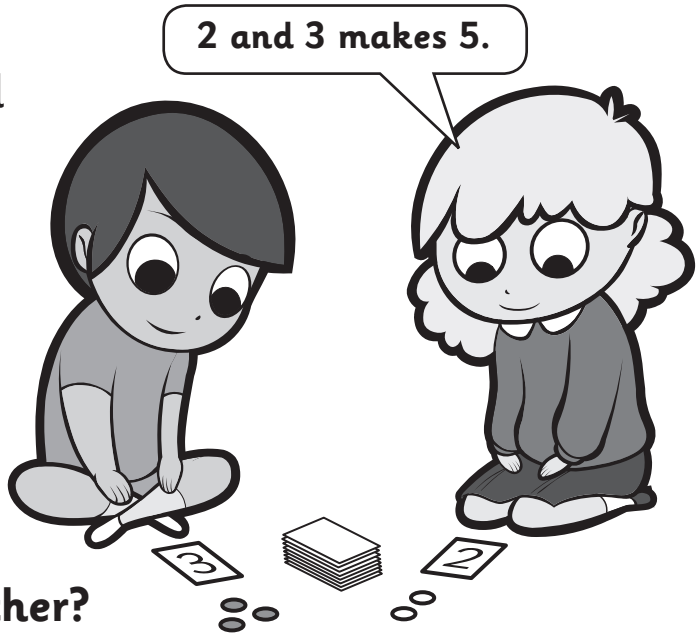


Addition – to 10

You will need: a partner, scissors, 5 blue counters and 5 yellow counters

C copy

What to do:



Player 1, take the blue counters and Player 2, take the yellow counters. Cut out the numbers below.

Turn them face down and spread them out.

Each player turns over a number and puts out the counters to match it.

How many counters are altogether?

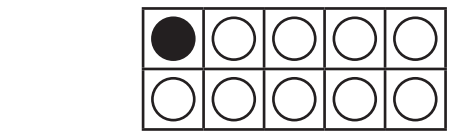
Record your number fact in your maths book.

Put the numbers back. Make 5 different sentences.

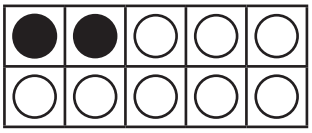
1	2	3	4	5
1	2	3	4	5

Addition – make 10

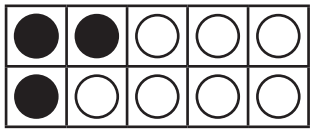
1 Colour more dots to make 10. Finish the number facts.



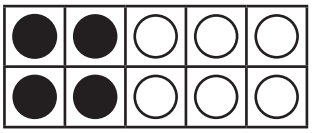
1 and 9 is 10



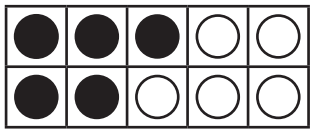
2 and ☐ is 10



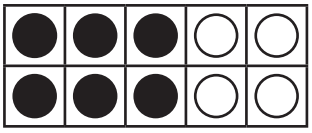
☐ and ☐ is 10



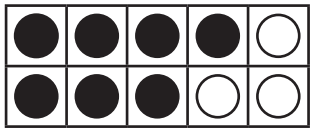
☐ and ☐ is 10



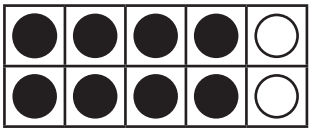
☐ and ☐ is 10



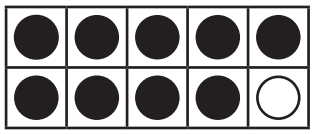
☐ and ☐ is 10



☐ and ☐ is 10



☐ and ☐ is 10



☐ and ☐ is 10

Addition – make 10

You will need: scissors, glue stick, a copy of this page and page 14

copy

What to do:

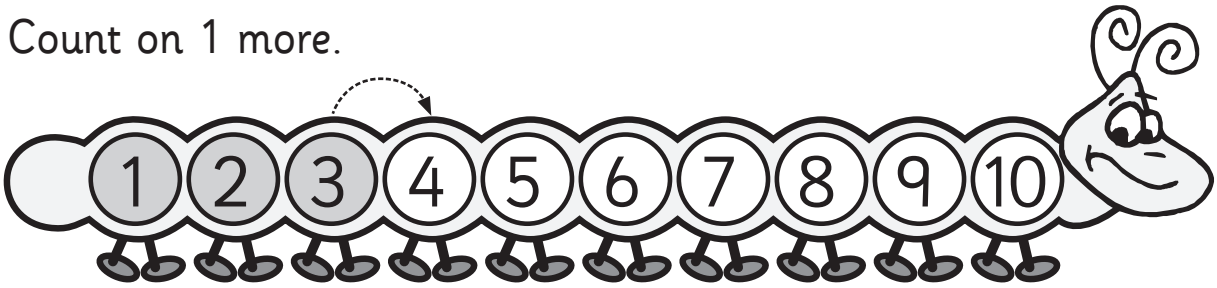
Cut out the groups on this page and page 14. Mix them up. Find the groups that make 10 when joined together. Stick them in your maths book.

Addition – make 10

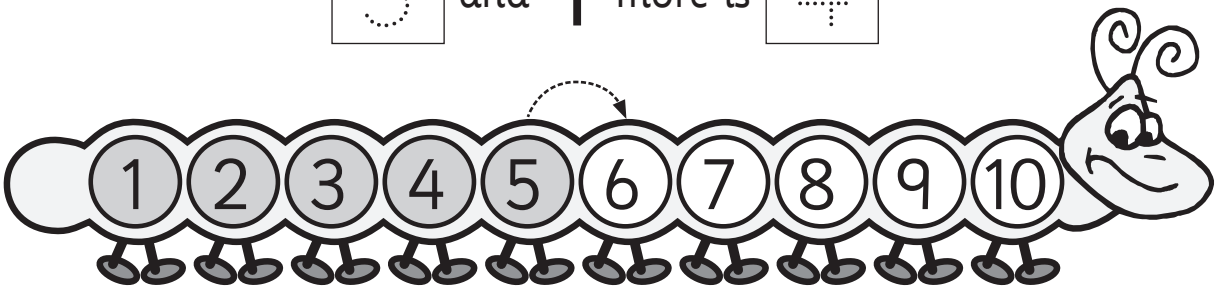
copy

Addition – counting on

1 Count on 1 more.



3 and 1 more is 4



5 and 1 more is

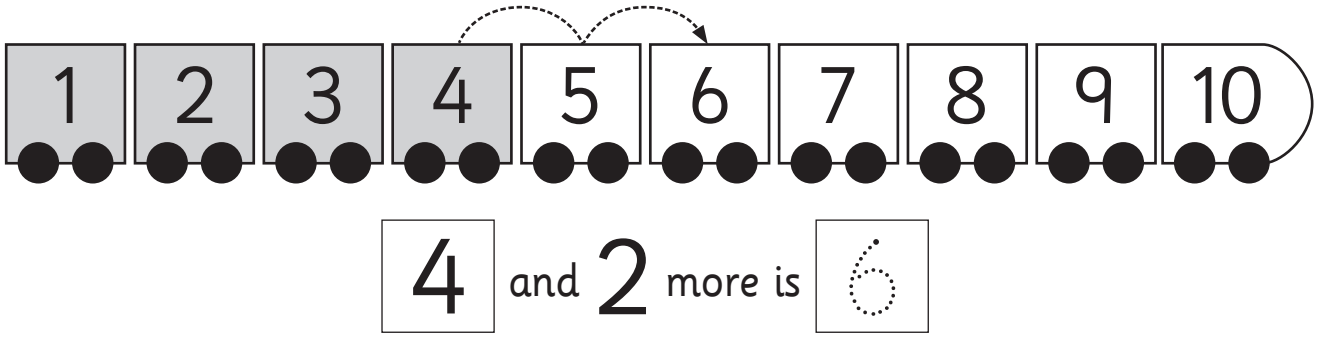
and 1 more is

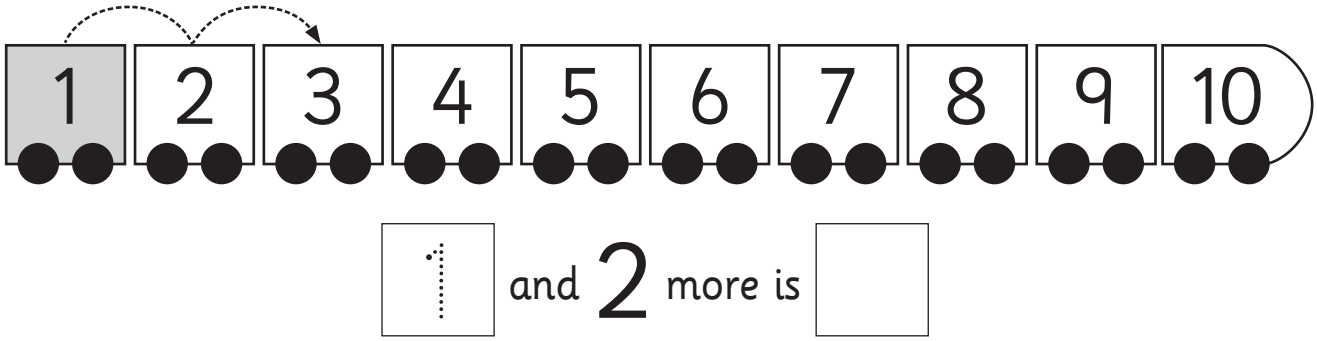
and 1 more is

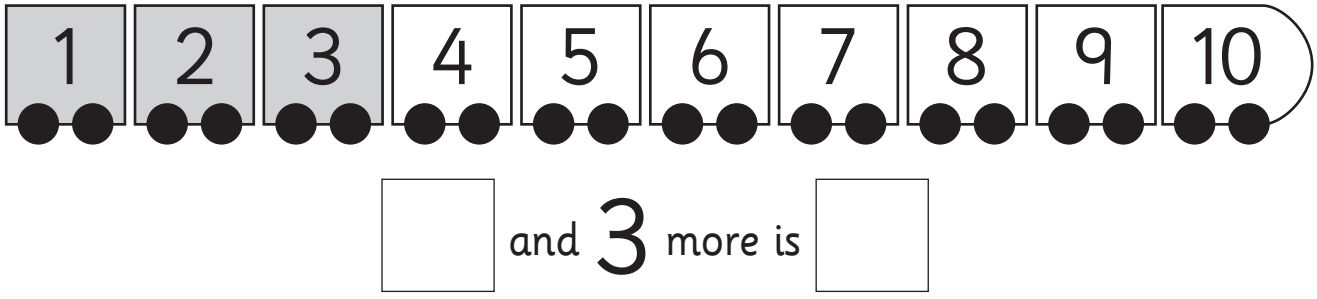
and 1 more is

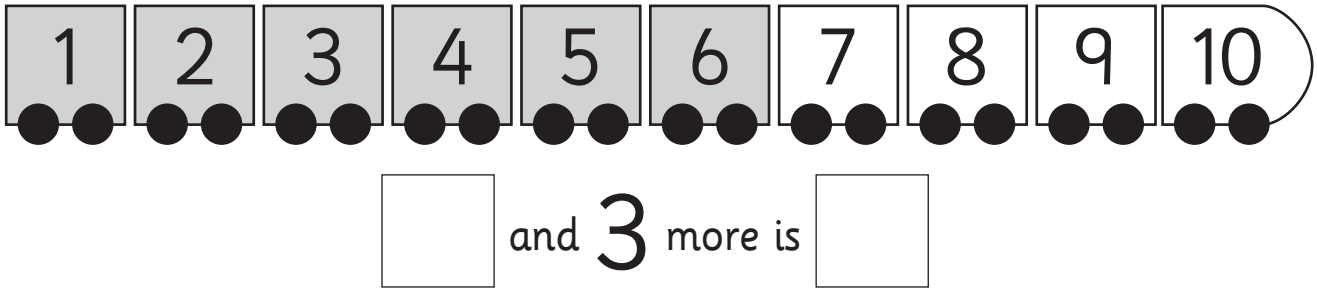
Addition – counting on

1 Count on 2 or 3 more.









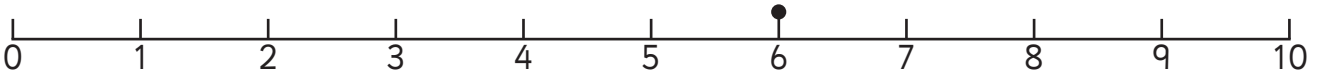
Addition – counting on

We can jump along number lines to help us count on.

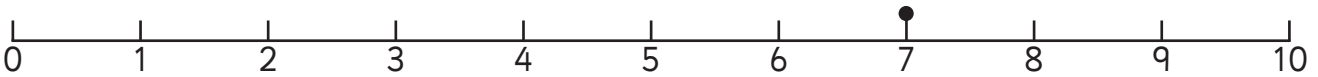
What is 3 more than 6? We start at **6** and take **3** jumps.

6 and **3** more is **9**

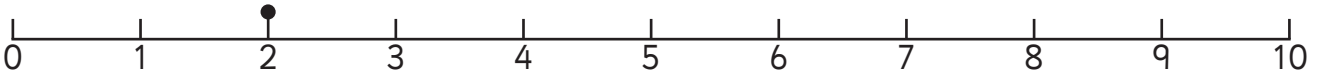
1 Jump along the number lines. Finish the number sentences.



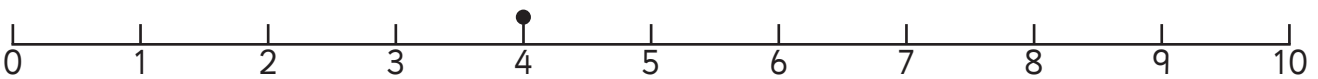
Take **1** jump. 6 and 1 more is ☐



Take **2** jumps. 7 and 2 more is ☐



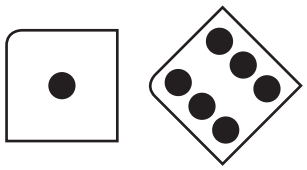
Take **2** jumps. 2 and 2 more is ☐



Take **3** jumps. 4 and 3 more is ☐

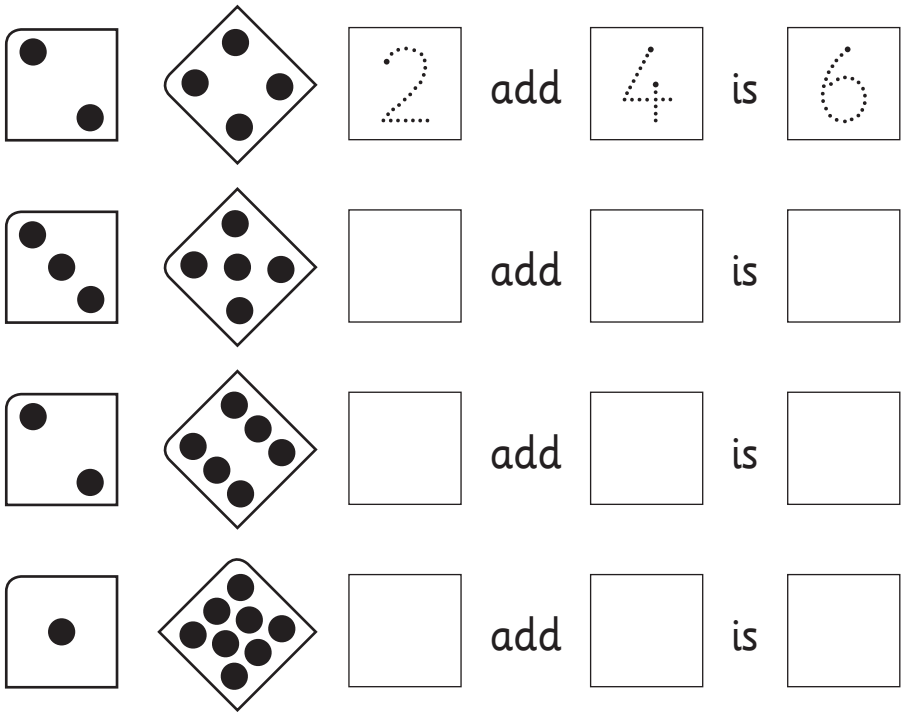
Addition – introducing the term 'add'

When we join 2 groups together, we **add** them. Another word for this is **plus**.

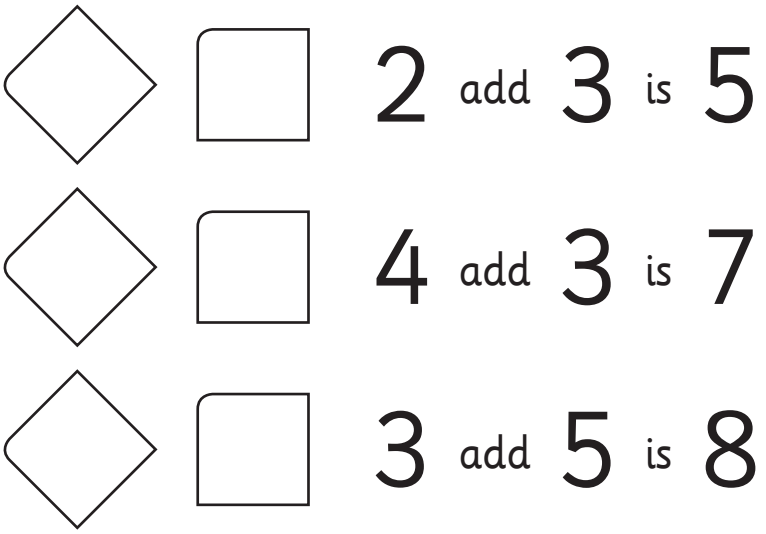


1 add 6 is 7

1 How many? Add the dots.



2 Draw dots on the dice to match the number facts.



Addition – explore

You will need:  a partner  counters

What to do:

Work with your partner.

Use pictures, counters or the number line to solve these problems.

5 kids were on the playground.

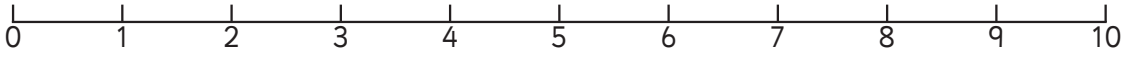
4 more kids join them.

How many kids are on the playground now? ☐

3 cats were on the mat.

4 more cats sit on the mat.

How many cats are on the mat now? ☐



Addition – explore

You will need: a partner, chalk, 2 bean bags

What to do:

Draw 6 number squares with chalk on the asphalt or carpet.

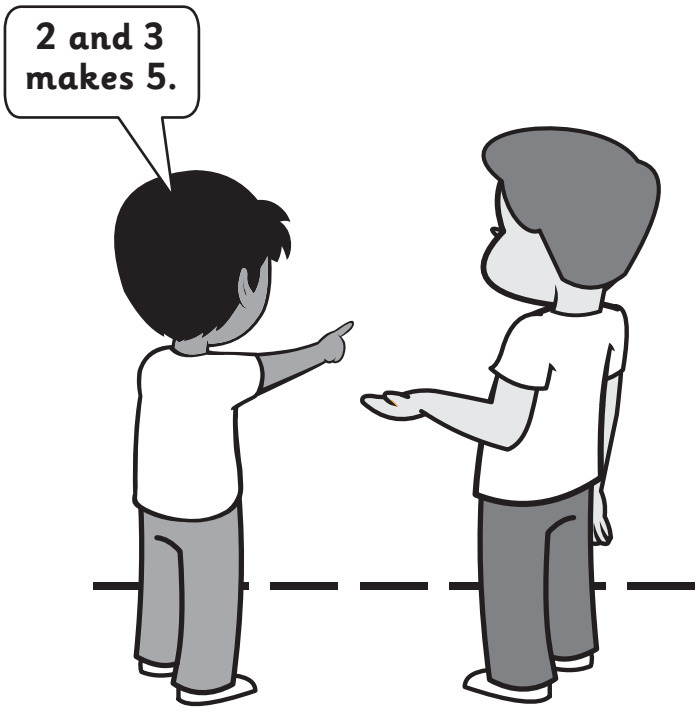
Draw circles in each square to match the number.

Take turns throwing 2 bean bags at the squares. If you miss the squares you can throw again.

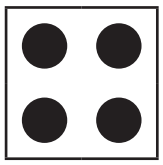
Use the circles to help you work out the number fact you have made. Your partner can help you work out the fact.

Make 5 number facts each.

0	1	2	3	4	5
	●	●●	●●	●●	●●
			●		●



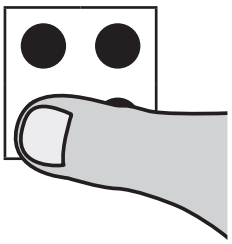
Subtraction – to 5



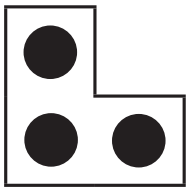
How many? 4

cover 2

leaves 2



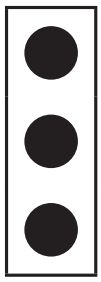
1 Cover and solve.



How many? 3

cover 1

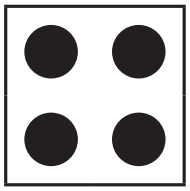
leaves 2



How many? 3

cover 2

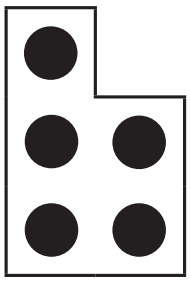
leaves



How many?

cover 1

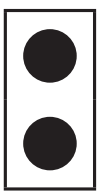
leaves



How many?

cover 2

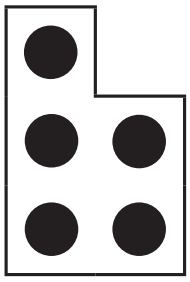
leaves



How many?

cover 2

leaves

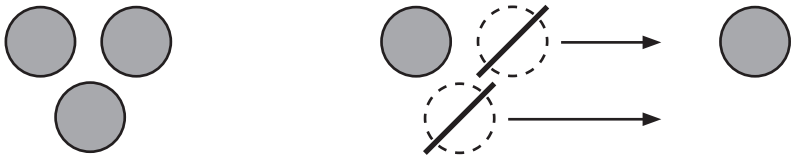


How many?

cover 4

leaves

Subtraction – to 5



How many? 3 take away 2 leaves 1

You will need: a partner counters

What to do:

Put out and take away counters to find how many are left.

Put out 5 take away 2 leaves ☐

Put out 4 take away 1 leaves ☐

Put out 3 take away 2 leaves ☐

Put out 5 take away 3 leaves ☐

What to do next:

Take turns telling each other to how many counters to put out and take away. Record 4 facts in your maths book.

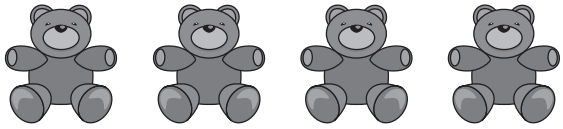
Subtraction – to 5

We can cross off things to show taking away.

How many? 5 take away 2 leaves 3

1 Cross off to **take away 1 or 2**.

How many? 5 take away 1 leaves ☐



How many? ☐ take away 2 leaves ☐

How many? ☐ take away 1 leaves ☐

How many? ☐ take away 2 leaves ☐

Subtraction – to 5

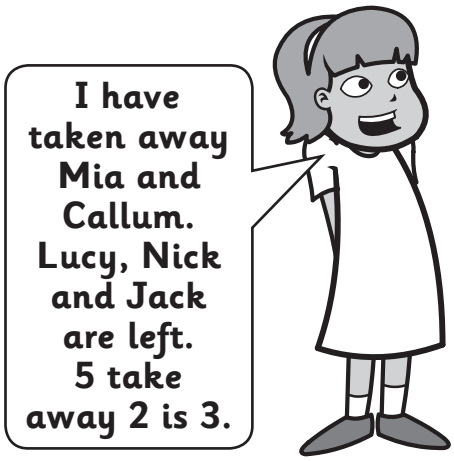
group activity

You will need: people, 5 chairs, your teacher

What to do:

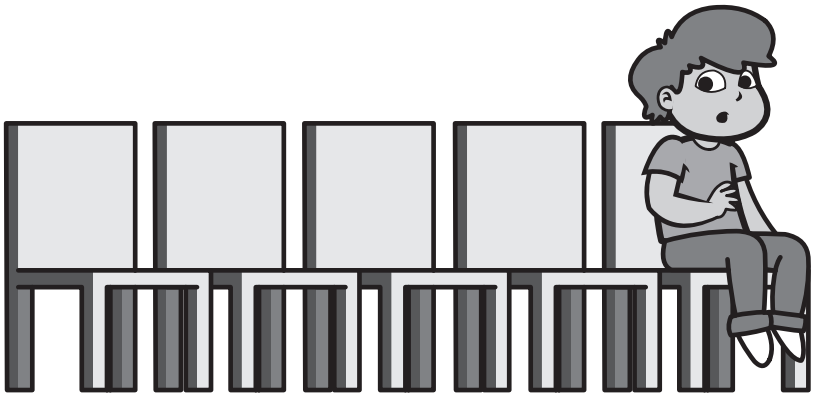
Sit 5 children on 5 chairs. Your teacher will tell you who to 'take away'. Move these children onto the mat.

Say the number story you have made.



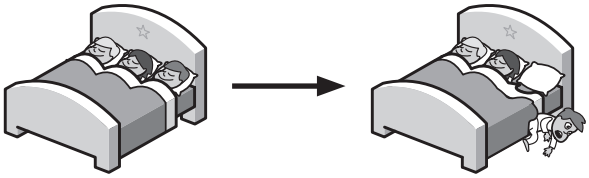
What to do next:

Your teacher will tell 5 children to act out a take away story on the chairs. Can you tell the number story?



Subtraction – to 5

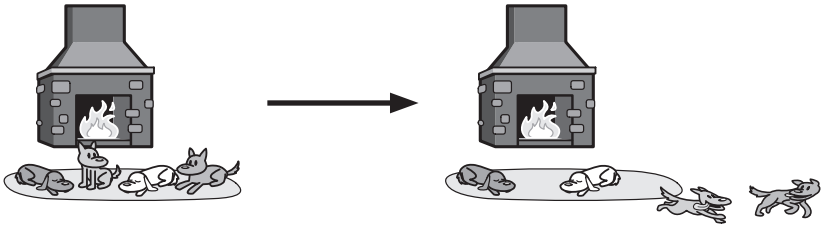
3 kids in the bed. 1 falls out. How many kids are **left** in the bed?



3 kids in the bed. 1 falls out. 2 kids are **left** in the bed.

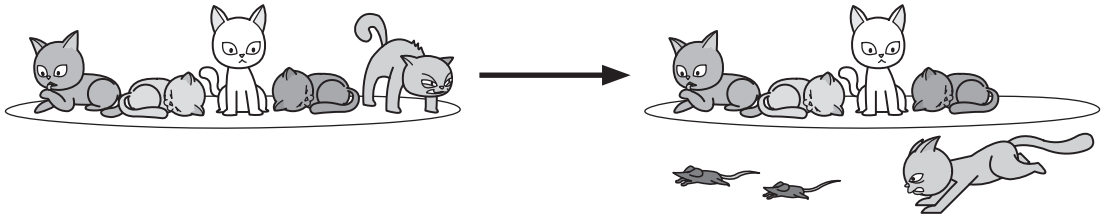
1 Use the pictures to solve the problems.

How many dogs are **left** on the rug?



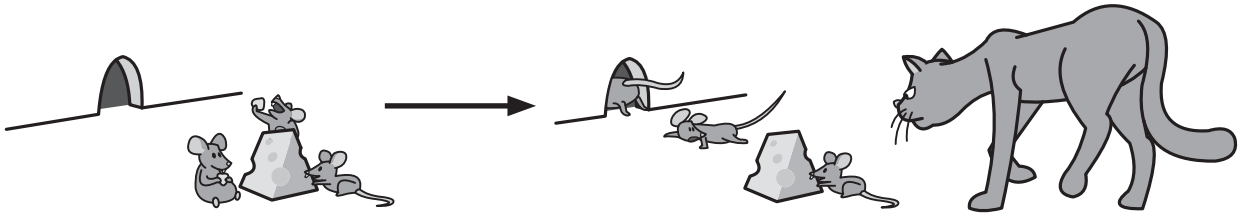
4 dogs on the rug. 2 see holes to be dug. 2 dogs are **left** on the rug.

How many cats are **left** on the mat?



[ ] cats on the mat. [ ] sees a rat. [ ] cats are **left** on the mat.

How many mice are **left** eating cheese?



[ ] mice eating cheese. [ ] quickly leave. [ ] mouse is **left** eating cheese.

Subtraction – to 5

You will need:  a partner  pencils or paints

 5 red counters  a copy of page 27 between you

What to do:

Colour the tree on page 27.
Pretend your counters are the apples. Put 5 on the tree.
Each time you solve a problem, put the 5 apples back on the tree again.

How many apples? 5
Pick 1
How many are left? ☐

How many apples? 5
Pick 2
How many are left? ☐

How many apples? 5
Pick 3
How many are left? ☐

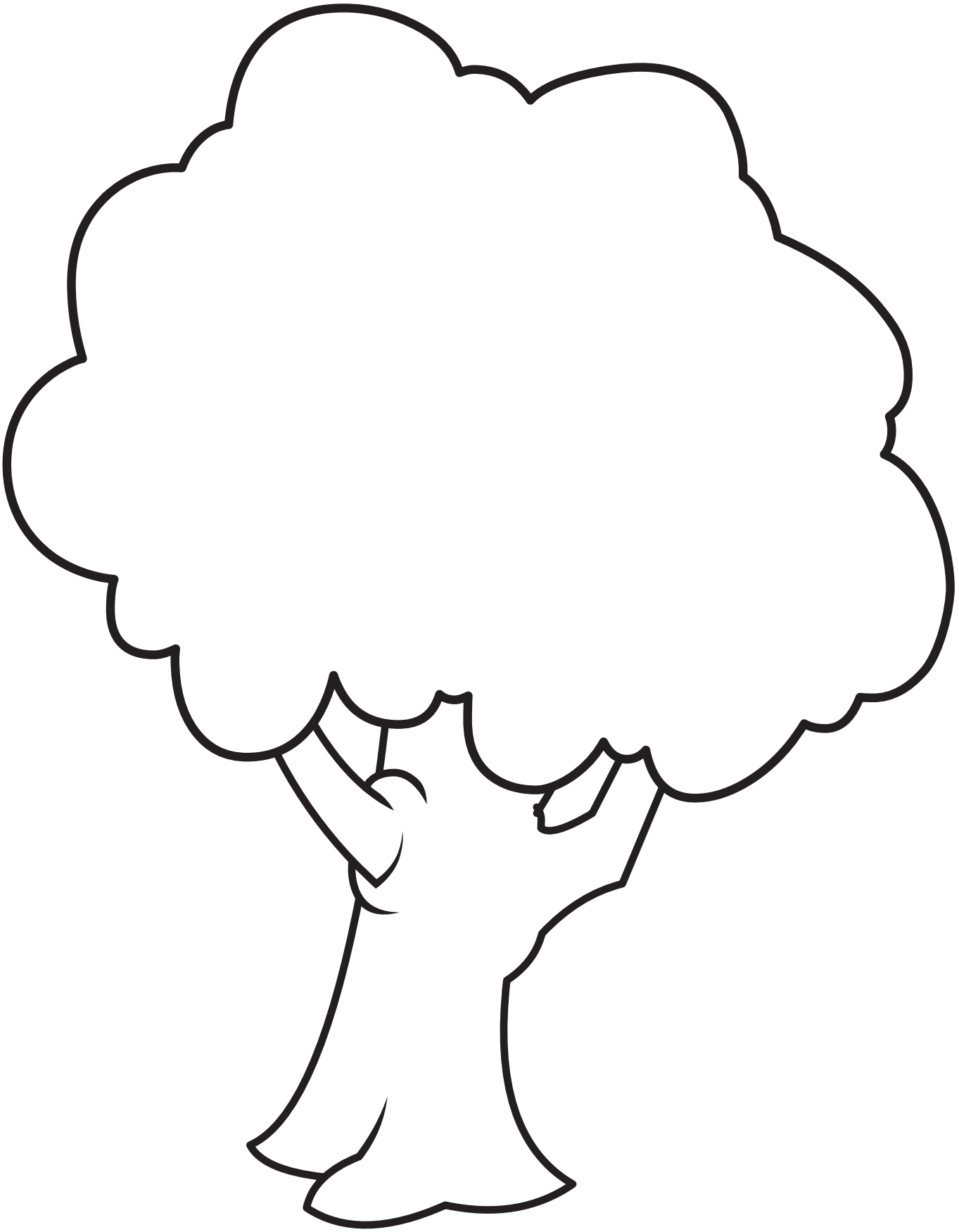
How many apples? 5
Pick 4
How many are left? ☐

How many apples? 5
Pick 5
How many are left? ☐

How many apples? 5
Pick 0
How many are left? ☐

Subtraction – to 5

copy



Subtraction – to 5

You will need: a partner counters

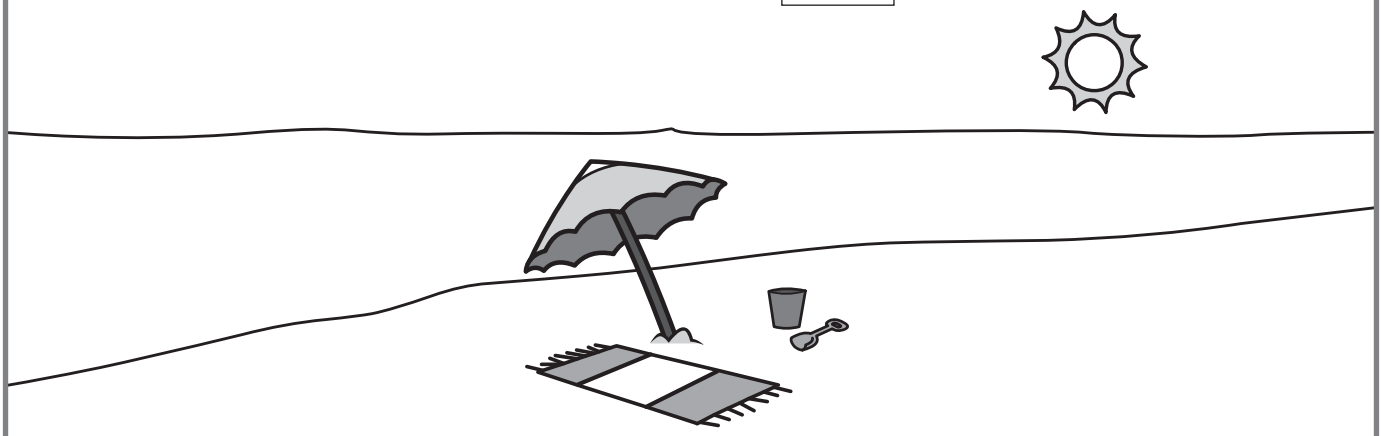
What to do:

Draw pictures or use counters to solve these problems.

5 kids were at the beach.

2 go home.

How many kids are left at the beach? ☐



4 cakes were on the plate.

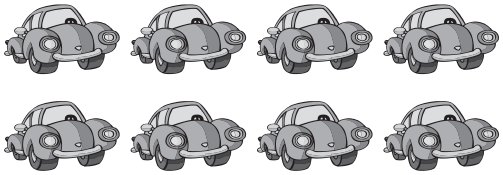
3 are eaten.

How many cakes are left on the plate? ☐

Subtraction – to 10

7 cakes Take away 3 There are 4 cakes left.

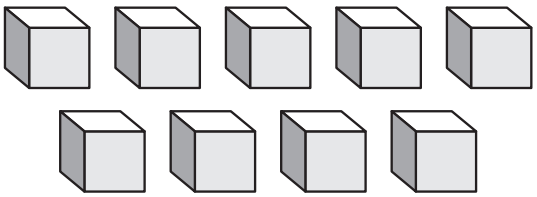
1  Cross off to **take away**.
Say the number facts out loud.



8 cars

Take away 1

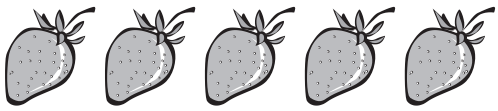
There are ☐ cars left.



☐ blocks

Take away 3

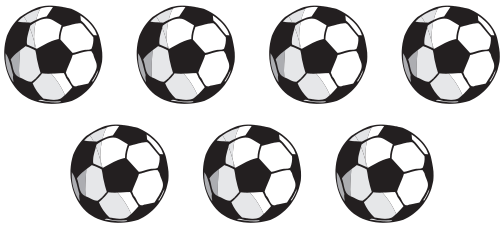
There are ☐ blocks left.



☐ strawberries

Take away 2

There are ☐ strawberries left.



☐ balls

Take away 4

There are ☐ balls left.

Subtraction – to 10

You will need:  a partner  10 counters

What to do:

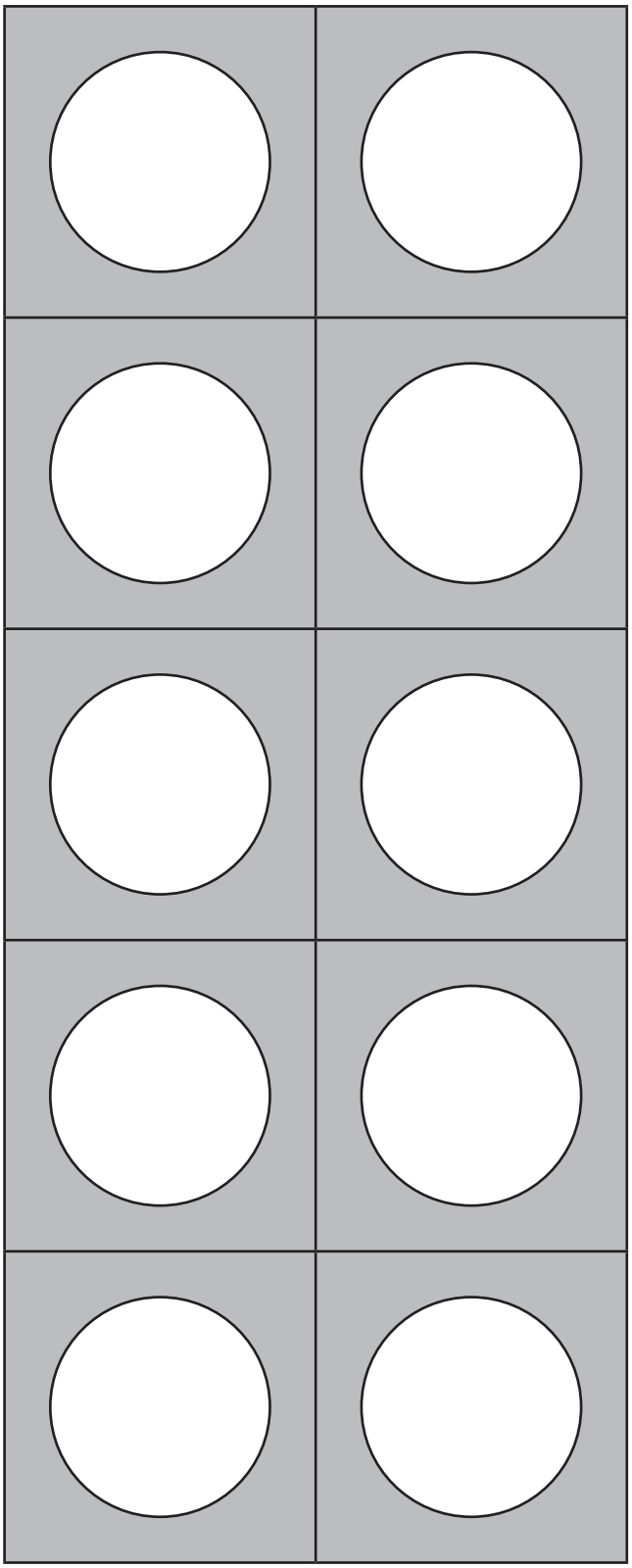
Put 10 counters on the frame.

Take turns taking some counters away. Don't let your partner see you do it!

Can they work out how many counters you took away?

Say or record the number fact together like this:

10 take away … is …



Subtraction – to 10

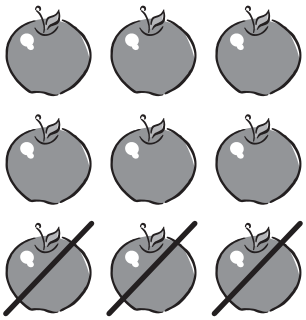
You will need: a partner scissors

copy

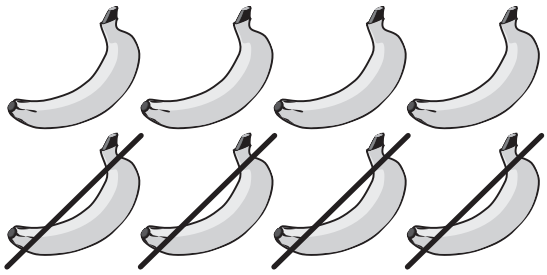
What to do:

How many are left?

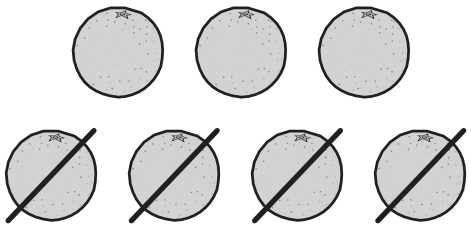
Cut out the take away pictures and number facts. Mix them up and then match the pictures with the number facts.



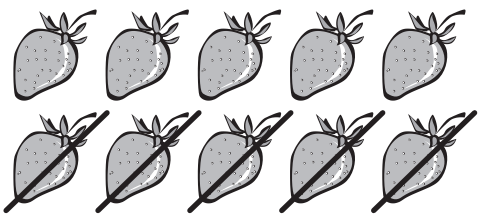
8 take away 4 is 4



9 take away 3 is 6



10 take away 5 is 5



7 take away 4 is 3

Subtraction – to 10

group activity

You will need: partners, a ball, counters

10 skittles or 1.25L bottles with sand in the bottom

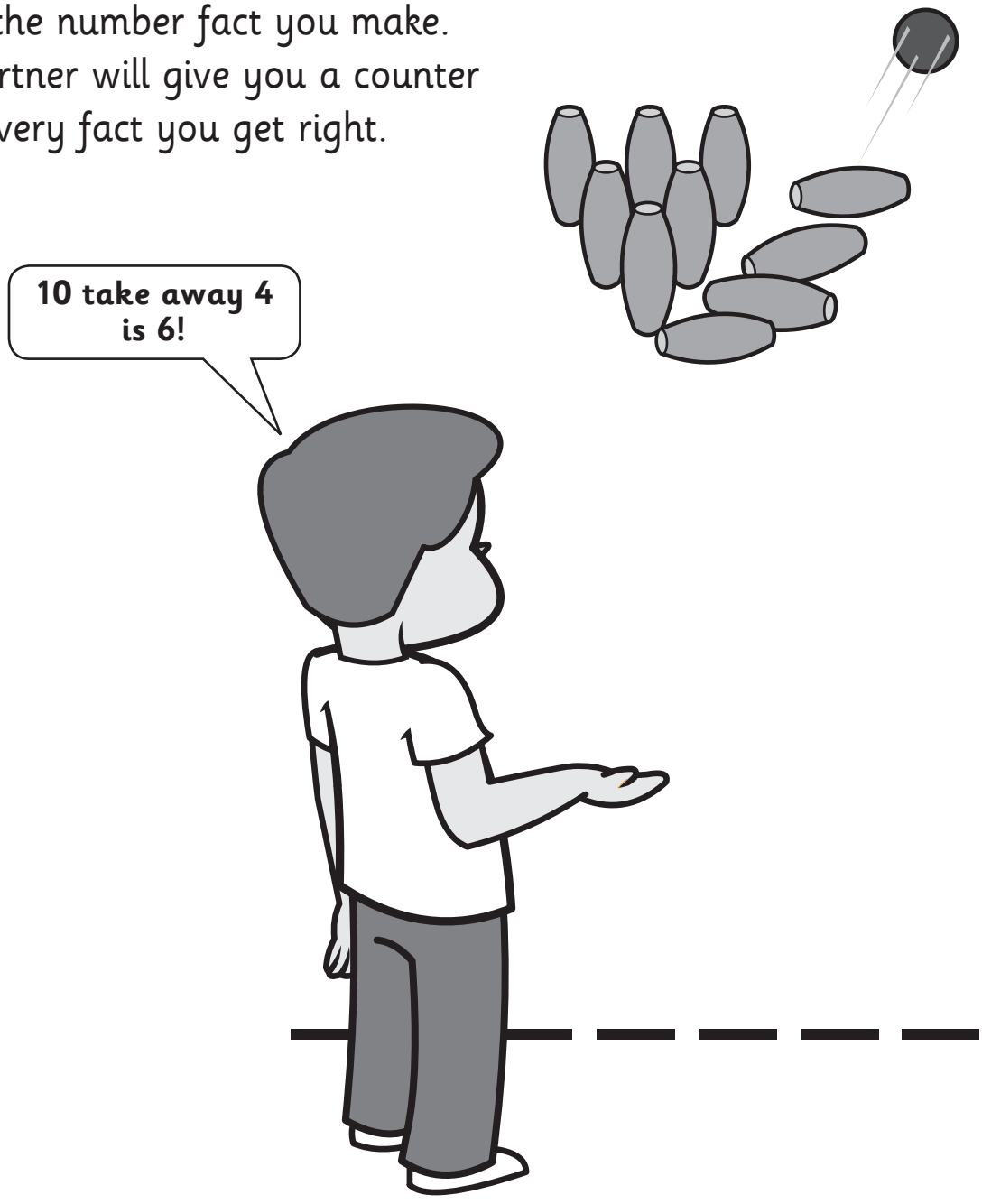
What to do:

Set up your skittles like this . How many skittles do you have?

Take turns bowling.

How many do you knock down each time?

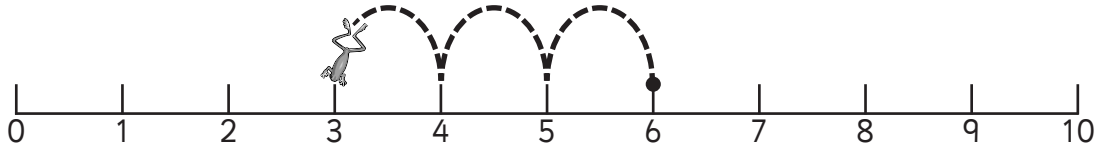
Say the number fact you make.
A partner will give you a counter for every fact you get right.



Subtraction – counting back

We can jump along number lines to help us count back.

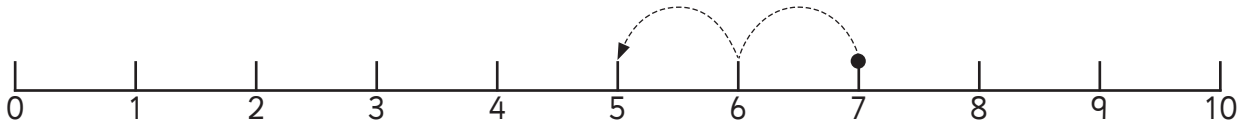
What is 3 less than 6? We start at **6** and take **3** jumps back.



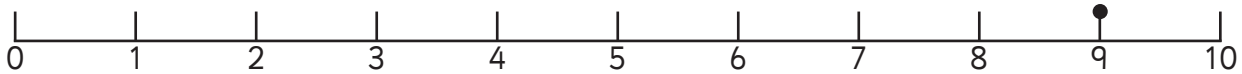
3 less than **6** is **3**

1 Jump back along the number lines.

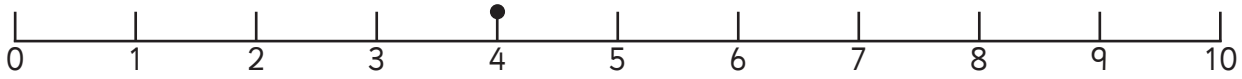
Finish the number facts and say them out loud.



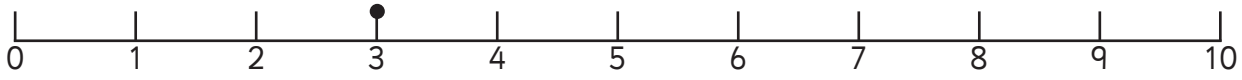
Take **2** jumps back. 2 less than 7 is ☐



Take **1** jump back. 1 less than 9 is ☐



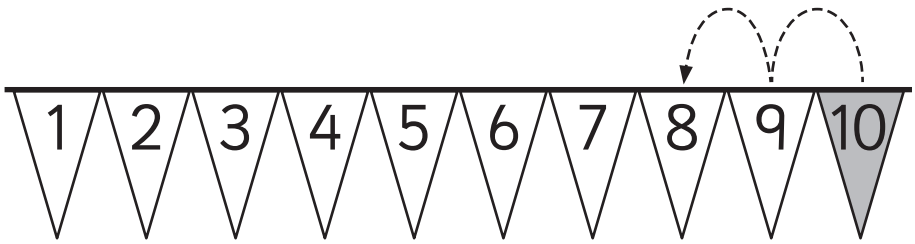
Take **2** jumps back. 2 less than ☐ is ☐



Take **1** jump back. 1 less than ☐ is ☐

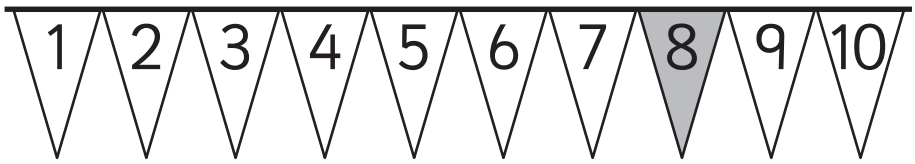
Subtraction – counting back

1 Count back.



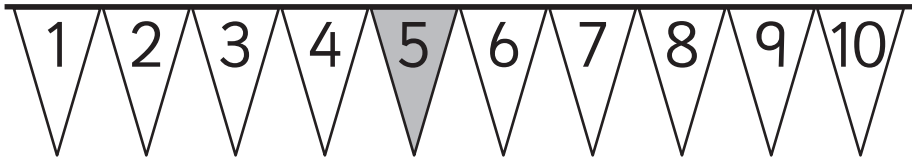
Start at 10

2 less is ☐



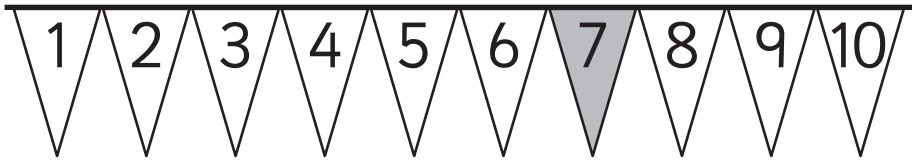
Start at 8

1 less is ☐



Start at 5

2 less is ☐



Start at ☐

1 less is ☐

Subtraction – explore

You will need: a partner counters

What to do:

Work with your partner.

Use pictures, counters or the number line to help solve these problems.

7 puppies are playing in the park.

5 go home to chew a bone.

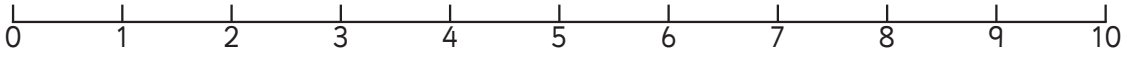
How many puppies are left in the park? ☐

10 balloons are tied to a chair.

3 escape to float in the air.

How many balloons are left on the chair? ☐

Help



Subtraction – explore

You will need:  a partner  counters

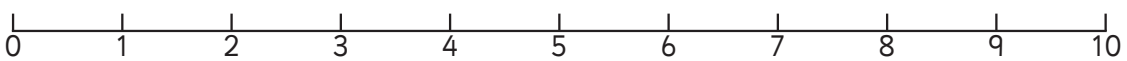
copy

What to do:

Cut out the number cards. Spread them out face down.

Take turns turning over 2 cards. Take away the smaller number from the bigger number. You can use counters, pictures or the number line to help.

1	2
3	4
5	6
7	8
9	10



Grouping and sharing – groups

You will need: a partner scissors

C copy

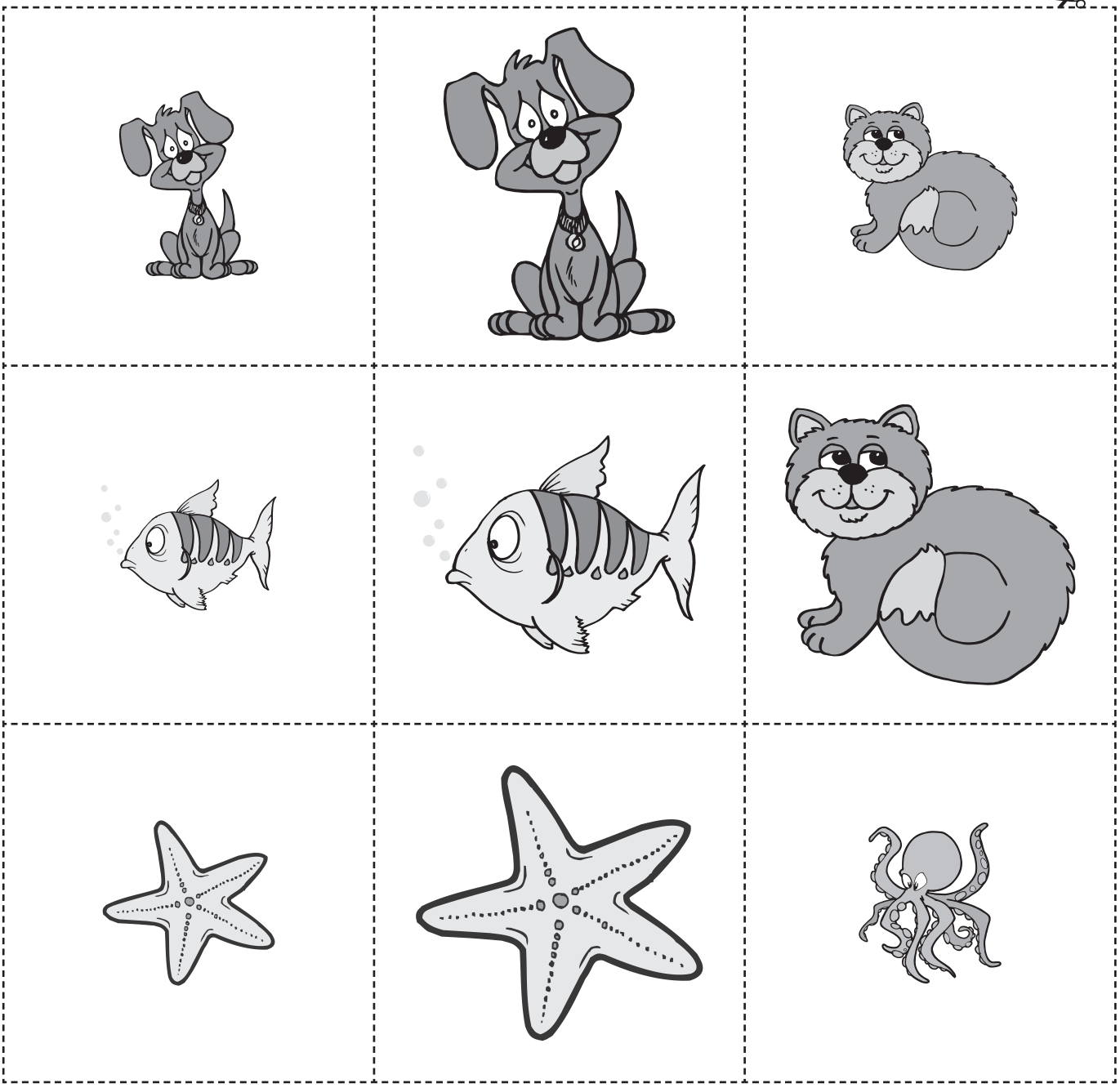
What to do:

Cut out the animals below and sort them into groups.

Tell your partner how you sorted them.

Now sort them another way into different groups.

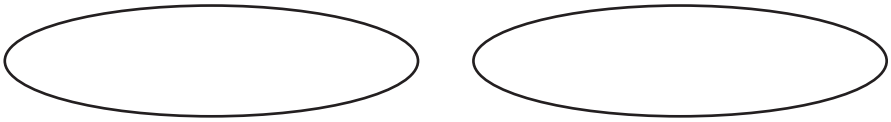
Tell your partner how you sorted them.



Grouping and sharing – groups

1 Draw groups.

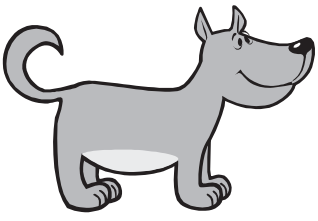
Put 3 cakes
on each plate.

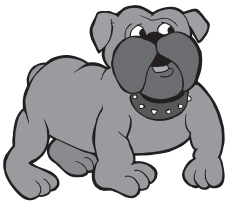


Put 2 flowers
in each vase.

Give the monkey
4 bananas.

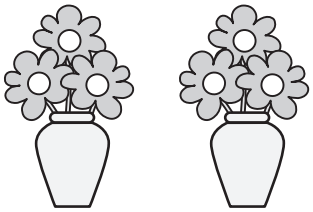
Give each dog
1 bone.



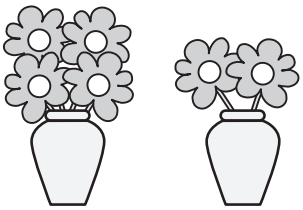


Grouping and sharing – equal groups

Are these groups **the same or equal**?
Yes. There are 3 flowers in each group.

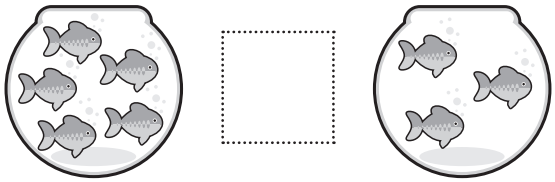


Are these groups **the same or equal**?
No. 1 group has 4 flowers.
The other group has only 2 flowers.
They are **not the same**.

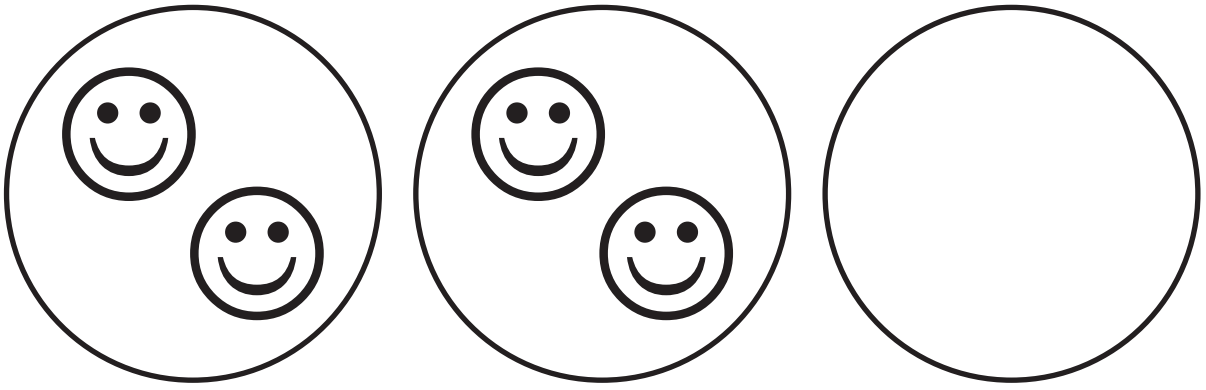


1 ✓ the groups that are **the same**.

✗ the groups that are **not the same**.

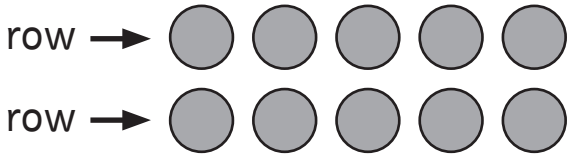


2 Draw another group that is **the same**.



Grouping and sharing – equal groups

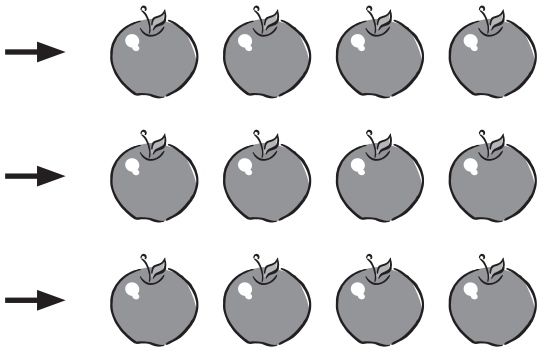
We can arrange our groups into rows.



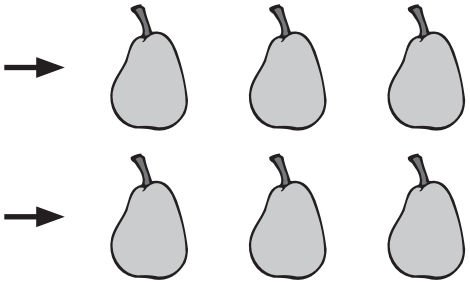
2 rows. There are 5 in each row

1 How many rows?

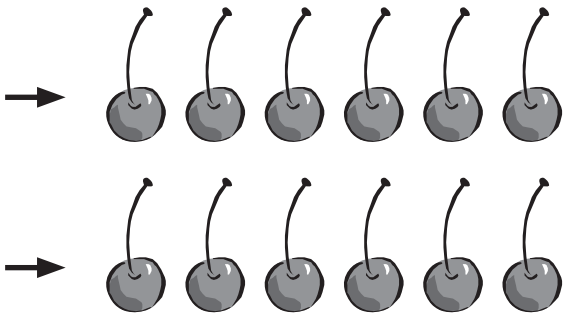
How many in each row?



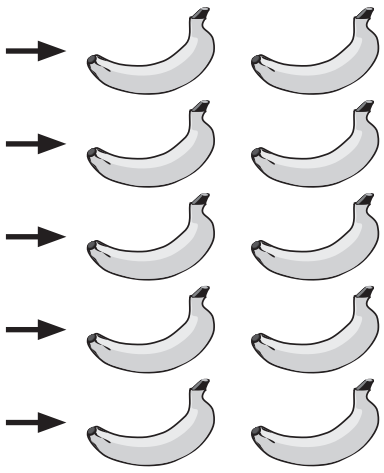
3 rows. 4 in each row



rows. in each row



rows. in each row



rows. in each row

Grouping and sharing – equal groups

You will need: a partner counters or blocks

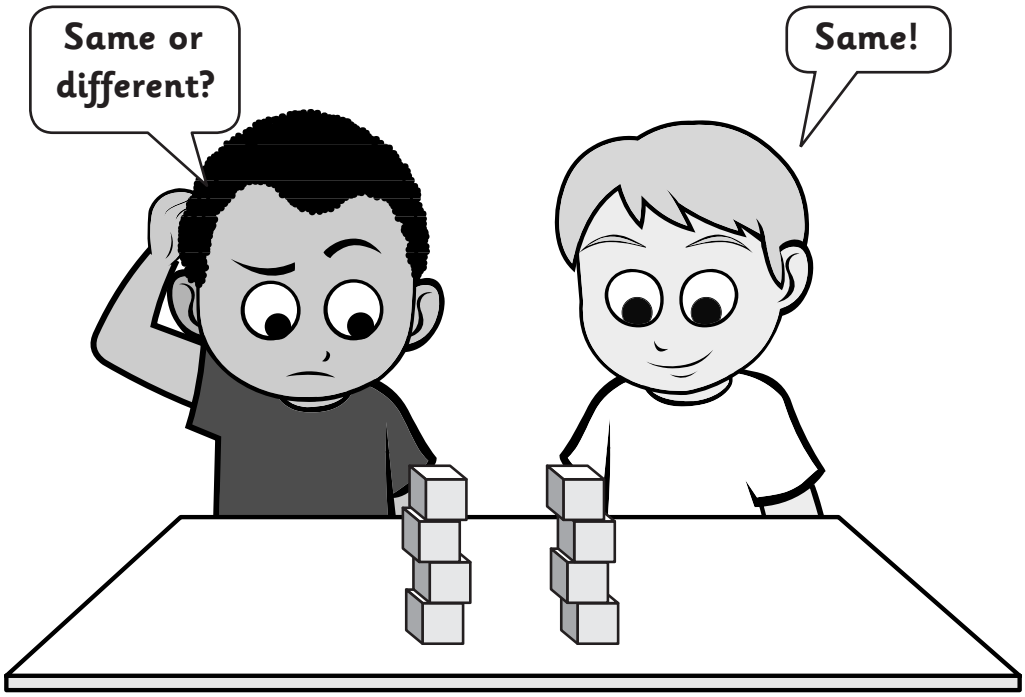
What to do:

Take turns putting some counters into groups or rows. Sometimes make the groups the same and sometimes make them different.

Ask your partner, 'Same or different?'

If they answer correctly, give them a big tick.

Can you both get 5 ticks?



What to do next:

Ask your teacher to play 'Huddles' with your class. They will call out a number and you have to form a group with that number of people. When your group has the right number, sit down.

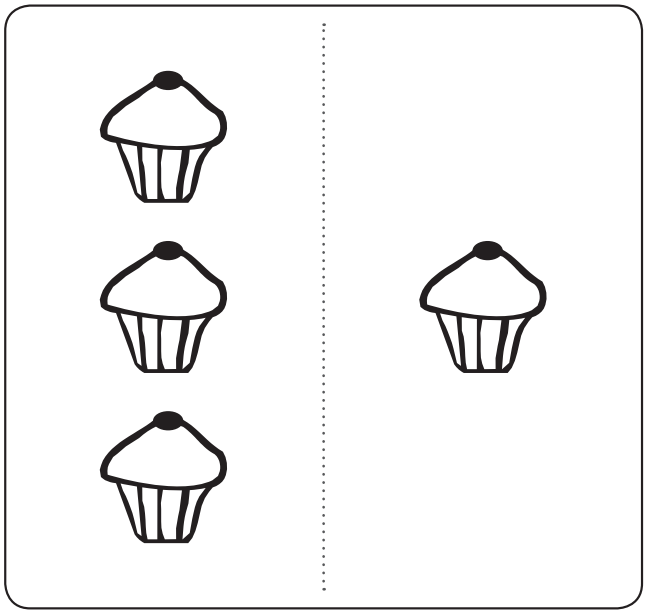
If you don't end up in a group, don't worry – there is always next time!

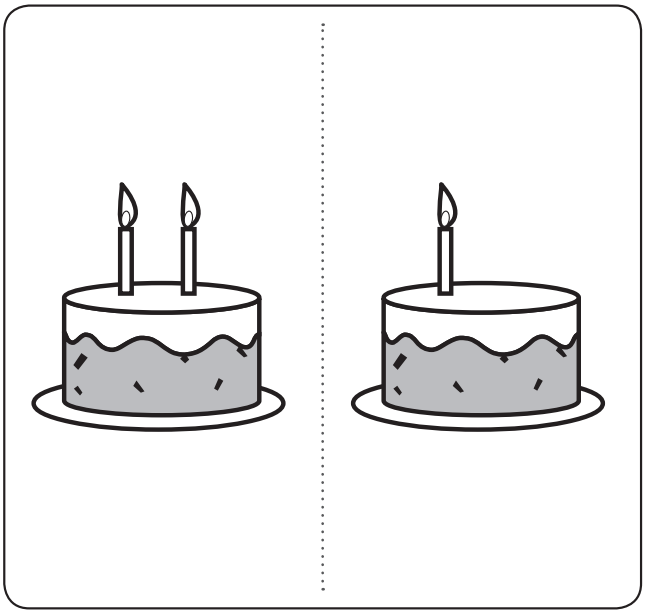
Grouping and sharing – sharing

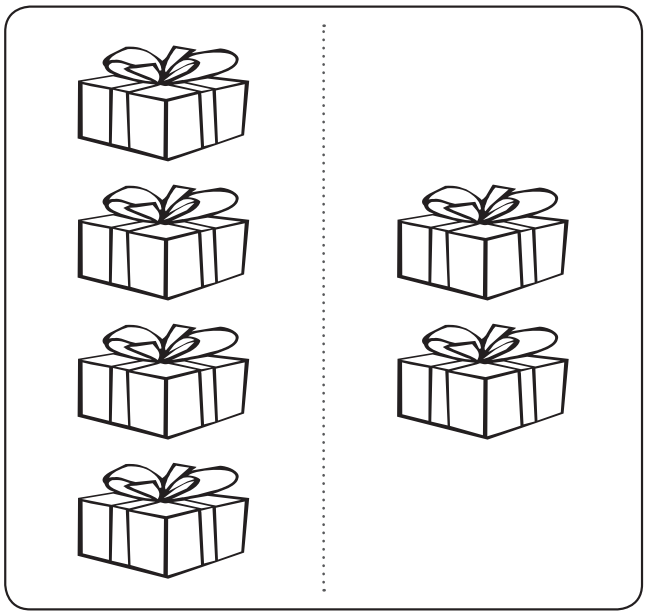
When every group contains the same amount, we say the shares are fair. Are these shares fair?

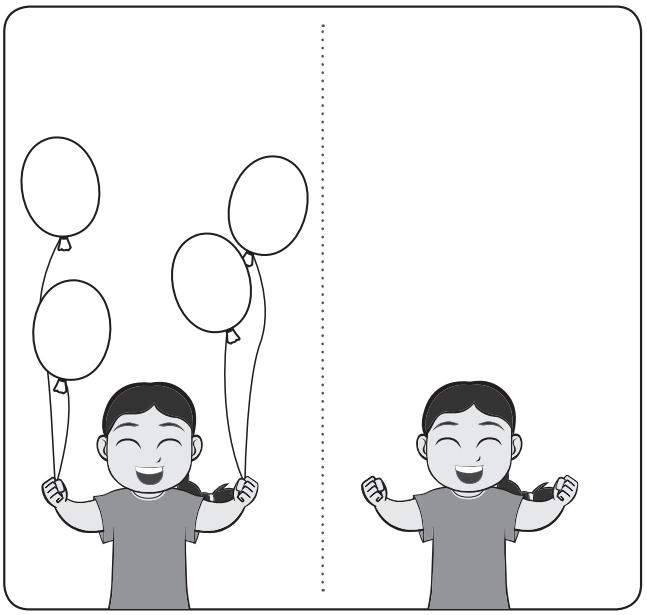
Yes, each bag has 5 lollies. **The shares are fair**.

1 Draw more to make the shares fair.









Grouping and sharing – sharing

You will need: a partner scissors glue stick

copy

What to do:

Colour and cut out the presents and kids.
Give each kid a share of the presents. Make the shares **not fair**.
Show your partner. Do they agree that the shares are not fair?
Now make the shares **fair**. Does your partner agree?
Glue the kids with their fair share of presents in your maths book.

Grouping and sharing – sharing

You will need:  a partner  counters

What to do:

Work with your partner.

Use pictures or counters help solve these problems.

There are **3** girls.

They each read **3** books.

How many books did they read **altogether**? ☐

There are **4** cousins.

There are **8** toy cars.

Give each cousin a ***fair share*** of the cars.

How many cars does each cousin have? ☐