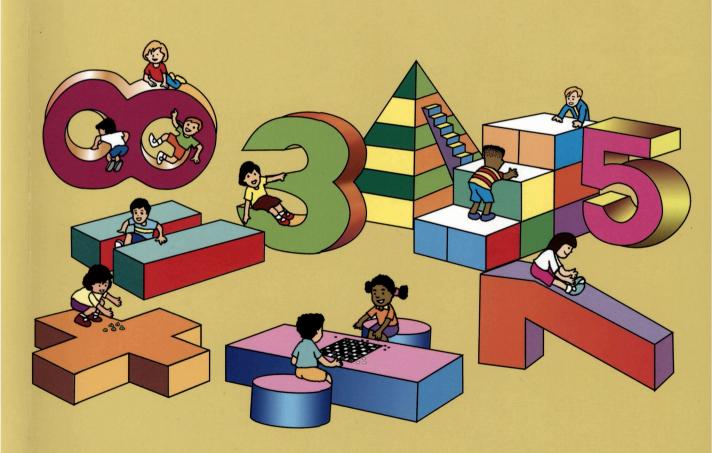
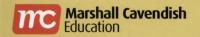
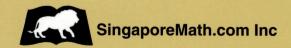
PRIMARY MATHEMATICS 1A TEXTBOOK







PRIMARY MATHEMATICS 1A TEXTBOOK



SingaporeMath.com Inc



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- Educational Technology Division, for the design and production of the audio-visual components of the package
- all those who have helped in one way or another in the development and production of the package

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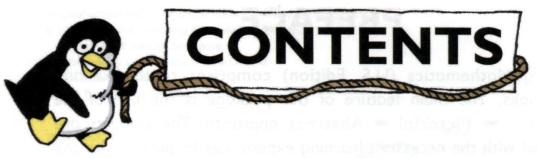
PREFACE

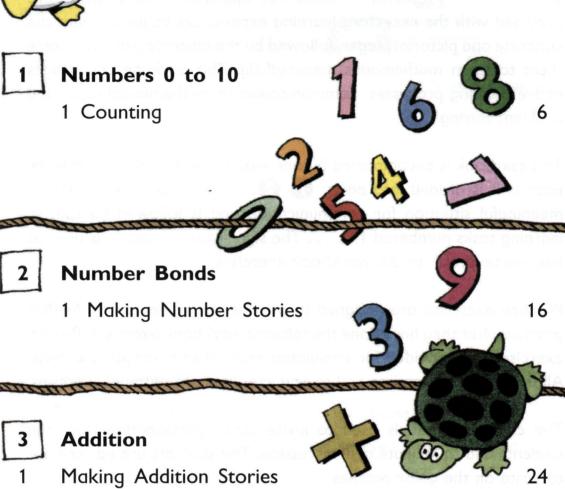
Primary Mathematics (U.S. Edition) comprises textbooks and workbooks. The main feature of this package is the use of the Concrete → Pictorial → Abstract approach. The students are provided with the necessary learning experiences beginning with the concrete and pictorial stages, followed by the abstract stage to enable them to learn mathematics meaningfully. This package encourages active thinking processes, communication of mathematical ideas and problem solving.

This textbook is accompanied by one workbook. It comprises 9 units. Each unit is divided into parts: 1,2,... Each part starts with a meaningful situation for communication and is followed by specific learning tasks numbered 1, 2,... The sign Workbook Exercise is used to link the textbook to the workbook exercises.

Practice exercises are designed to provide the students with further practice after they have done the relevant workbook exercises. Review exercises are provided for cumulative reviews of concepts and skills. All the practice exercises and review exercises are optional exercises.

The color patch is used to invite active participation from the students and to faciliate oral discussion. The students are advised not to write on the color patches.





4 Subtraction

3

1 Making Subtraction Stories

Addition With Number Bonds

Other Methods of Addition

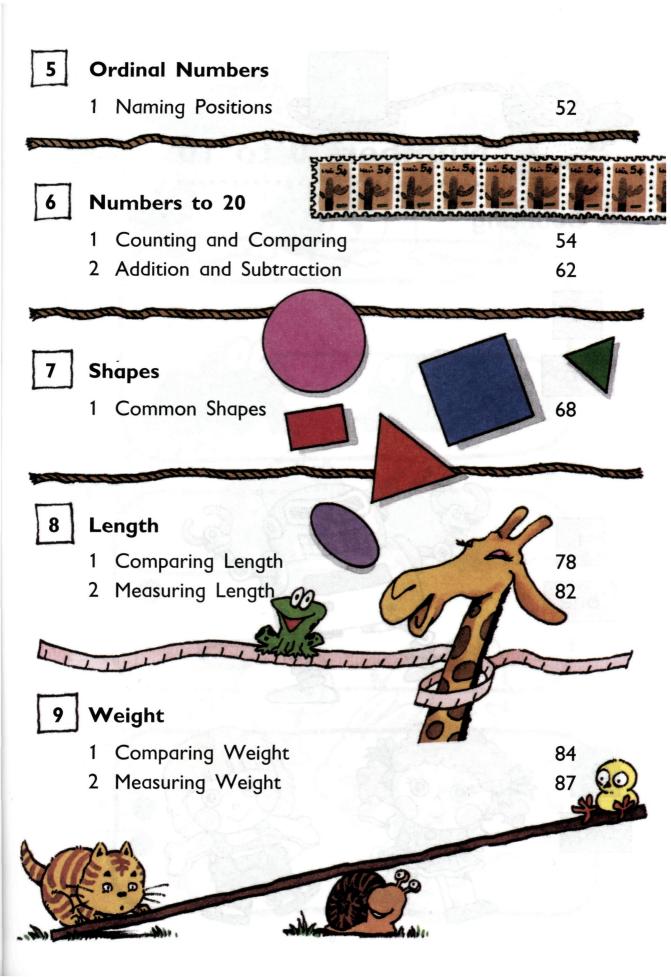
2 Methods of Subtraction

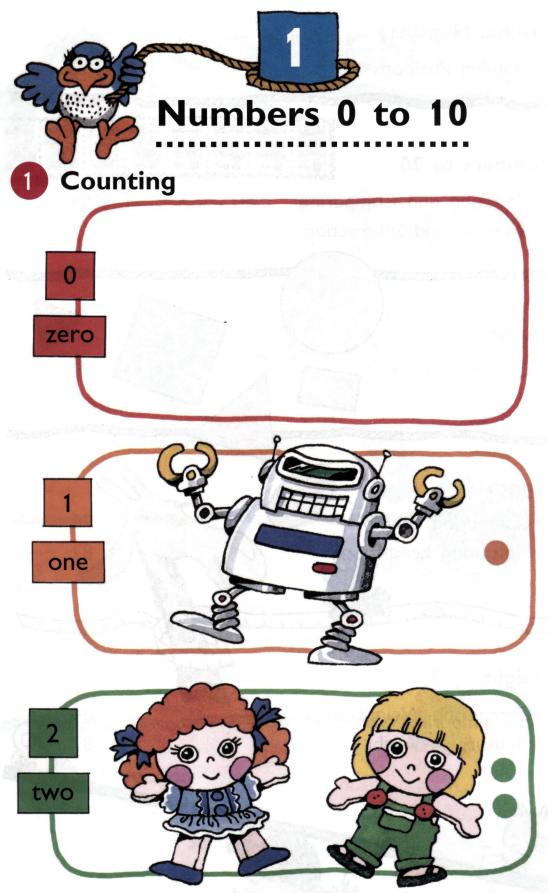


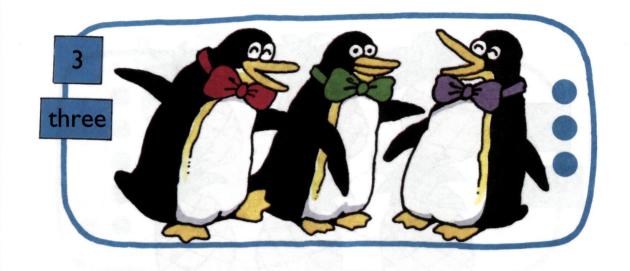
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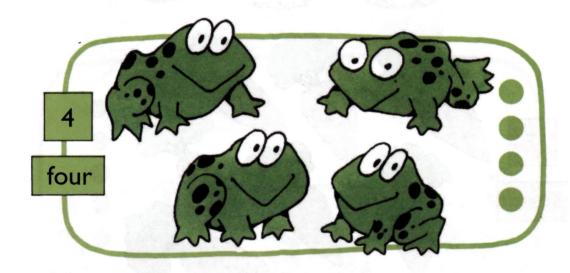
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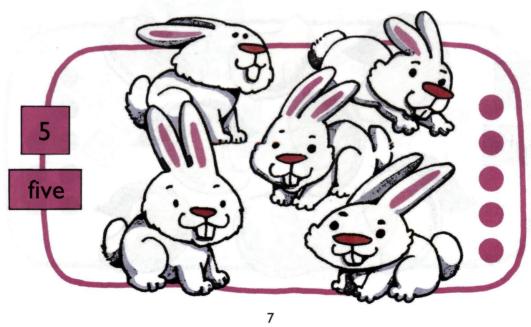
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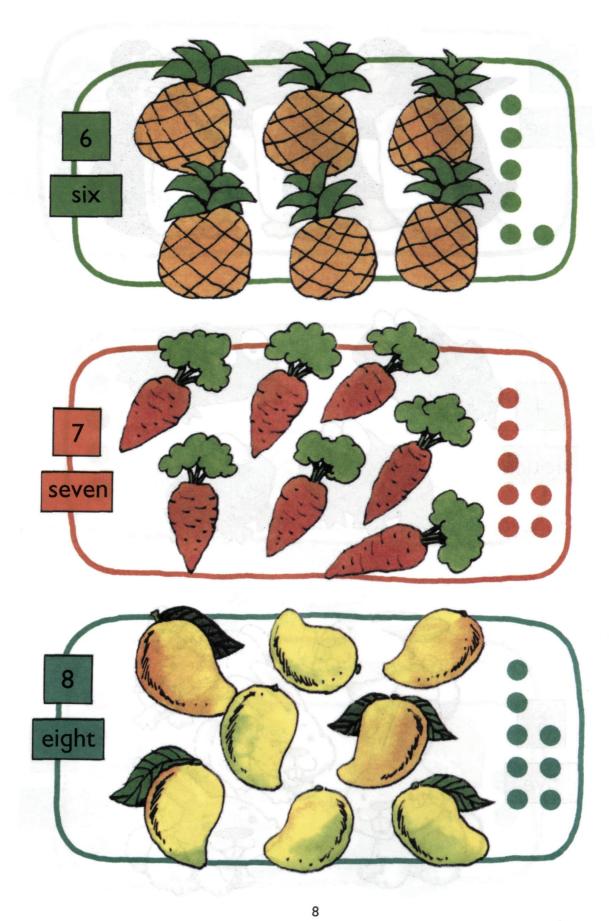


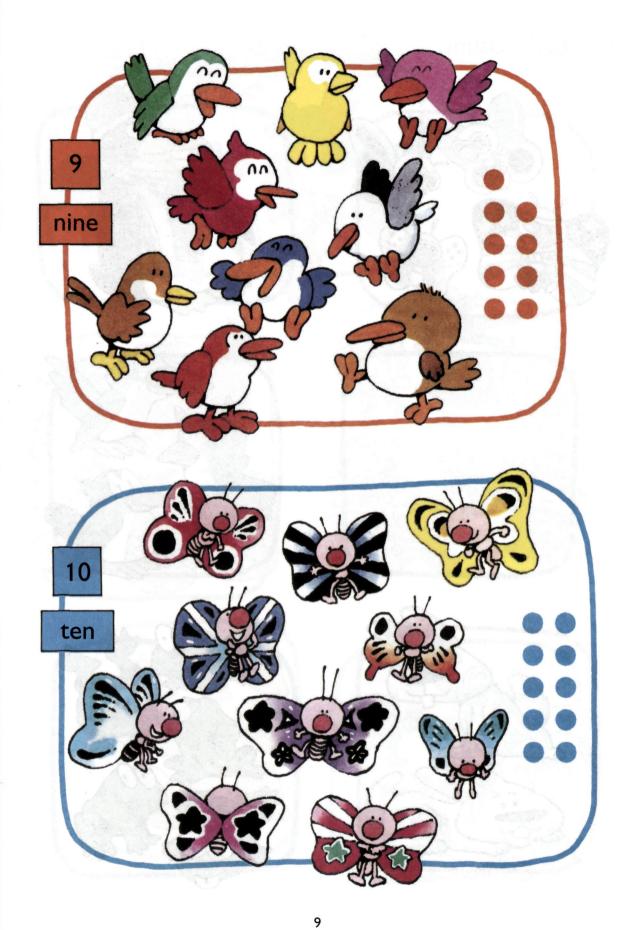










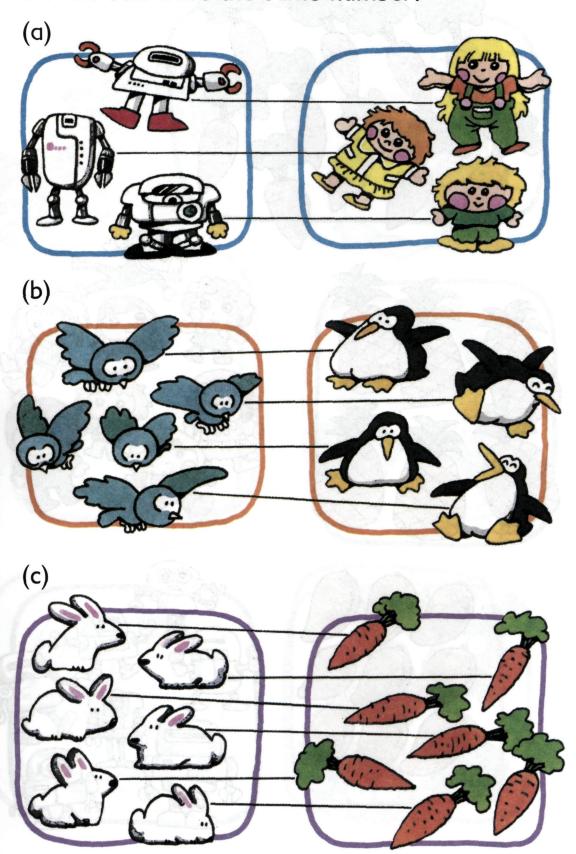


1. Let's count.





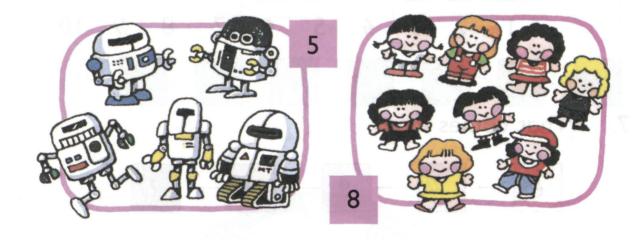
2. Do the sets have the same number?



3. How many butterflies are there?



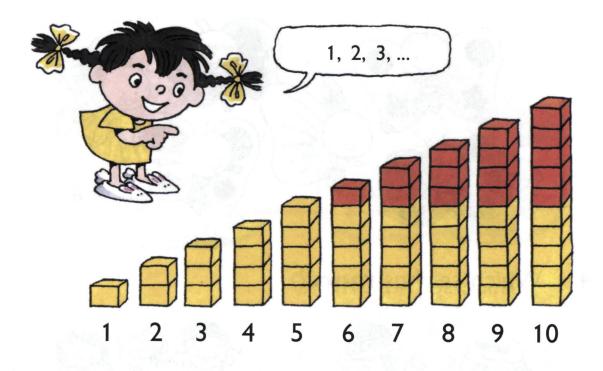
4. Which set has more?



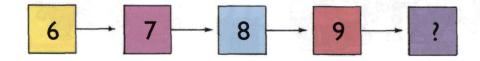
5. Which set has less?



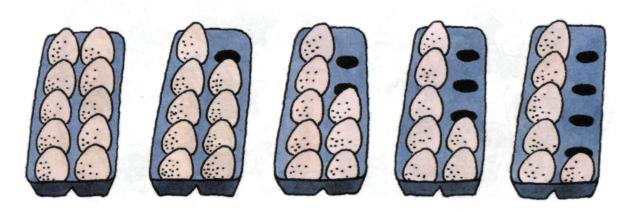
6. Count from 1 to 10.

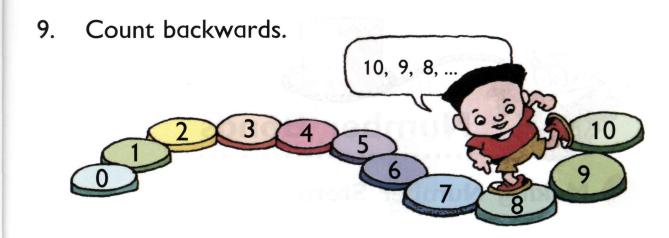


7. What comes next?

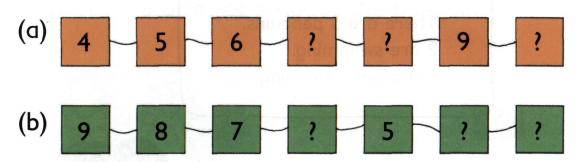


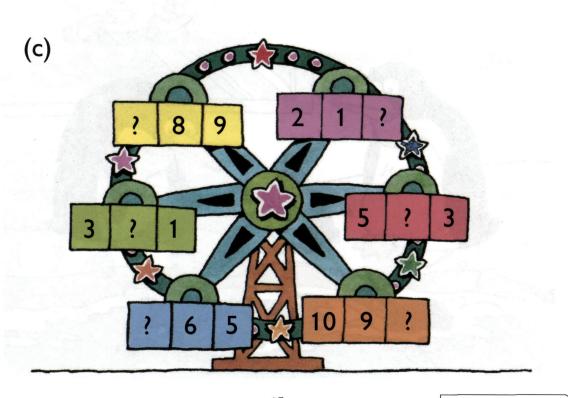
8. What comes next?

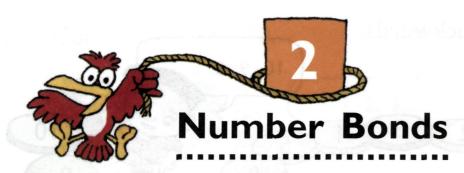




10. What are the missing numbers?





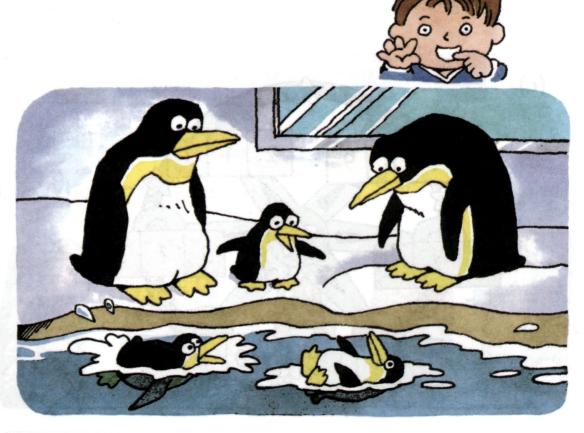


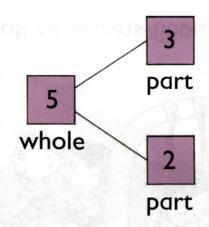
Making Number Stories

There are 5 penguins.

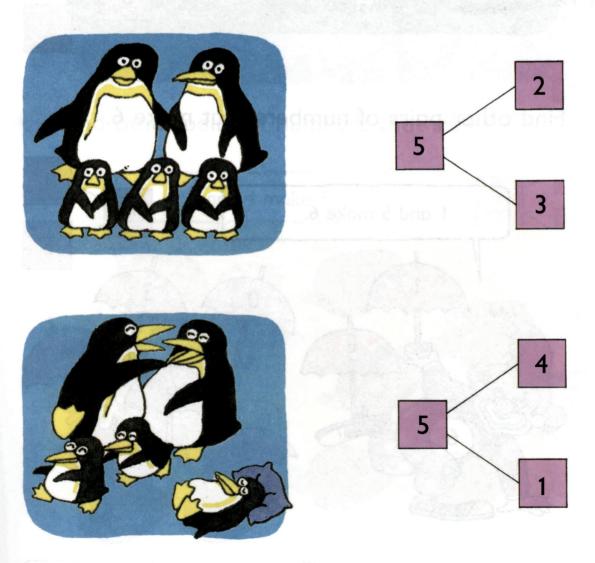
2 are swimming.

3 are not swimming.





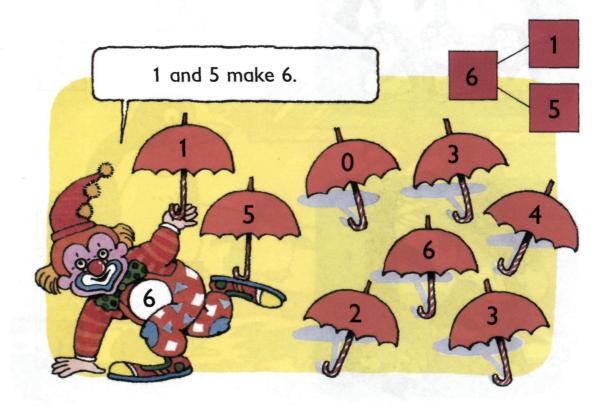
Make up other stories of 5 about the penguins.



1. Make up as many stories as you can about the 6 children.



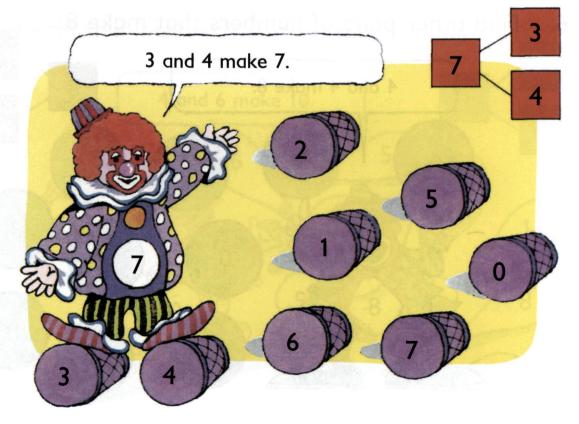
2. Find other pairs of numbers that make 6.



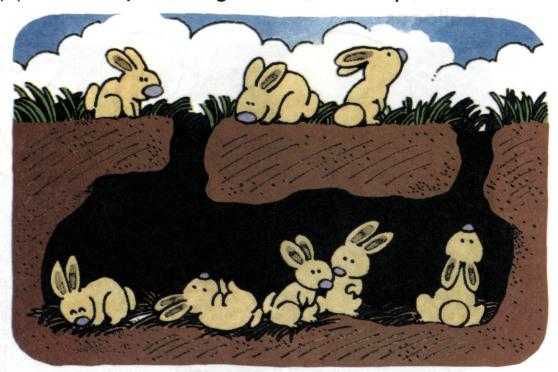
3. Make up as many stories as you can about the 7 balloons.



4. Find other pairs of numbers that make 7.



5. (a) Make up a story of 8 from the picture.



(b) Tell other stories of 8.

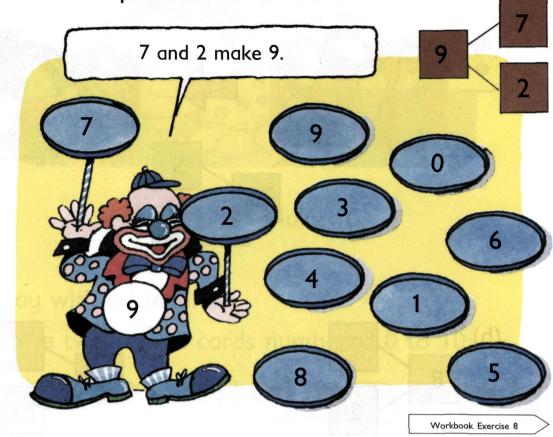
6. Find other pairs of numbers that make 8.

4 and 4 make 8.

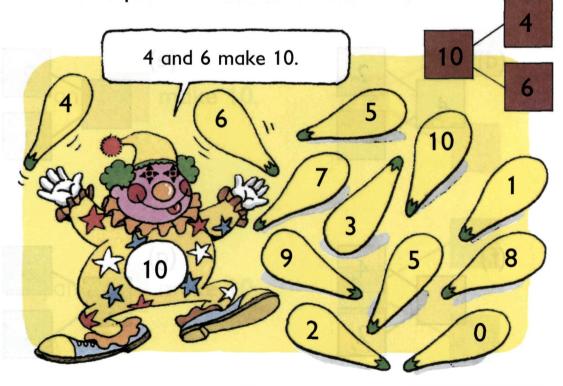
4 and 5 make 8.

7 8 8

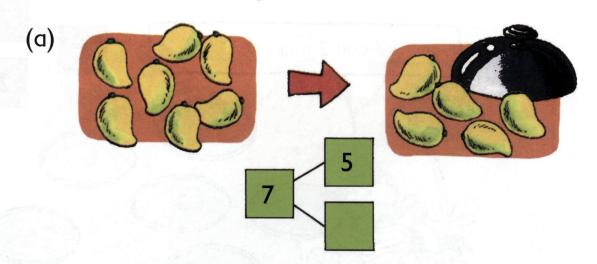
7. Find other pairs of numbers that make 9.

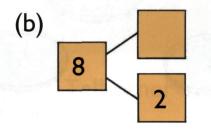


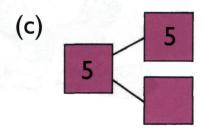
8. Find other pairs of numbers that make 10.

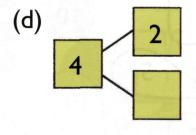


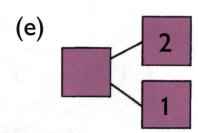
9. What are the missing numbers?

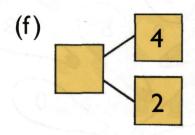


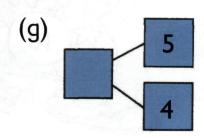












10.



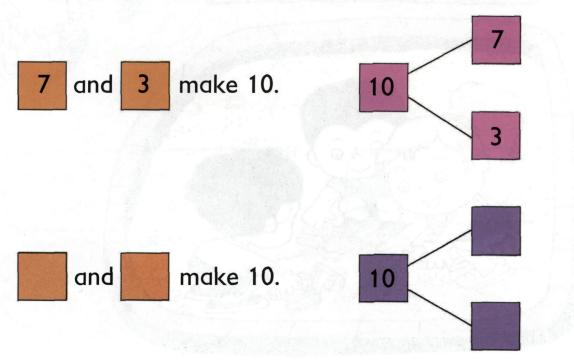
6 and make 10.

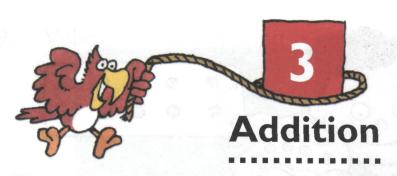
11. Play with a friend.

Make two sets of cards numbered 0 to 10:



Use the cards to make as many tens as you can.

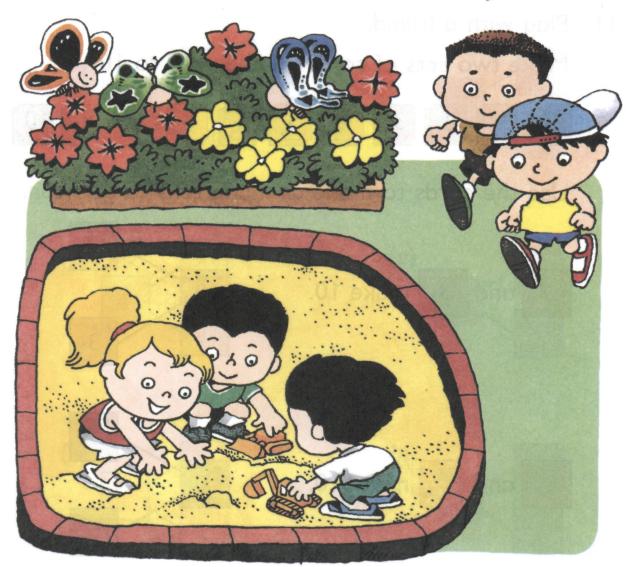


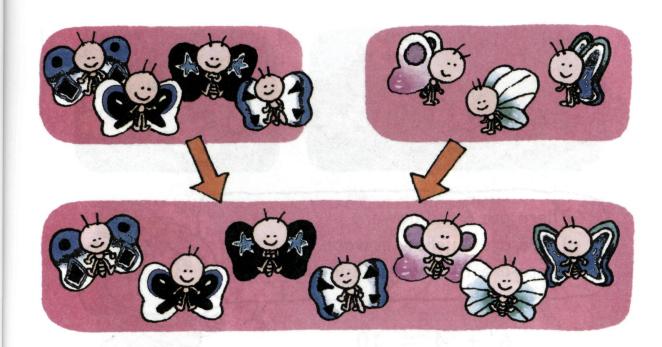


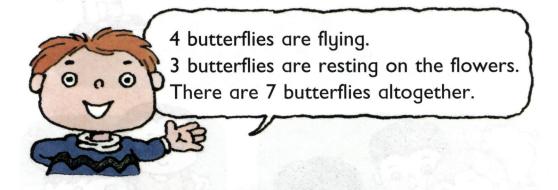
Making Addition Stories





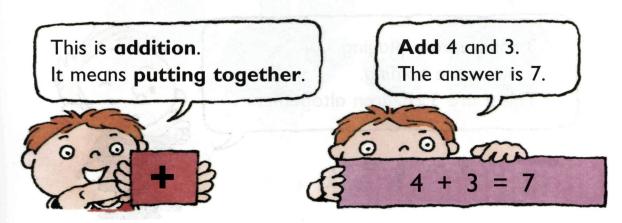




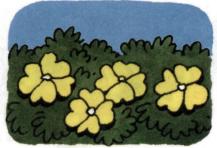


We write the number sentence:

$$4 + 3 = 7$$







There are 6 red flowers.

There are 4 yellow flowers.

There are 10 flowers altogether.

$$6 + 4 = 10$$







3 children are playing.

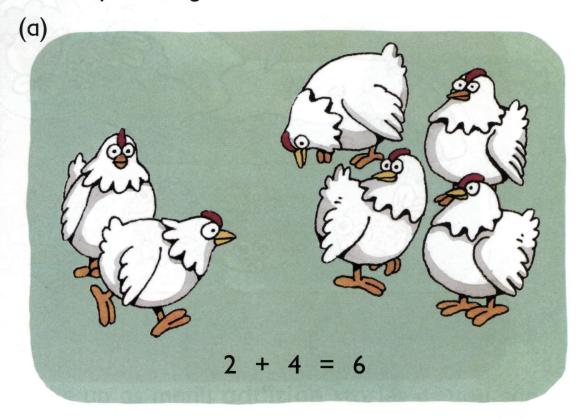
2 more are coming.

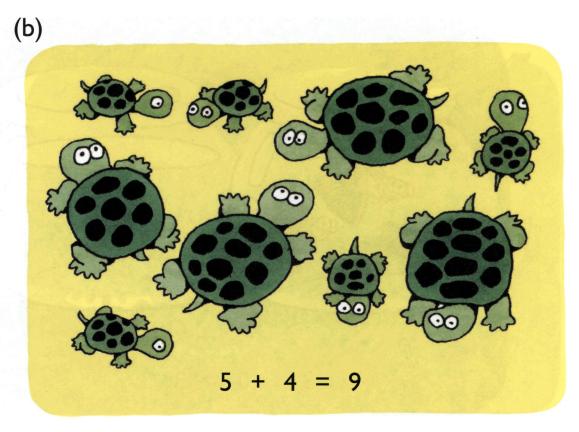
There are 5 children altogether.

$$3 + 2 = 5$$



1. Make up a story for each number sentence.





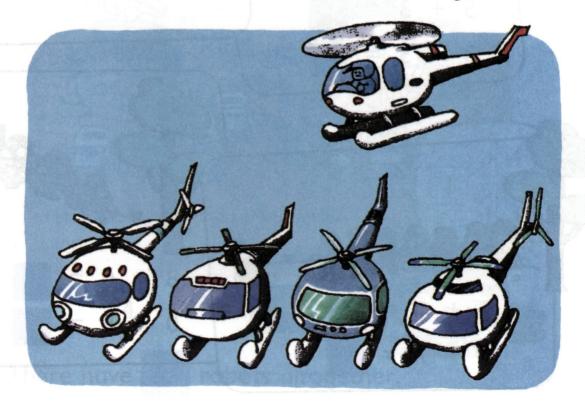


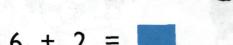


2. Make up as many stories as you can for each number sentence.



Make up as many addition stories as you can.
 Write a number sentence for each story.









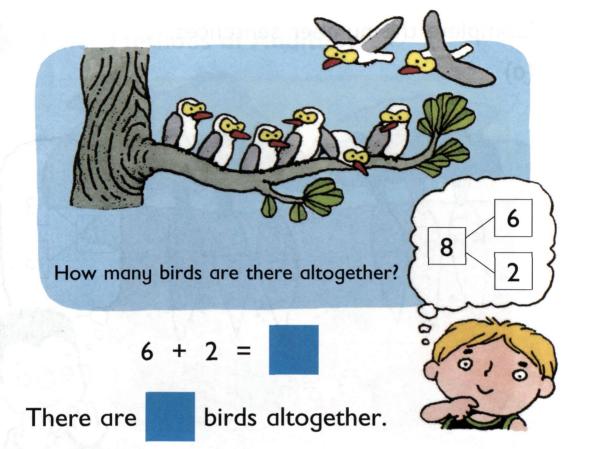
$$3 + 5 =$$



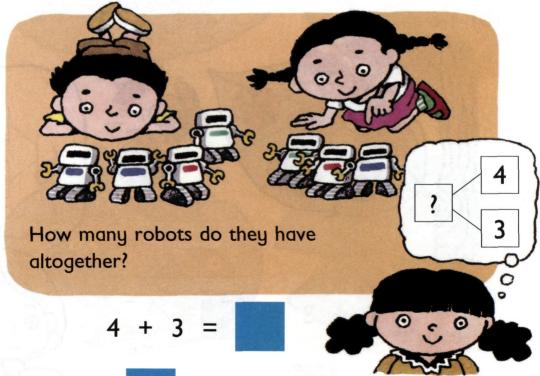


$$0 + 8 =$$

1.



2.

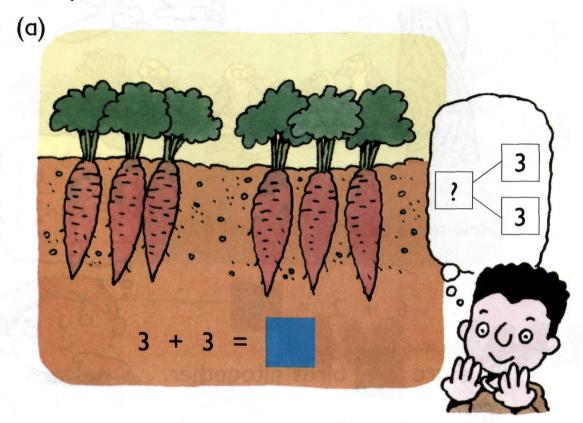


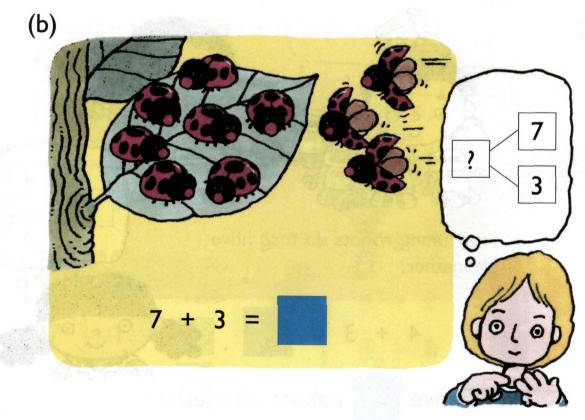
There have



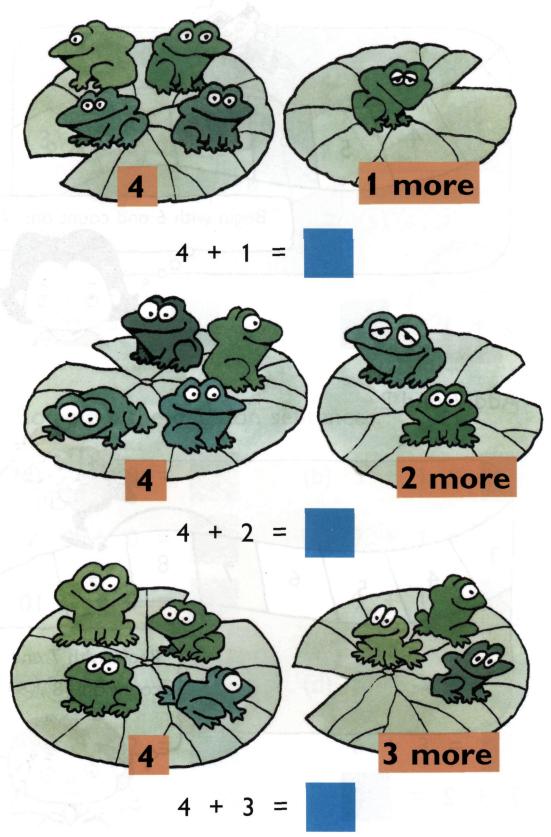
robots altogether.

3. Complete the number sentences.

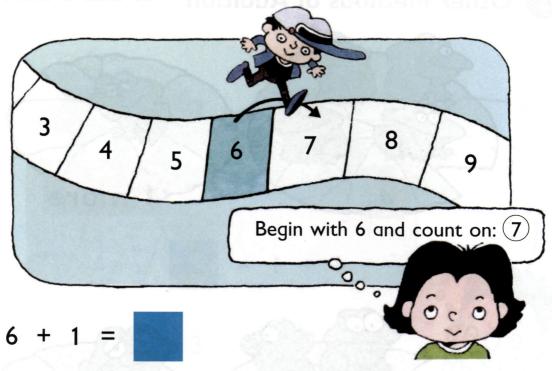




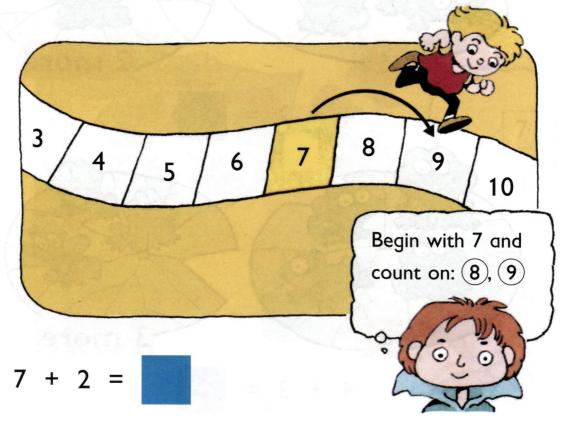
3 Other Methods of Addition



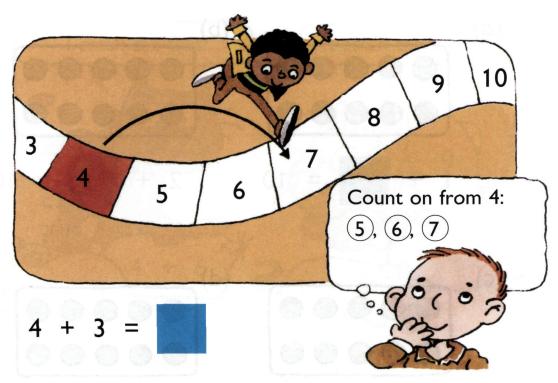
1. Add 6 and 1.



2. Add 7 and 2.



3. Add 4 and 3.



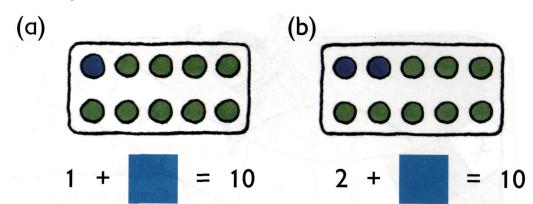
4. Complete the addition sentences.

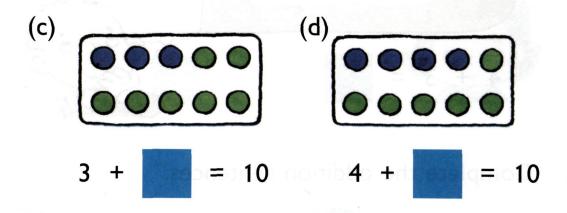
(a)
$$4 + 0 =$$

(b)
$$5 + 1 =$$

(d)
$$5 + 3 =$$

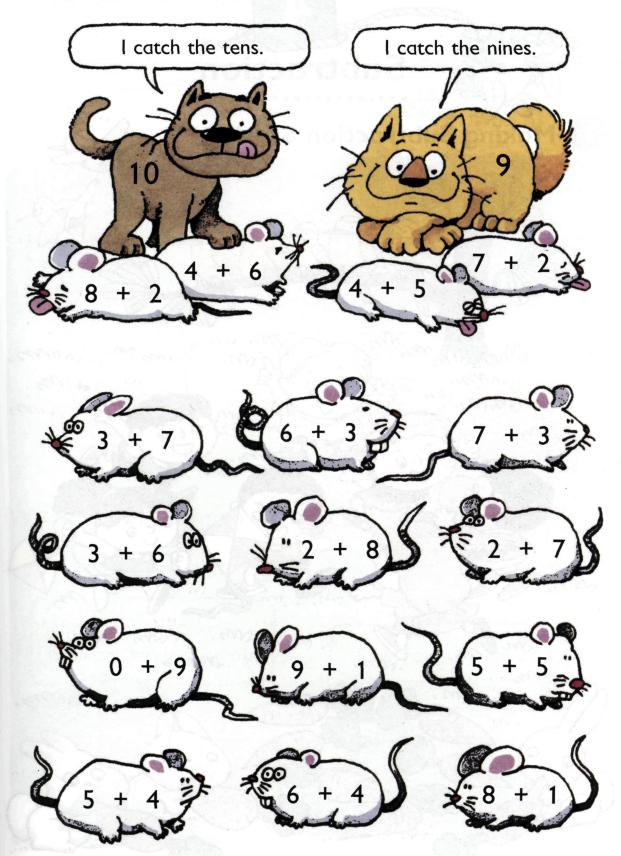
5. Complete the addition sentences. 5 bnp 4 bbA

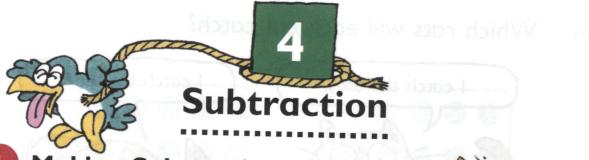




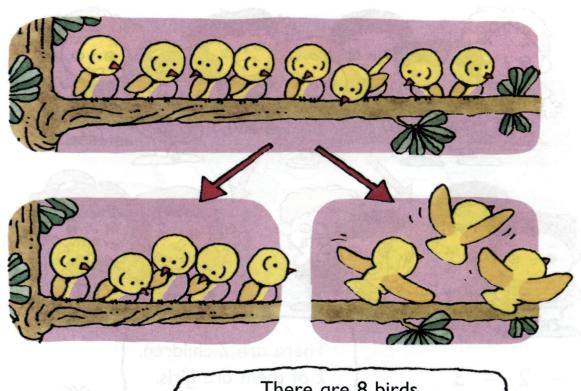
(g)
$$7 + = 10$$
 (h) $8 + = 10$

6. Which rats will each cat catch?





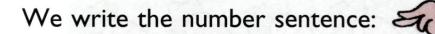




There are 8 birds.

3 birds fly away.

5 birds are left.

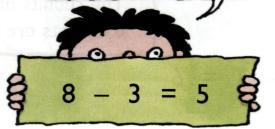




This is **subtraction**. It means taking away.



Subtract 3 from 8. The answer is 5.





7 - 2 = 5

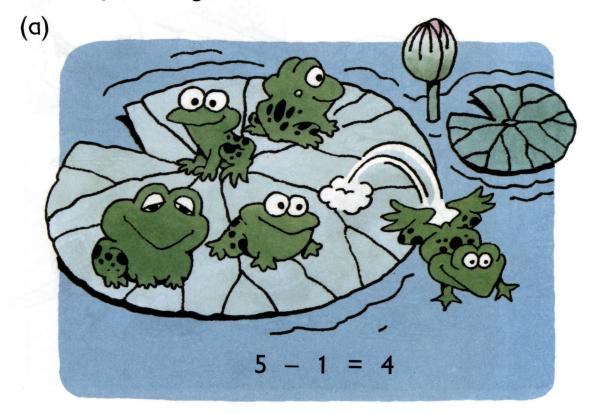
There are 7 children.
2 of them are girls.
There are 5 boys.

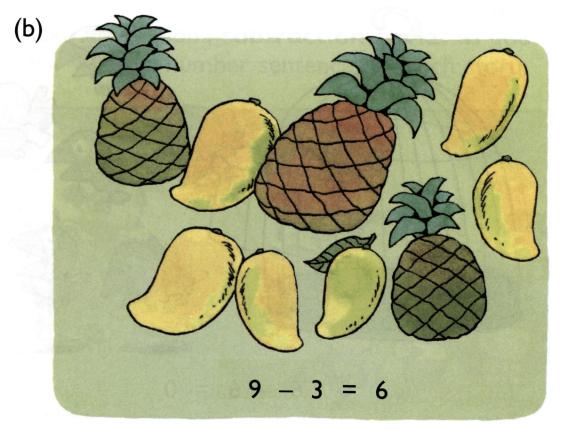


There are 9 carrots altogether.
The rabbits are eating 3 carrots.
6 carrots are left.

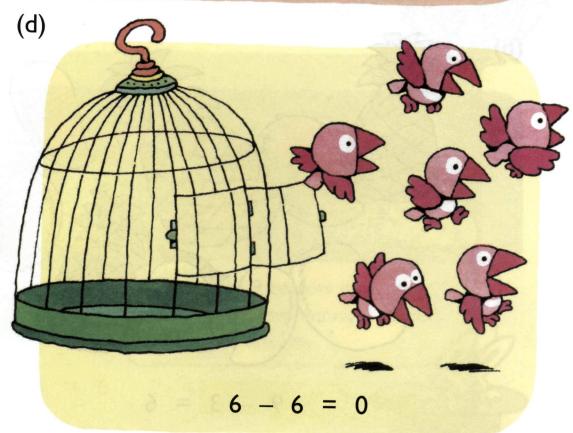
9 - 3 = 6

1. Make up a story for each number sentence.

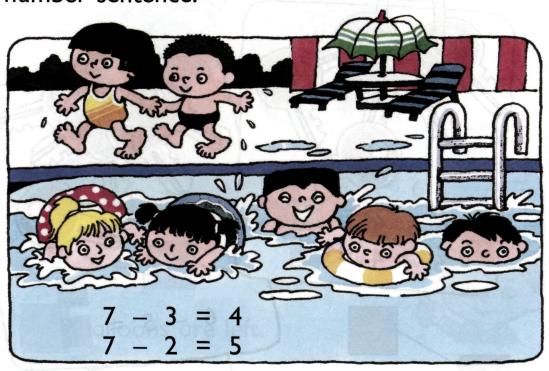








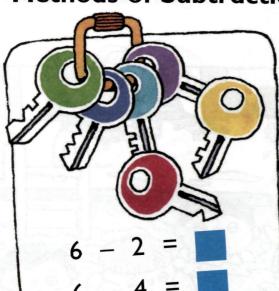
2. Make up as many stories as you can for each number sentence.

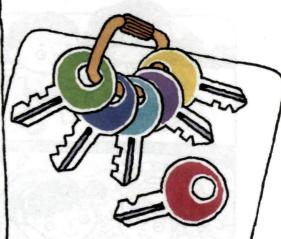


3. Make up as many **subtraction** stories as you can. Write a number sentence for each story.

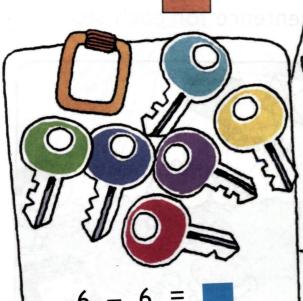


2 Methods of Subtraction



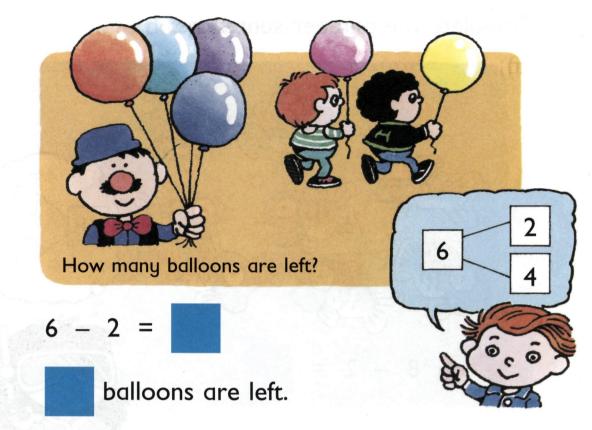




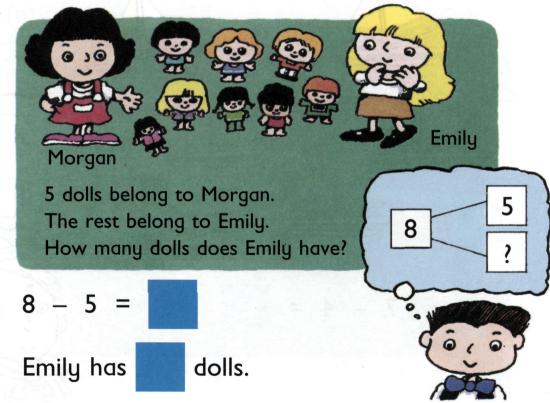




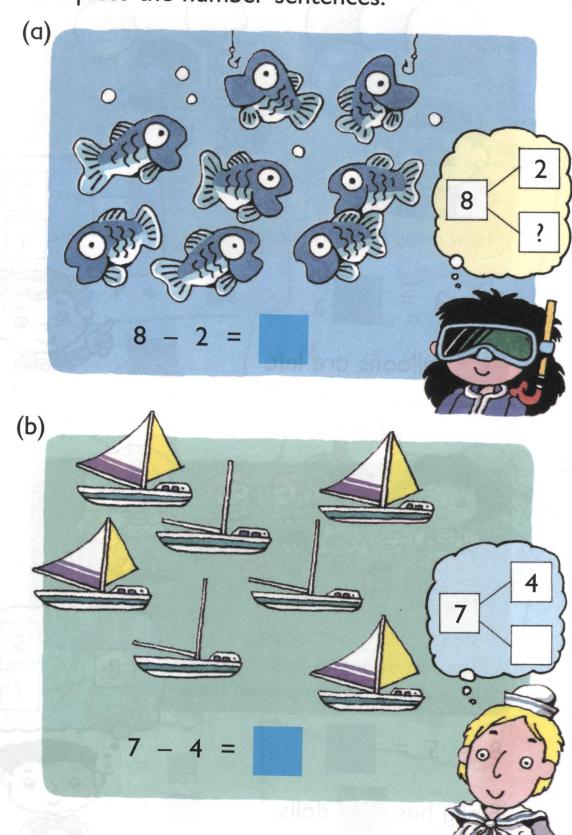
1.



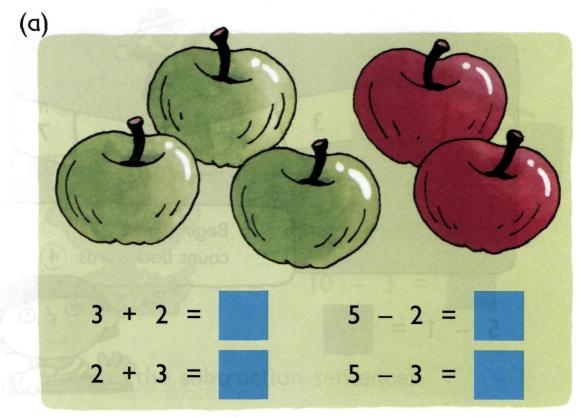


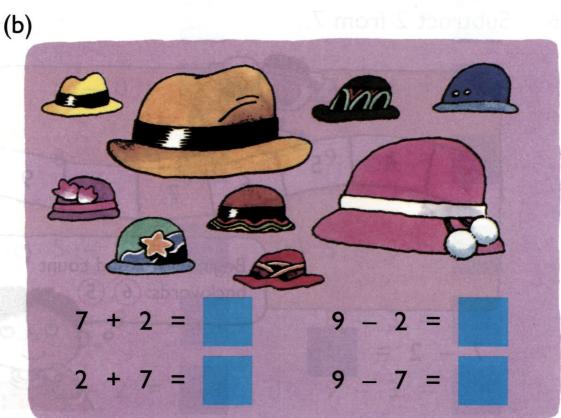


3. Complete the number sentences.

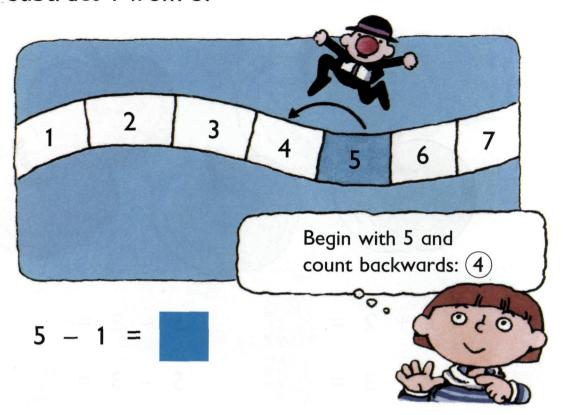


4. Complete the number sentences.

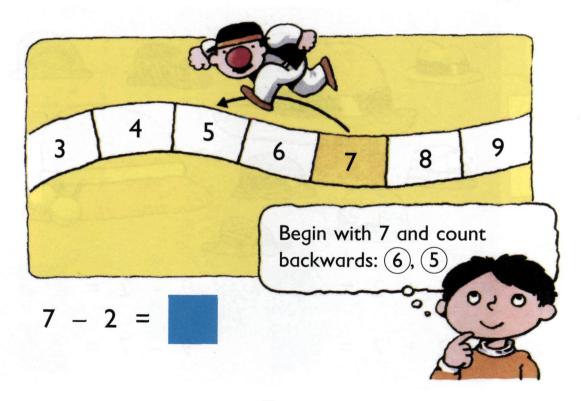




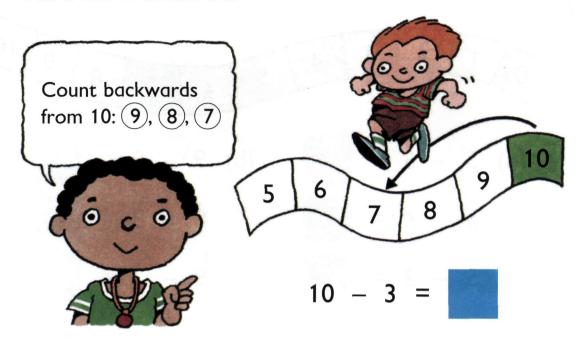
5. Subtract 1 from 5.



6. Subtract 2 from 7.



7. Subtract 3 from 10.

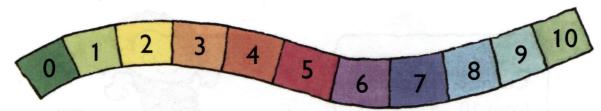


8. Complete the subtraction sentences.

(c)
$$5 - 2 =$$

(d)
$$5 - 3 =$$

9. Complete the subtraction sentences.



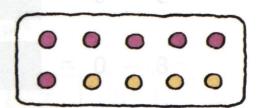
(a) 5 - 5 =

(b) 9 - 9 =

(c) 3 - 2 =

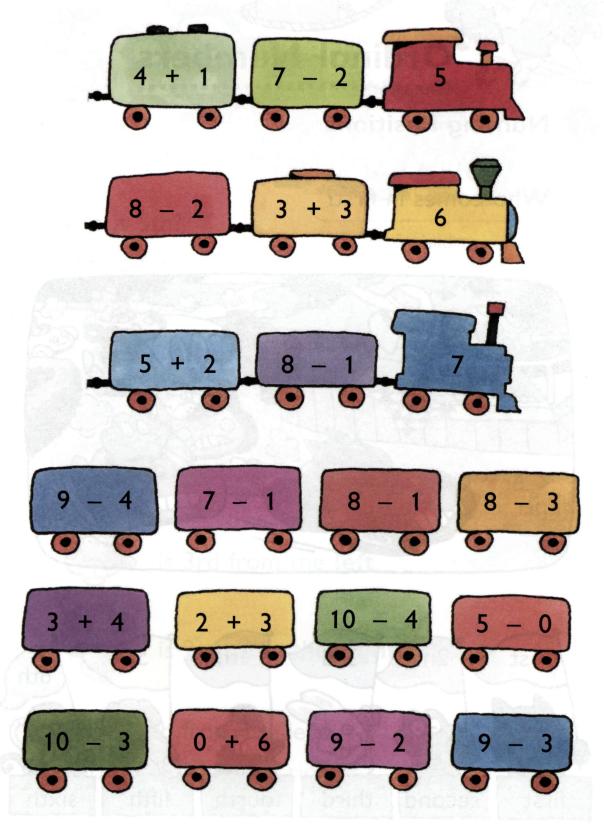
(d) 6 - 4 =

10. Subtract 6 from 10.6 and 4 make 10.



11. Complete the subtraction sentences.

12. Which train does each car belong to?

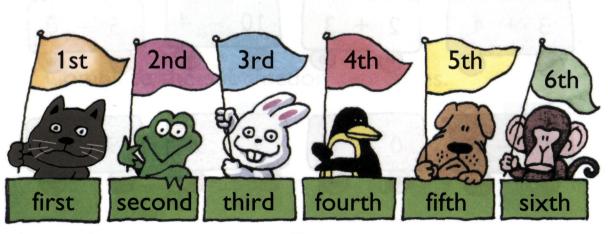


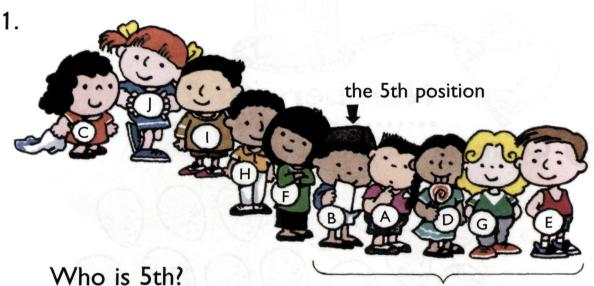


Naming Positions

Who comes in first?





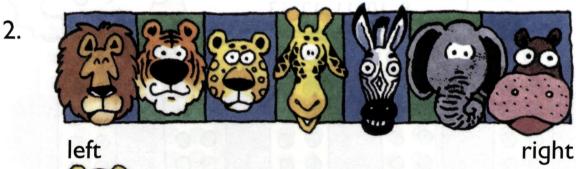


5 children

Who is 9th?

In which position is the boy E?

Workbook Exercises 32 & 33





is 3rd from the left.

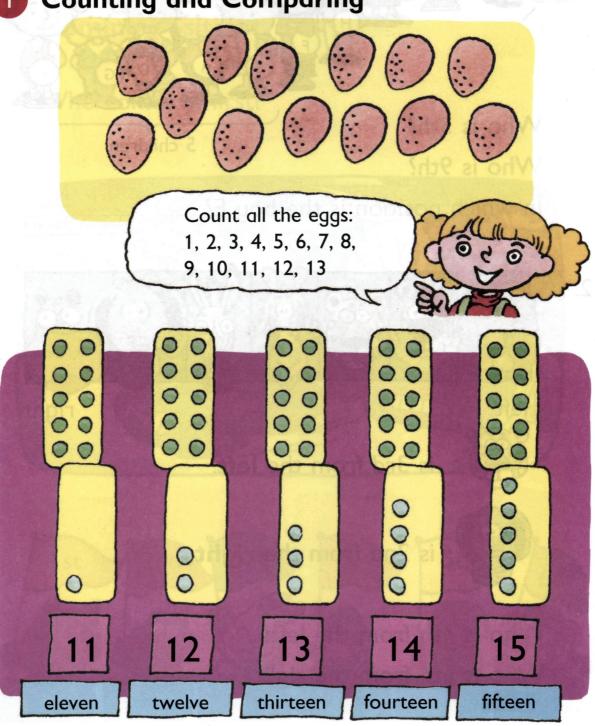


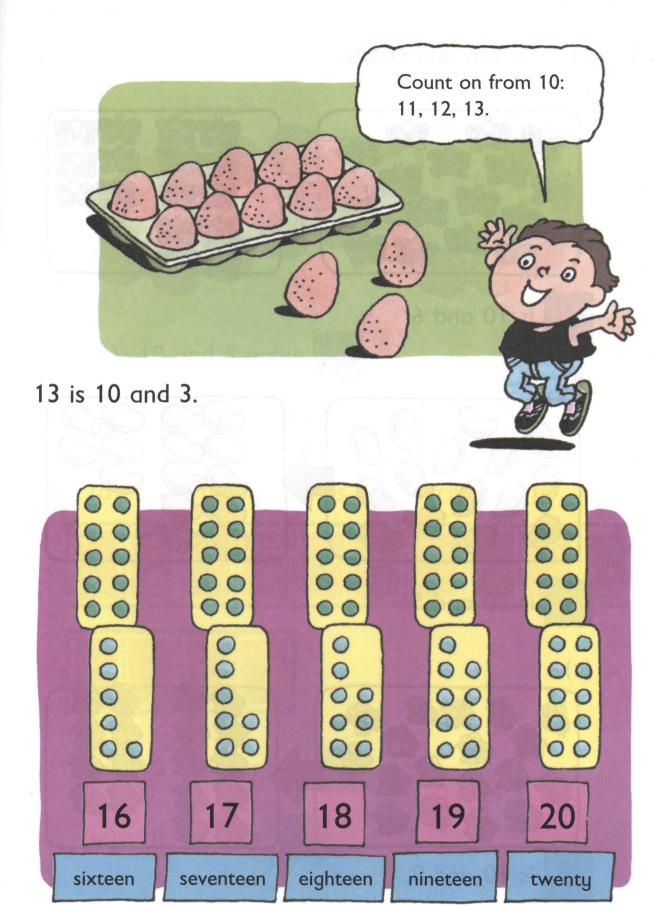
is 2nd from the right.

Who is 4th from the left? Who is 6th from the right?

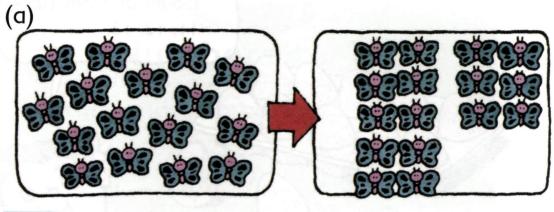


Counting and Comparing

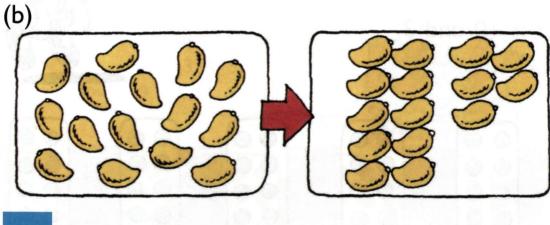




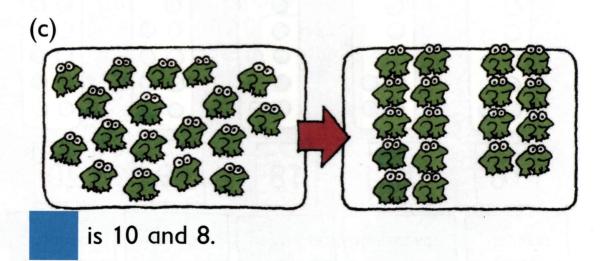
1. Make a ten and count.



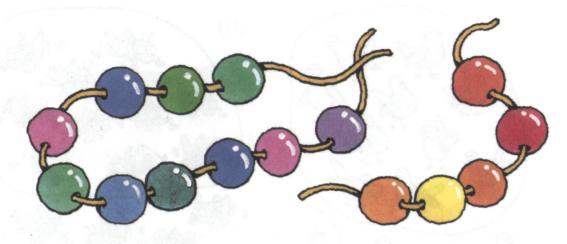
is 10 and 6.



is 10 and 5.



2. (a) How many beads are there?

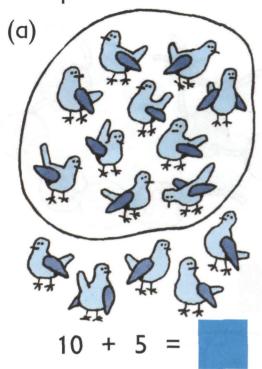


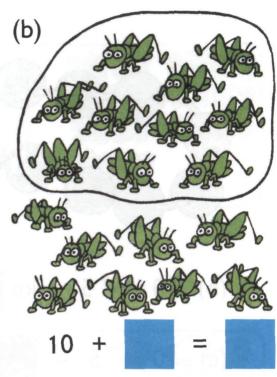
- (b) 10 and 5 make
- (c) 10 + 5 =
- 3. (a) How many stamps are there?



- (b) 10 and 4 make
- (c) 10 + 4 =

4. Complete the addition sentences.

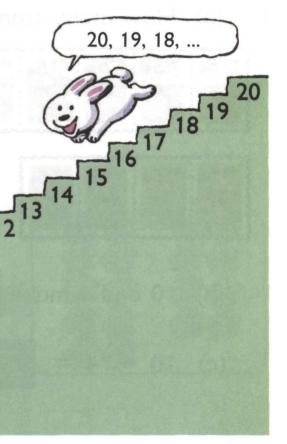




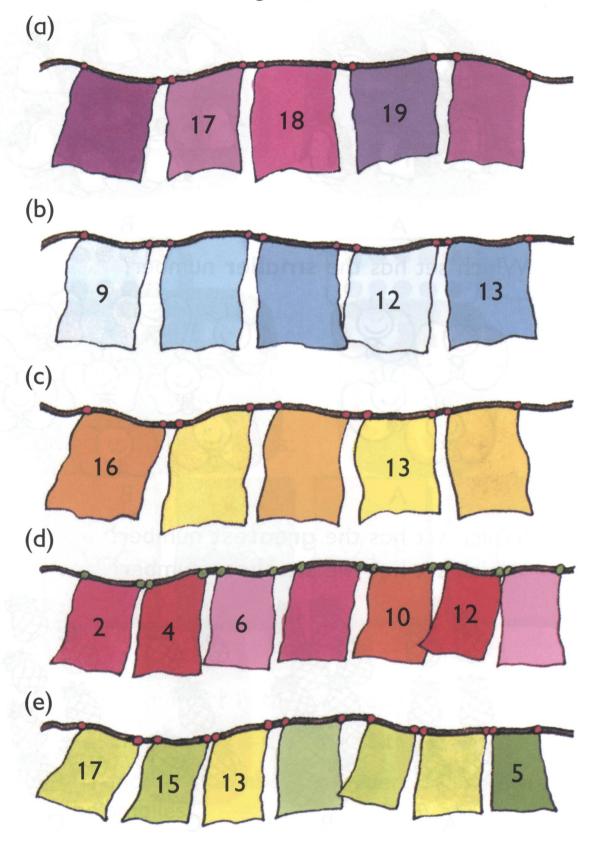
Workbook Exercise 37

Count from 1 to 20.Then count backwards.

12 3 4 5 6 7 8 9 10 11 12 3 4 5 6 7 8 9 10 11



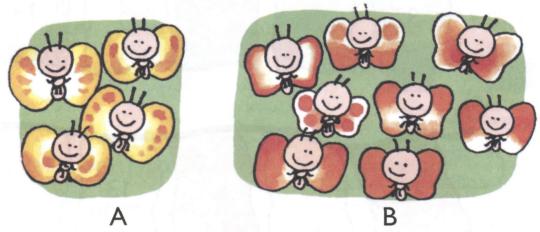
6. What are the missing numbers?



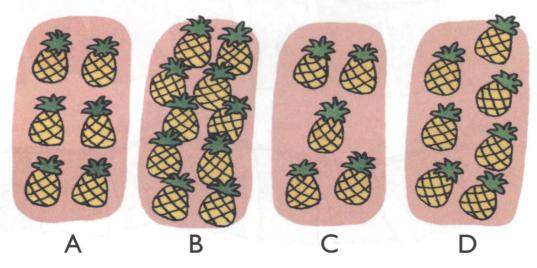
7. Which set has the **greater** number?



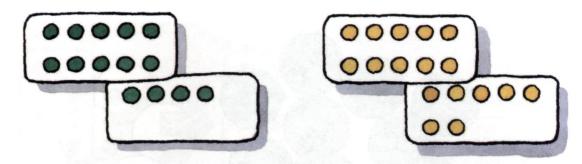
8. Which set has the **smaller** number?



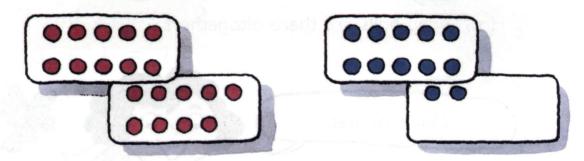
9. Which set has the **greatest** number? Which set has the **smallest** number?



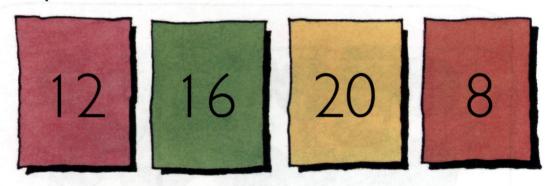
10. (a) Which is greater, 14 or 17?



(b) Which is smaller, 19 or 12?



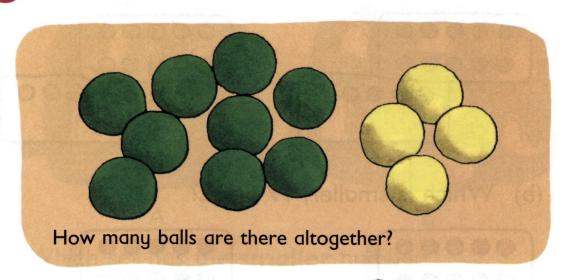
11. Compare these numbers:



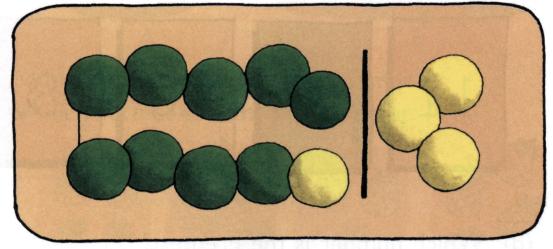
- (a) Which number is the greatest?
- (b) Which number is the smallest?
- (c) Arrange the numbers in order. Begin with the smallest.

2

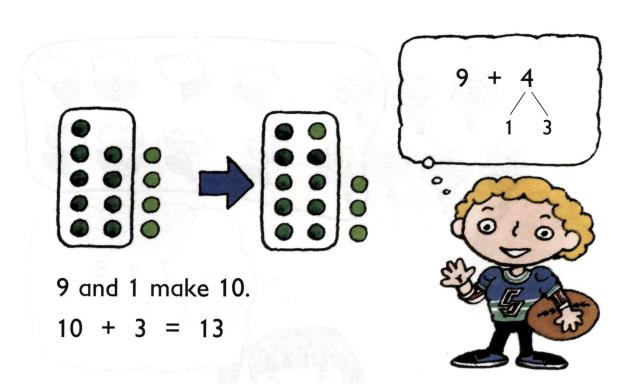
Addition and Subtraction



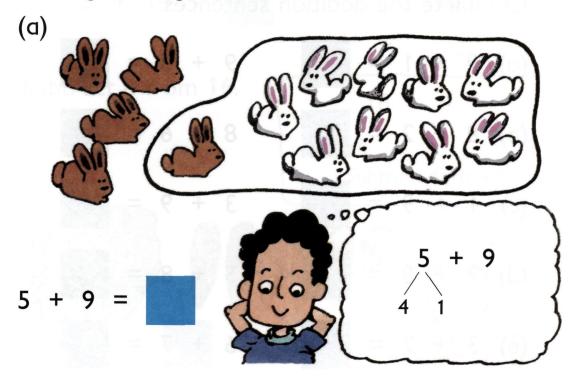




There are balls altogether.



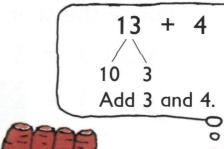
1. Add by making 10 first.



(b) 7 + 8 5 2 7 + 8

2. Complete the addition sentences.

3. Add 13 and 4.











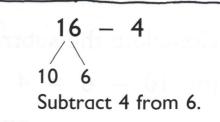
- 13 + 4 =
- 4. Complete the addition sentences.

(a)
$$5 + 4 = 9$$

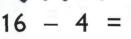
(b)
$$2 + 8 = 10$$

Workbook Exercise 42

5. Subtract 4 from 16.











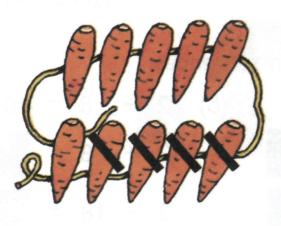
6. Complete the subtraction sentences.

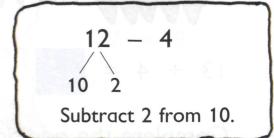
(a)
$$8 - 3 = 5$$

(b)
$$7 - 5 = 2$$

Workbook Exercise 43

7. Subtract 4 from 12.





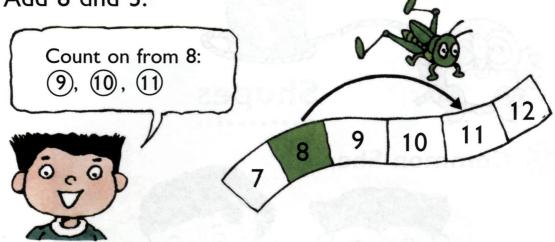


8. Complete the subtraction sentences.

(a)
$$10 - 6 = 4$$

(b)
$$10 - 7 = 3$$

9. Add 8 and 3.



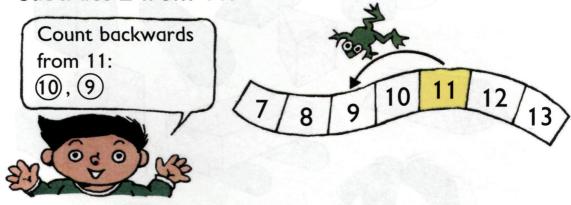
10. Complete the addition sentences.

(a)
$$9 + 2 =$$

(b)
$$9 + 3 =$$

(d)
$$17 + 2 =$$

11. Subtract 2 from 11.



12. Complete the subtraction sentences.

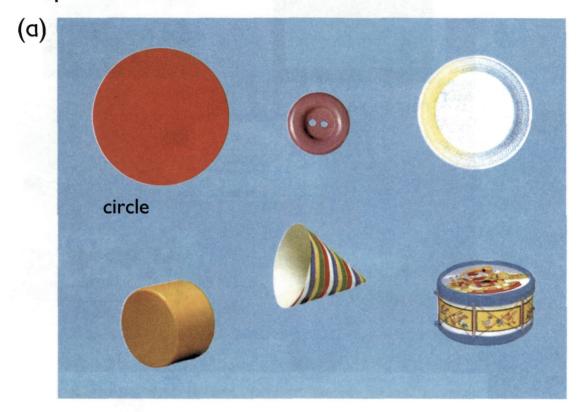
(b)
$$12 - 3 =$$

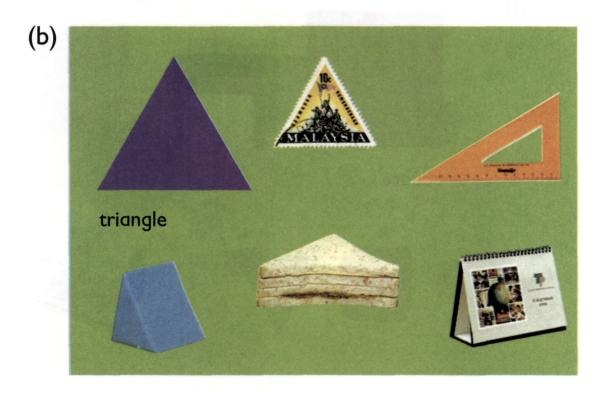
(c)
$$14 - 1 = (d)$$





1. Compare the objects in each set with the given shape.

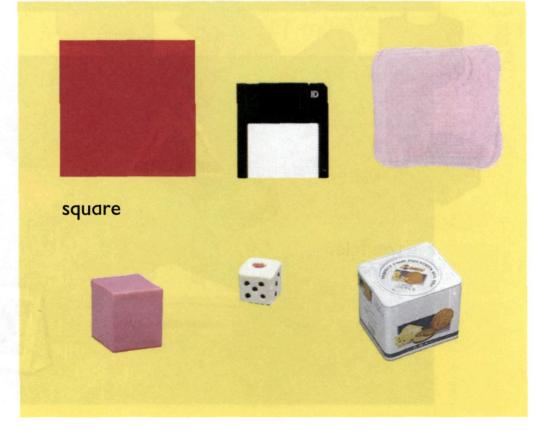




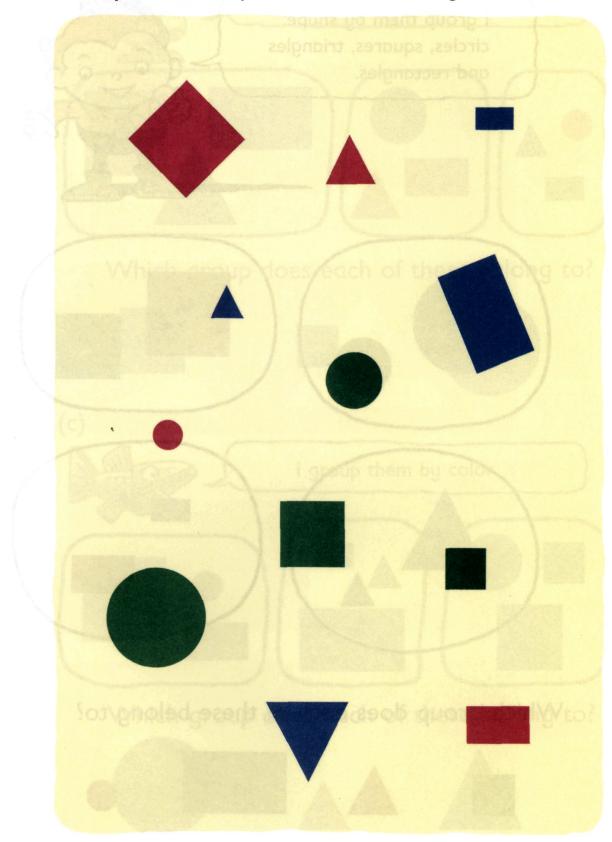
(c)

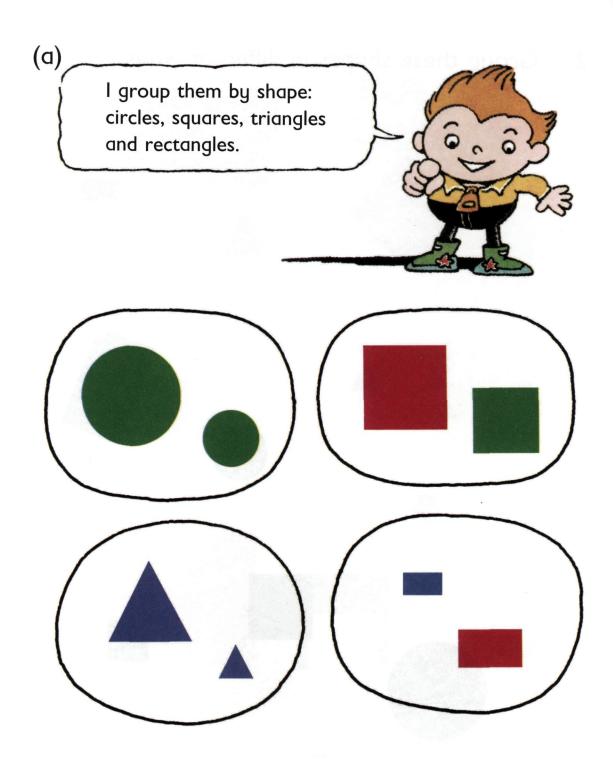


(d)



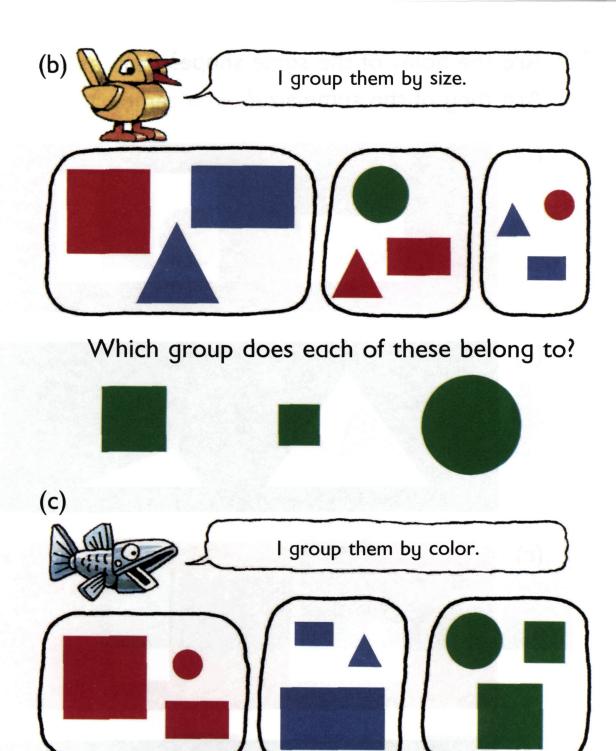
2. Group these shapes in different ways.





Which group does each of these belong to?

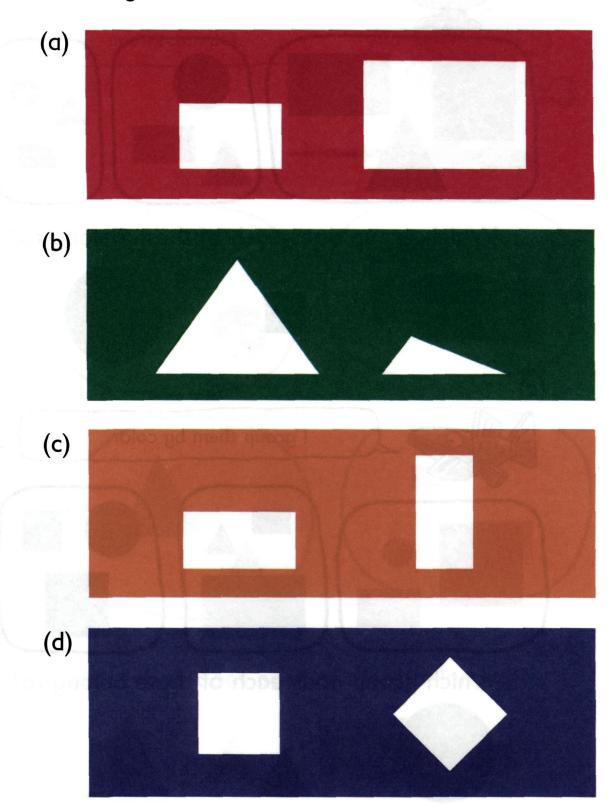




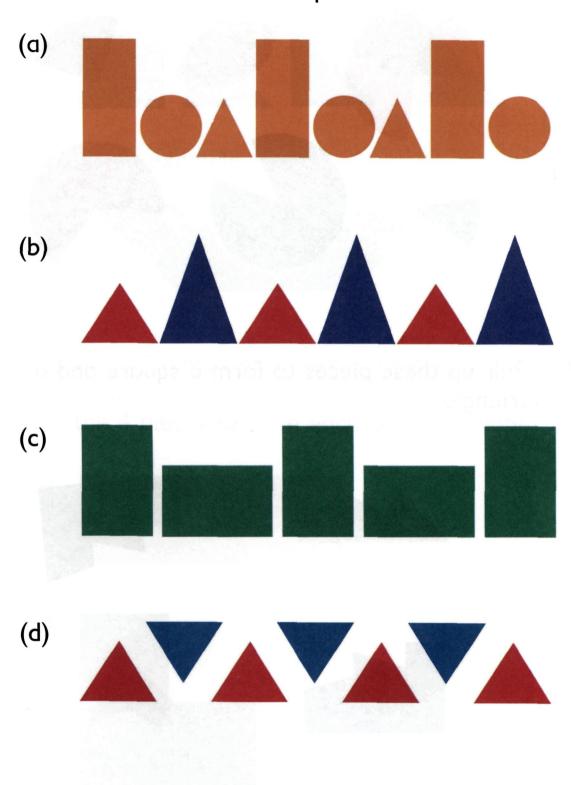
Which group does each of these belong to?



3. Are the holes of the same shape? Are they of the same size?



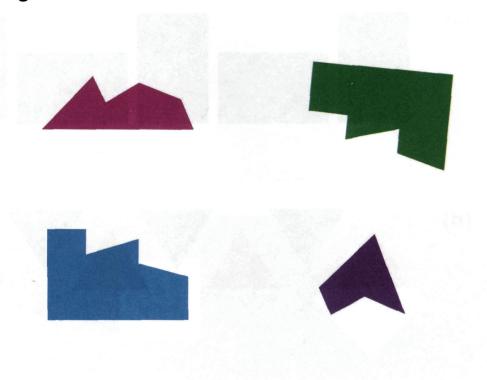
4. These are patterns of shapes.
What comes next in each pattern?



5. Pair up these pieces to form 3 circles.



6. Pair up these pieces to form a square and a triangle.



7. We can fit these 4 pieces together to form a shape.



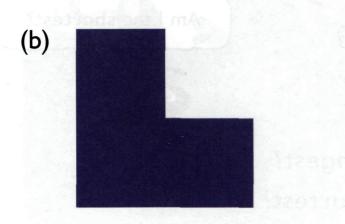
Here is an example:



Trace the 4 pieces on a piece of paper and cut them out.

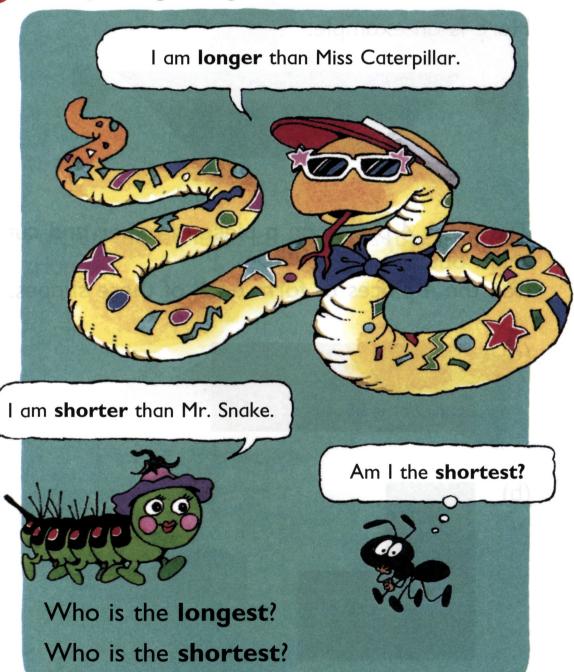
Use the 4 pieces to form each of these shapes.

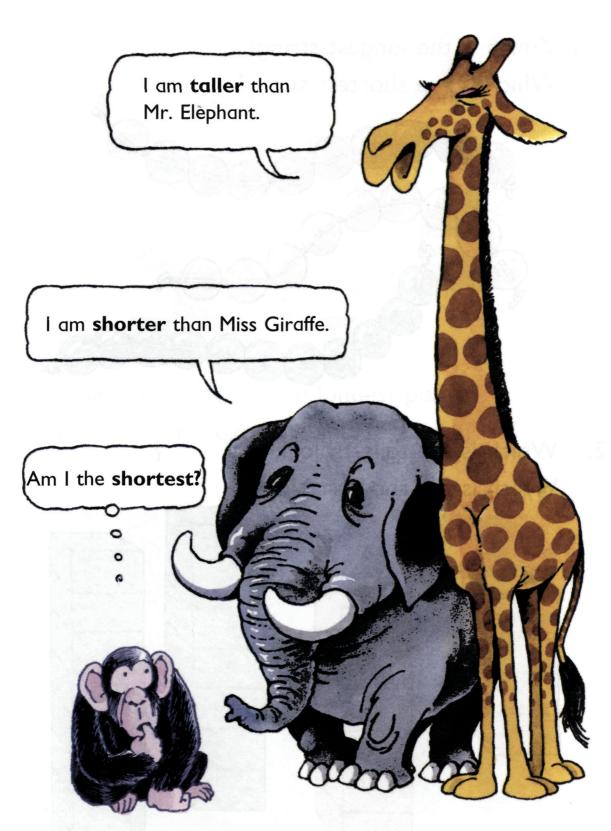






Comparing Length



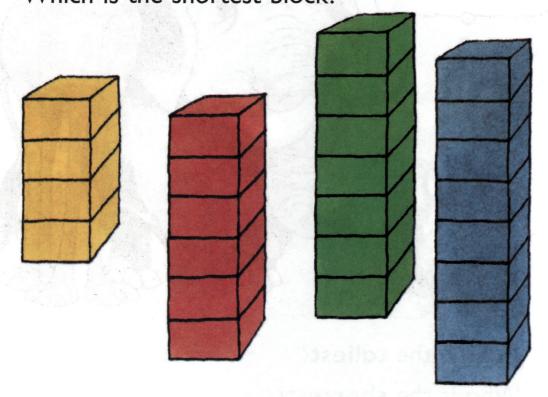


Who is the **tallest**?
Who is the **shortest**?

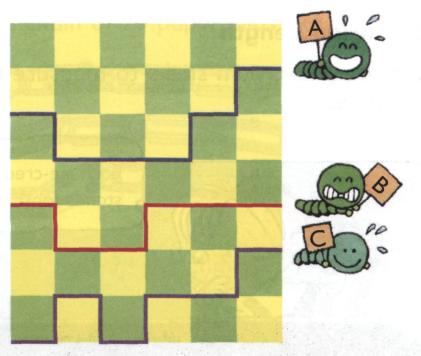
Which is the longest string?
 Which is the shortest string?



Which is the tallest block?
Which is the shortest block?

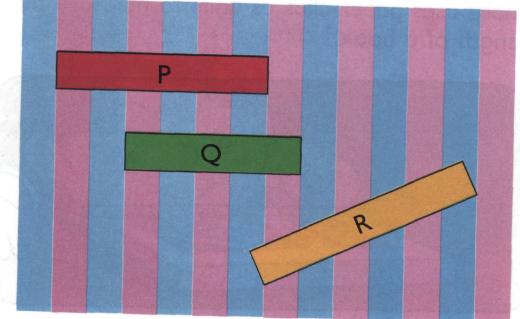


3.



Which worm takes the longest path? Which worm takes the shortest path?

4.



Which tape is the longest? Which tape is the shortest?

2 Measuring Length

John uses ice-cream sticks to measure the length of a table.



The length of the table is about 12 units.

1. Mary uses paper-clips as units to measure the length of a book.

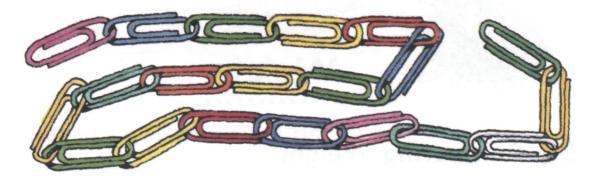


The length of the book is about

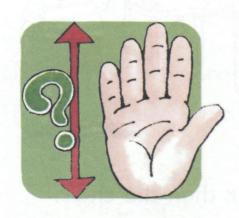


units.

2. Make a chain of 20 paper clips like this:



- (a) The length of the chain is units.
- (b) Use the chain to measure your hand and your foot.



My hand is about units long.

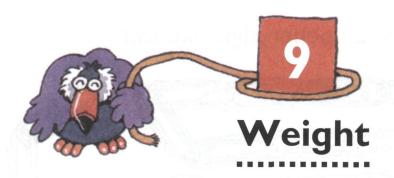




My foot is about units long.



(c) Which is longer, your hand or your foot?



1 Comparing Weight



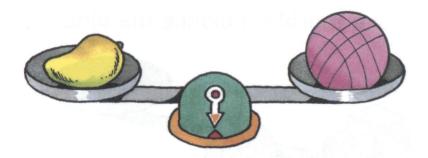
The cupboard is **heavier** than the chair. The chair is **lighter** than the cupboard.



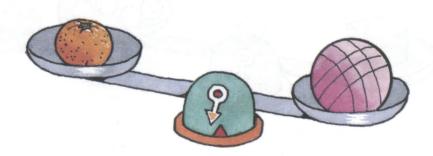




Which is the **lightest**? Which is the **heaviest**?

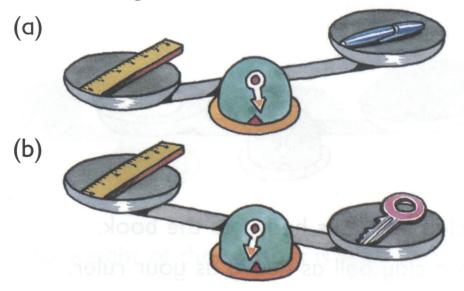


The mango is **as heavy as** the ball.

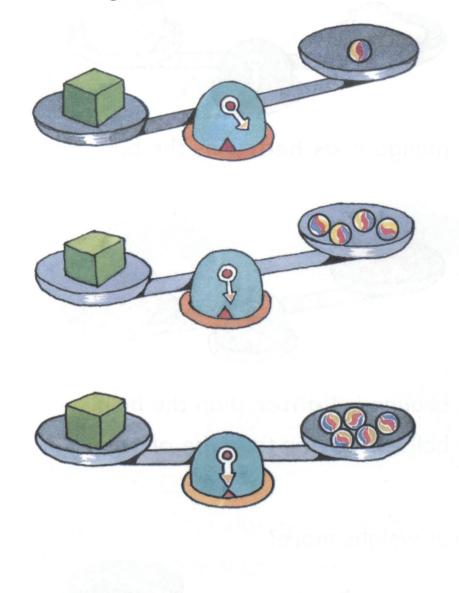


The orange is **lighter** than the ball. The ball is **heavier** than the orange.

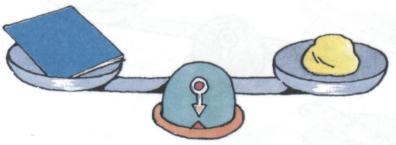
1. Which weighs more?



2. How many marbles balance the block?



3.

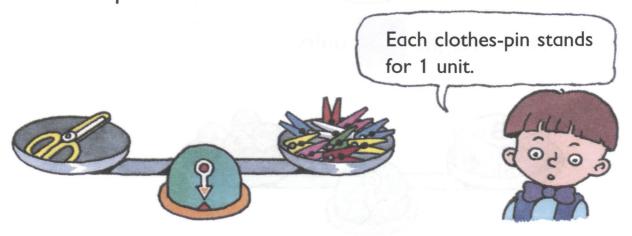


The clay ball is as heavy as the book.

Make a clay ball as heavy as your ruler.

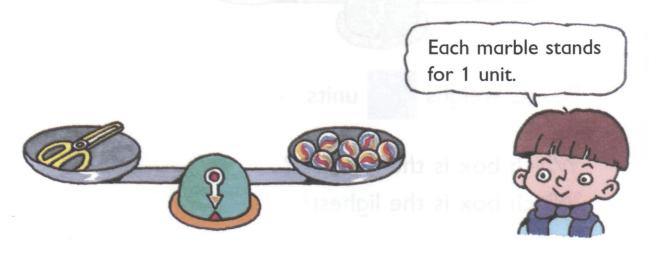
2 Measuring Weight

Matthew uses clothes-pins to measure the weight of a pair of scissors.



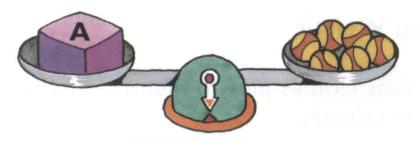
The weight of the scissors is units.

Then he uses marbles to measure the weight of the same pair of scissors.

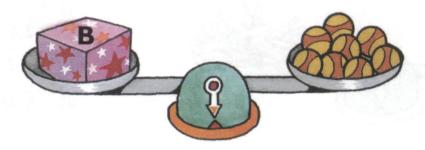


The weight of the scissors is units.

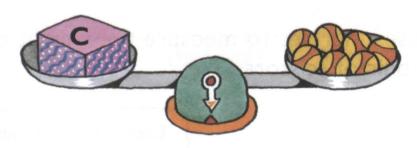
1.



Box A weighs units.



Box B weighs units.



Box C weighs units.

Which box is the heaviest? Which box is the lighest?

Find out how many marbles balance your pencil box.

Adapted from Primary Mathematics 1A Textbook by Ministry of Education, Singapore

