



college press

New Curriculum

# Ventures Primary Mathematics and Science

Grade  
**1**

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Learner's Book

# Ventures Primary Mathematics and Science Grade 1

1

Ventures Primary Mathematics and Science Grade 1 Learner's Book has been developed to support the content, aims and objectives contained in the New Primary Education Curriculum for Zimbabwe. It contains all the activities that the learners need to cover the Mathematics and Science Syllabus for Grade 1.

#### The book:

- Develops a positive attitude towards Mathematics and Science.
- Exposes the learner to various technologies and how to apply these technologies in everyday life.
- Develops critical thinking, problem solving, decision making, innovation and collaboration skills.
- Provides awareness of the importance of the environment.

The Learner's Book is part of the Junior Primary learner's Development Series completed with a comprehensive Facilitator's Resource Book.



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Approved by the Ministry of Primary and Secondary Education, November 2016

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## UNIT

# 1

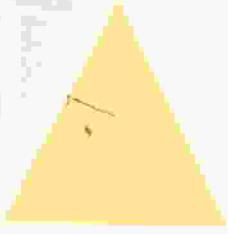
## Matching

### Sorting



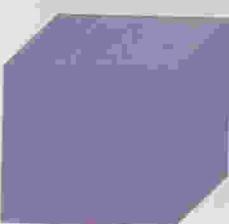
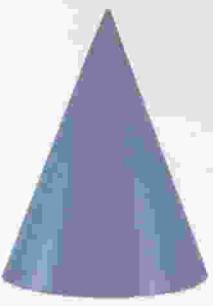
Look at the pictures.  
What do you see?

### Plane Shapes



Name the shapes.

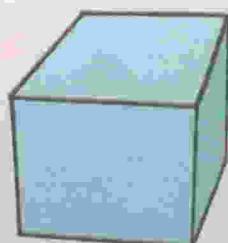
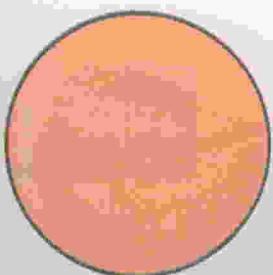
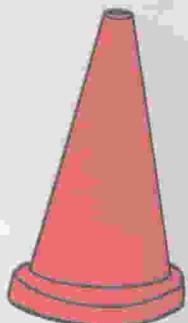
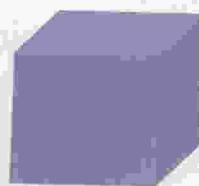
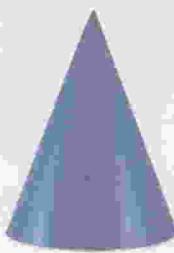
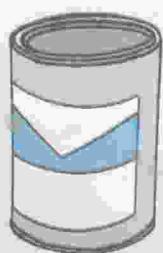
## Solid Shapes



Name the shapes.

## Matching

### Practice exercise 1



Match objects to shapes.

## Activity 1: The classroom shapes



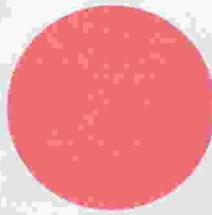
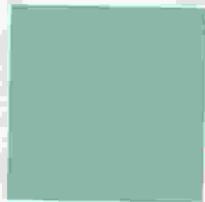
Look at the classroom in the picture.

### Assessment test

1. What is in the set?

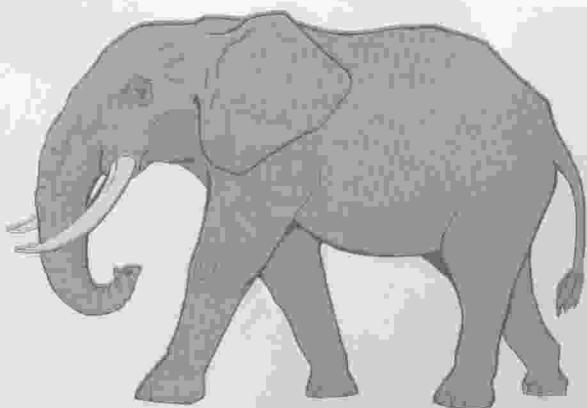
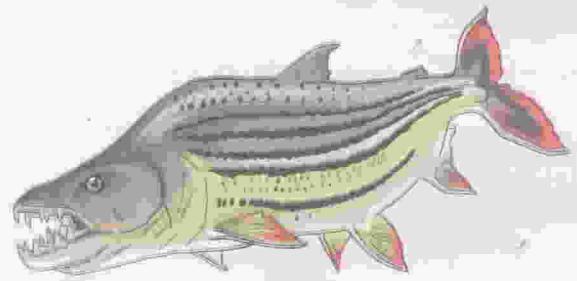
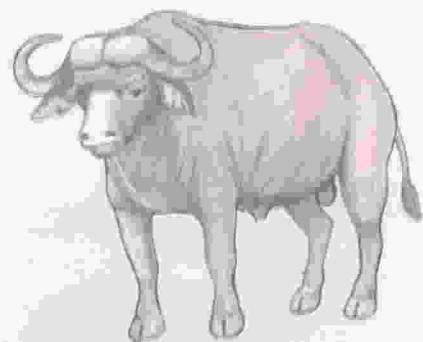


2. Name the shapes.



Big, Small

Practice exercise 1



Name the animals.  
What size is it?

Tall; short

Practice exercise 2

1.

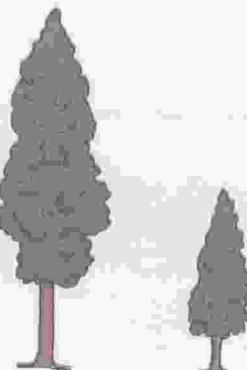


Boy A



Boy B

2.

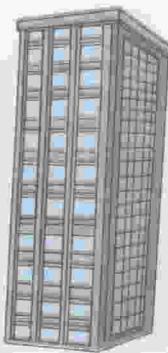


E



F

3.



C



D

- (a) Say which one is tall?
- (b) Say which one is short?

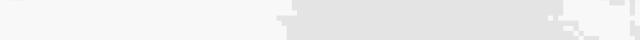
Long; short

Practice exercise 3

1.



2.



3.



4.

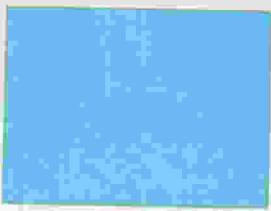


Say which object is longer than the other.

## Equal; different

### Practice exercise 4

1. Look at the shapes.



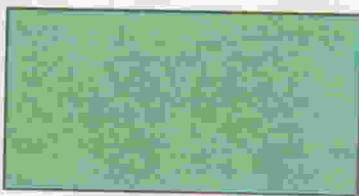
- (a) What is the same?
- (b) What is different?

2. Look at the shapes.



- (a) What is the same?
- (b) What is different?

3. Look at the shapes.

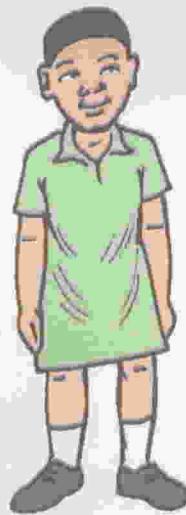


- (a) What is the same?
- (b) What is different?

## Ordering



tall



taller

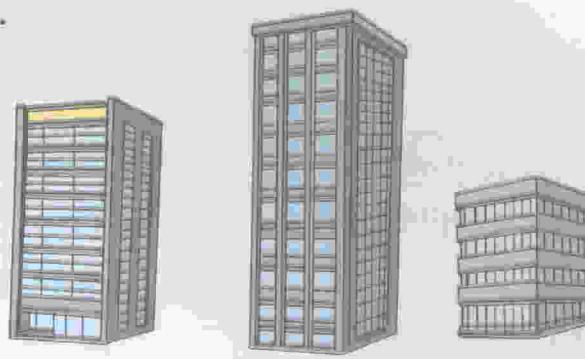


tallest

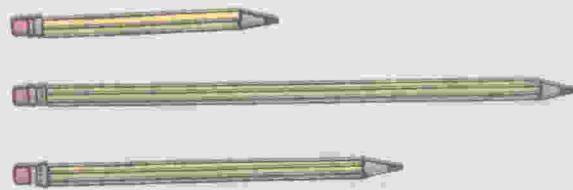
### Practice exercise 5

Order the following.

1.



2.



3.



Order sets showing tall, taller, tallest or short, shorter, shortest.

## Assessment test

A



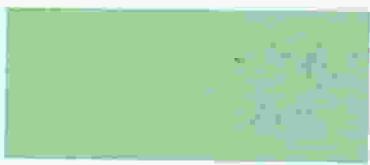
B



C



1. The longest is \_\_\_\_\_.



2. The two shapes are — (equal, different).

A



B



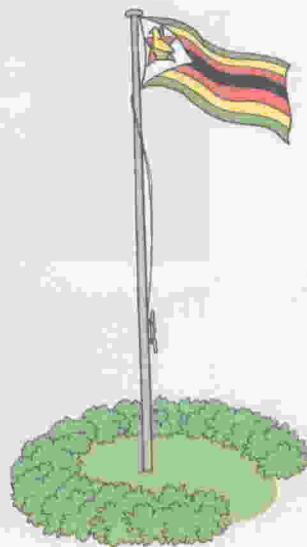
3. — is longer.



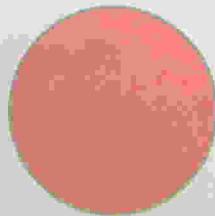
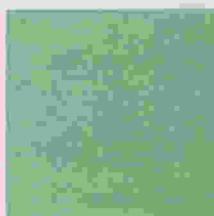
4. The pencils are — (equal, different).

**Shapes around us****Practice exercise 1**

Name the objects.



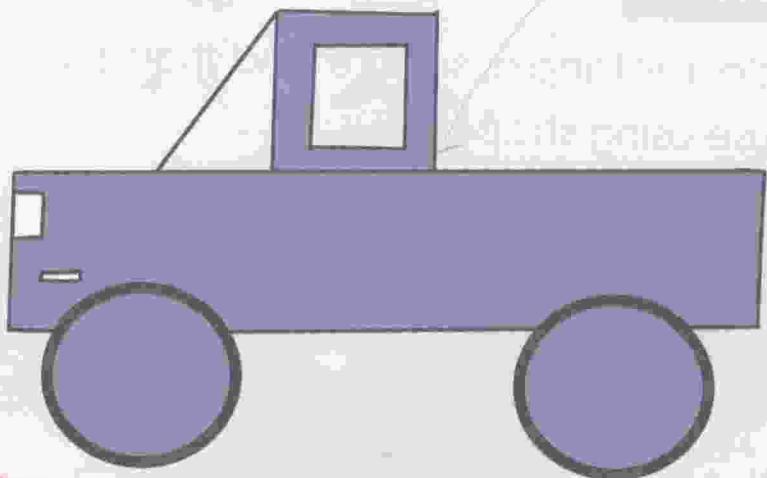
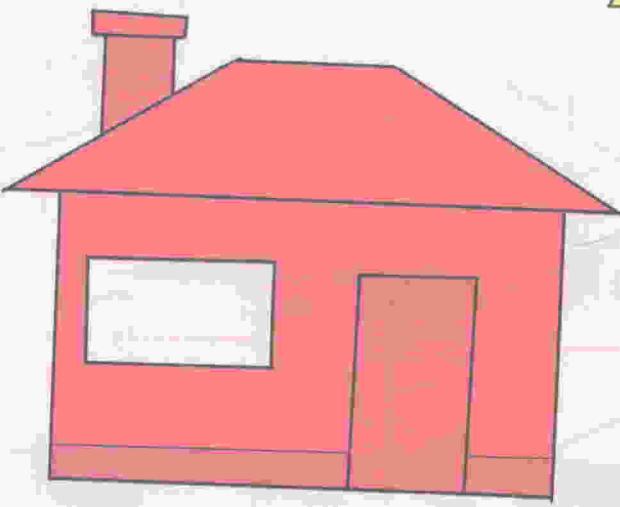
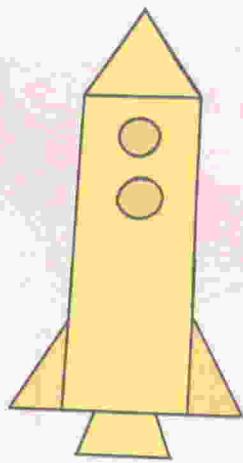
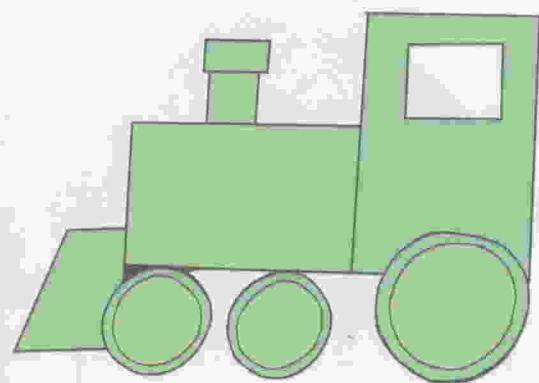
What shapes do you see?

**Plane shapes****Practice exercise 2**

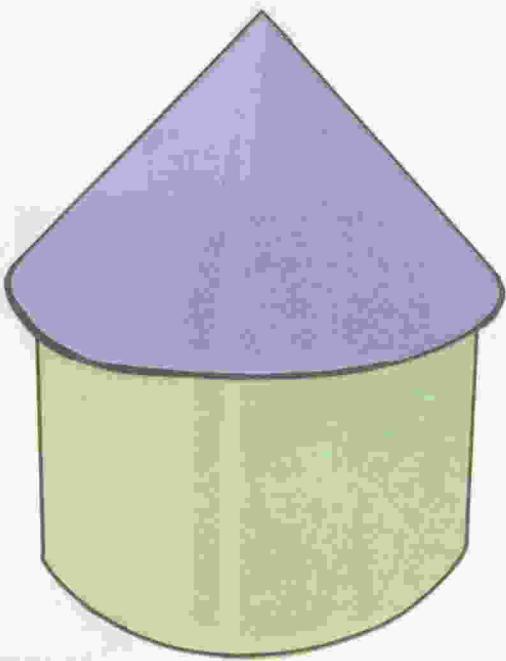
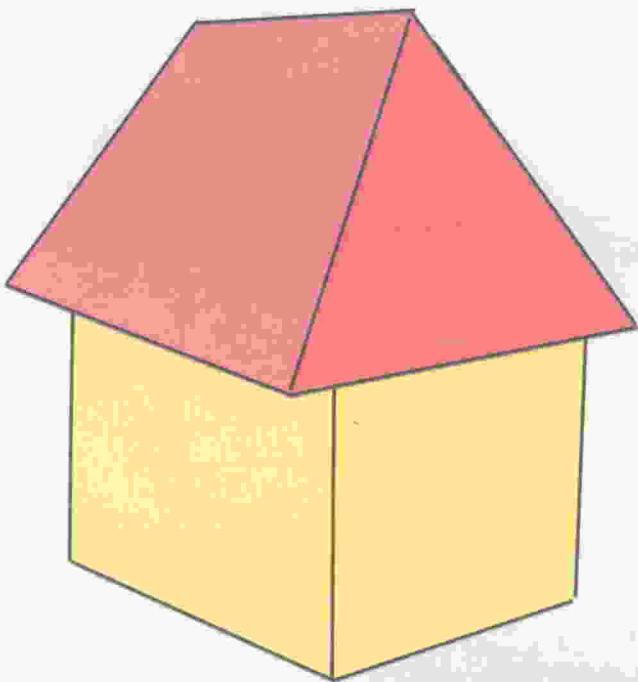
Name the shapes.

## Making pictures using shapes

### Practice exercise 3



## Activity 1: A house



Using building blocks, make a house.

### Assessment test

Draw a circle, rectangle, square and triangle

Draw a house using shapes.

**Key words**

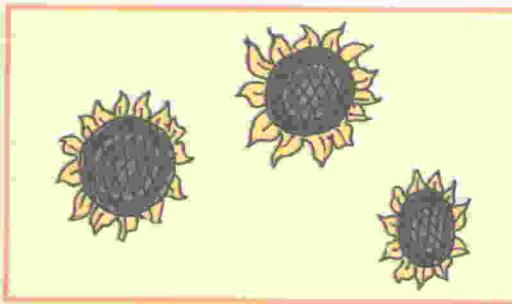
set      number      count

**Numbers**

1 One



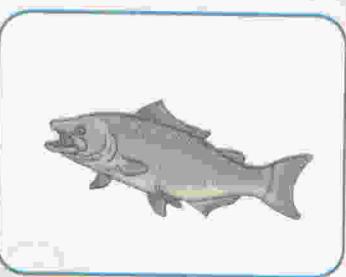
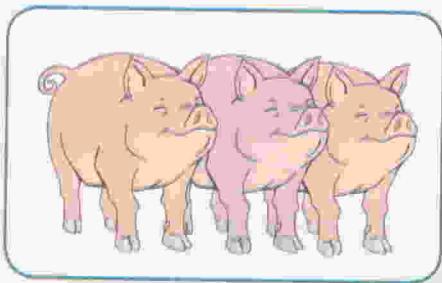
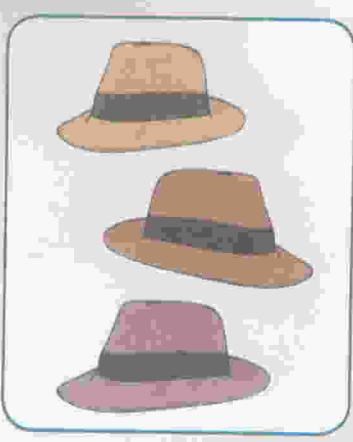
2 Two



3 Three

### Practice exercise 1

Count the number of objects in the set.



### Writing numbers in words

**Example:** Write down the following numbers in numerals and words.

- 1 = one
- 2 = two
- 3 = three

## Practice Exercise 2

Write numbers in words.

(a) 1

(b) 2

(c) 3

Write the numbers in numerals.

(d) three

(e) one

(f) two

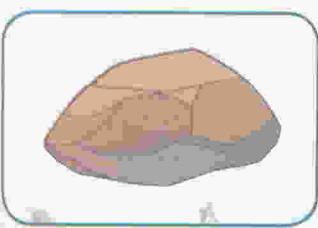
## Make a set

**Example:** Make a set with

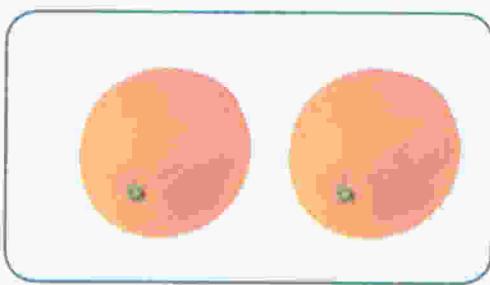
(i) 1 stone

(ii) 2 oranges

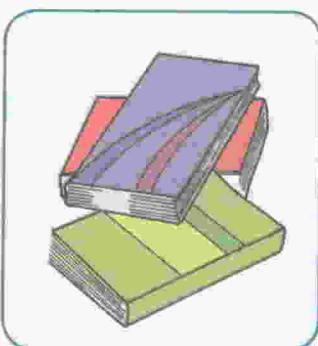
(iii) 3 books



1 stone



2 oranges



3 books

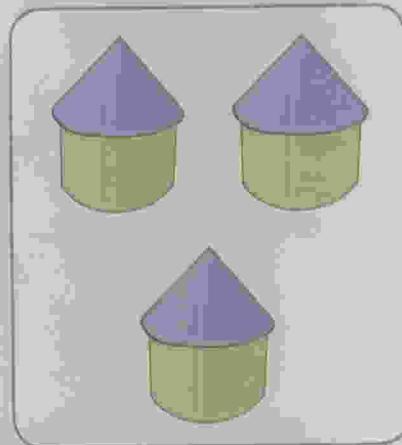
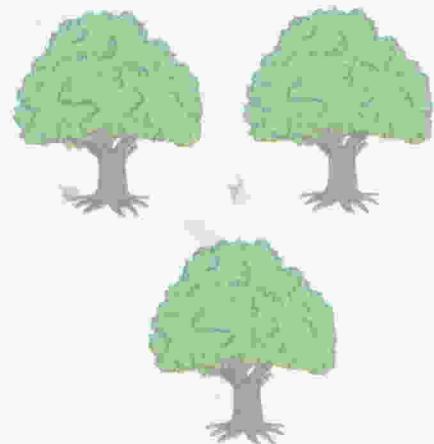
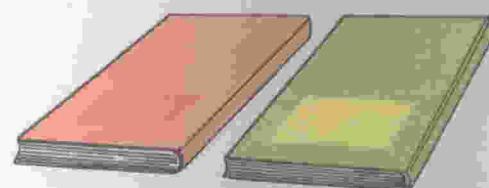
## Practice Exercise 3

Make a set with:

1. 1 pencil
2. 2 leaves
3. 2 bananas
4. 1 school bag
5. 3 trees
6. 3 circles

## Practice Exercise 4

Look at the sets below.



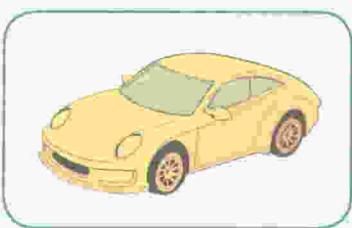
1. Which sets have
  - (a) 1 member
  - (b) 2 members
  - (c) 3 members
2. Draw sets of
  - (a) 1
  - (b) 2
  - (c) 3

Write the numerals 1, 2 and 3 under their sets.

## Assessment test

1. Count the number of objects in the following sets:

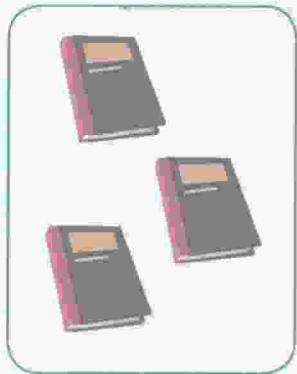
(a)



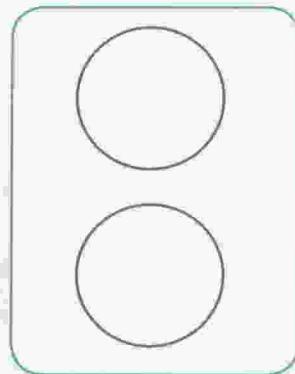
(b)



(c)



(d)



2. Build a set with:

(a) one ball

(b) three stones.

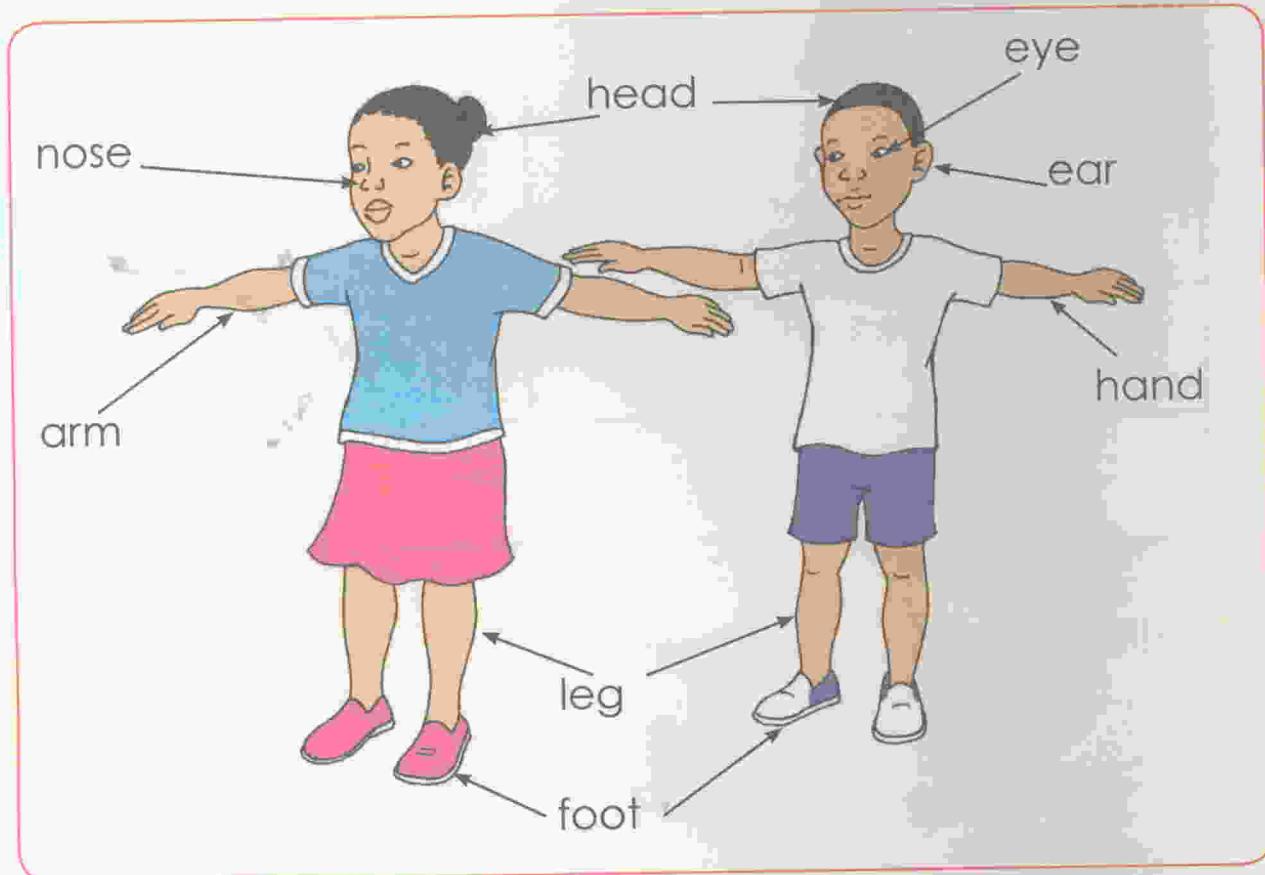
**Flashback**

Do the rhyme 'Head and shoulders.'

**Key words**

boy

girl

**Parts of the body**

Our bodies have many parts.

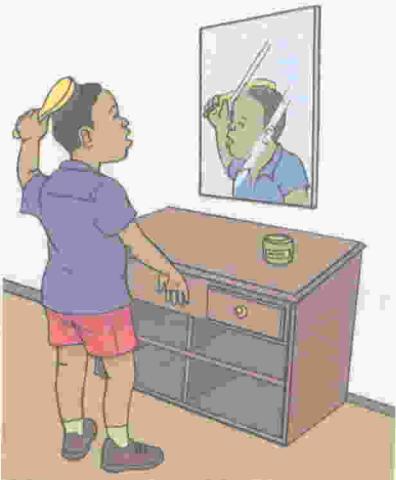
## Activity 1

1. Draw a human head and label body parts such as, nose eyes, ears, chin and mouth.
2. Draw a human being and label body parts such as head, hands, knees, feet, stomach, arms and legs.

### The body needs care

The body does many things.

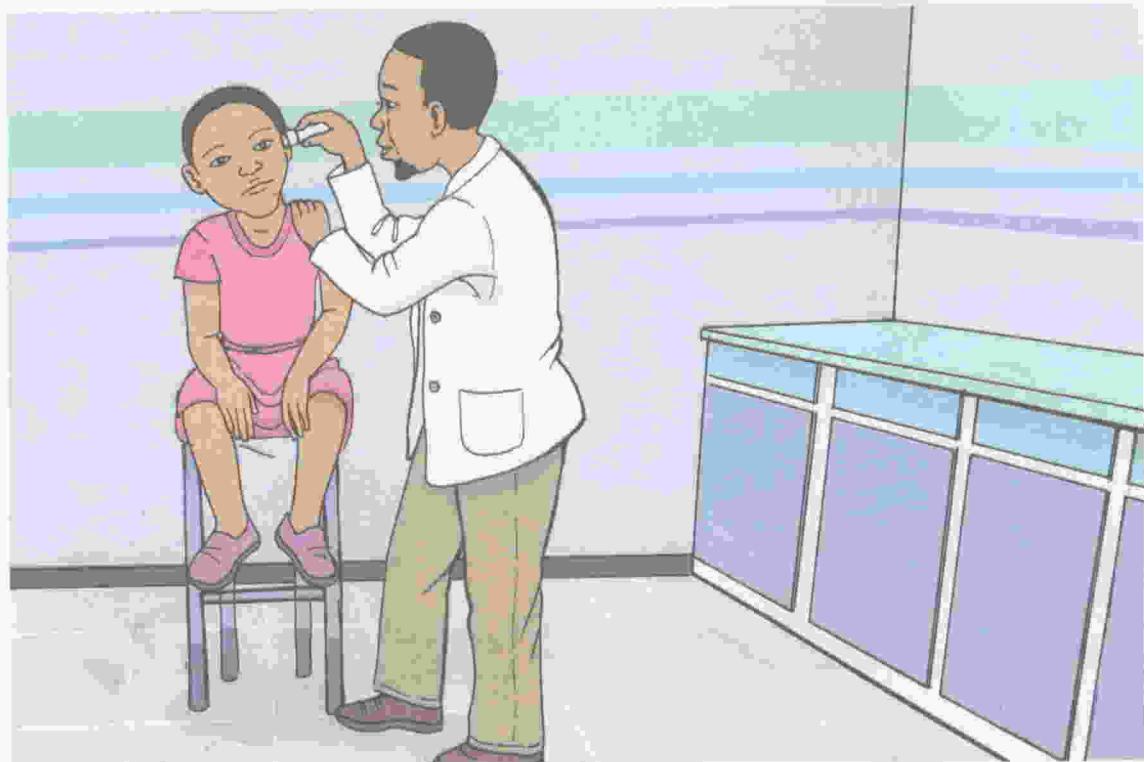
Look at the pictures.



## Activity 2

1. What do you do before you come to school?
2. Discuss with a friend.

## The eyes, nose and ears



We need to take care of our eyes.

We wash our eyes with water.

We need to take care of our nose

We blow our nose with a clean cloth.

We wash our ears and eyes everyday.  
We wash our ears with a clean cloth.  
We wash our ears with water.  
We wash our ears with soap.

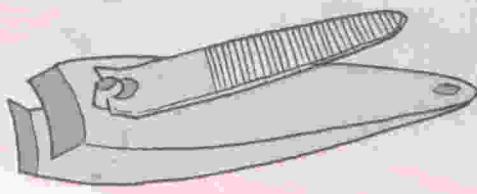
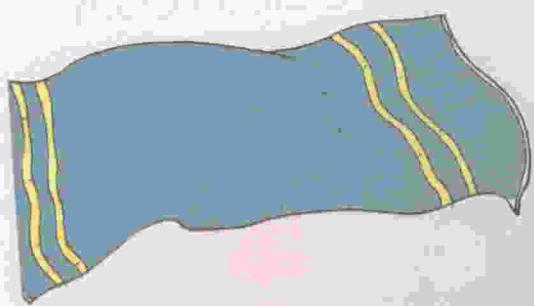
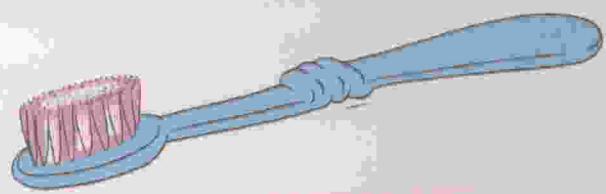
### Practice Exercise 1

1. We wash our ears and eyes — (every week/everyday).
2. We —— (blow/wash) our nose with a clean cloth.
3. We wash our eyes with —— (water/soap).

### What is the difference?

### Practice Exercise 3

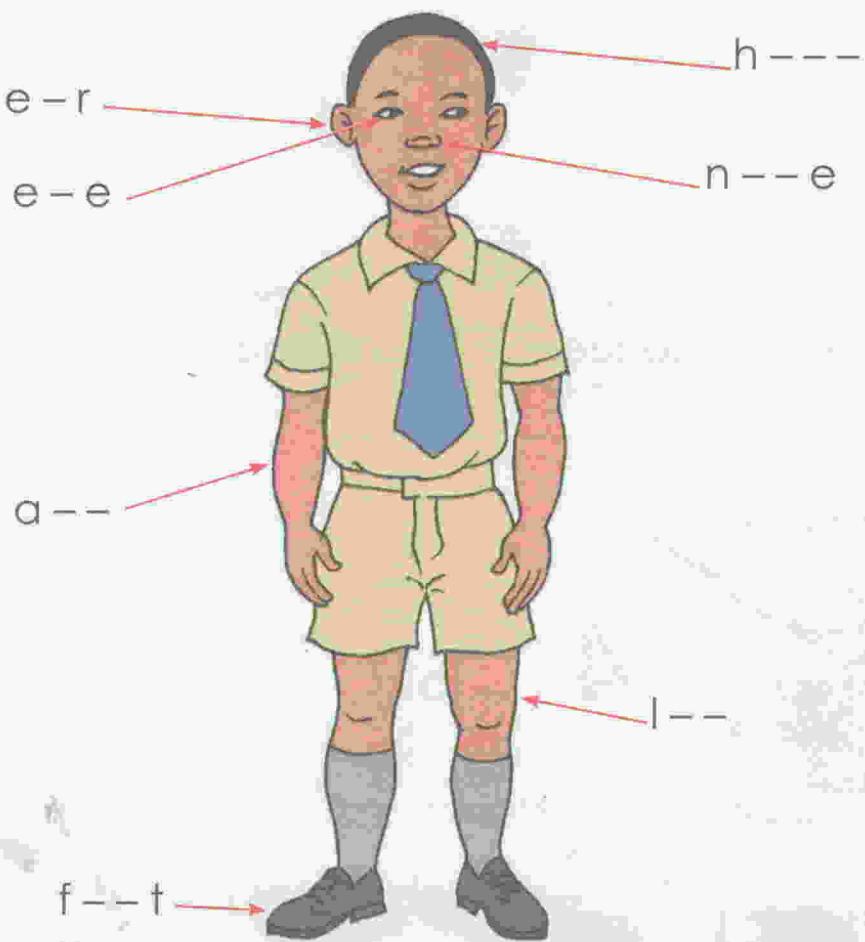




Look at the pictures.  
What are they used for?

## Assessment test

1. Draw a human being and label it.



2. I \_\_\_\_\_ my hair before I come to school.
3. I \_\_\_\_\_ my teeth every morning.
4. I \_\_\_\_\_ my body before I go to sleep every day.

(brush, comb, wash)

**UNIT  
6**

# Set of 4, 5 and 0

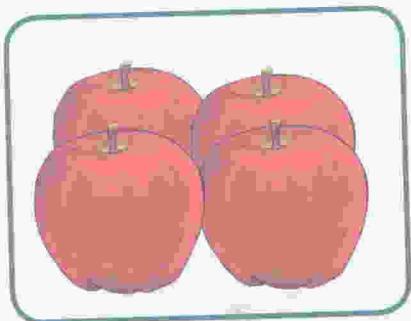
## Flashback

Count from 0 to 10.

### Key words

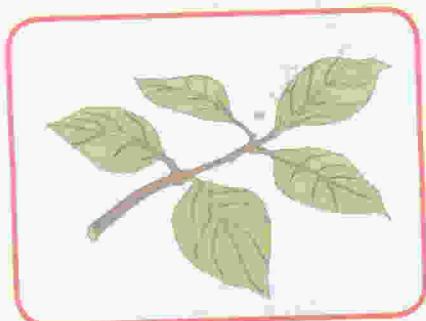
set    object    sequence    missing

### Numbers



**4**

four



**5**

five



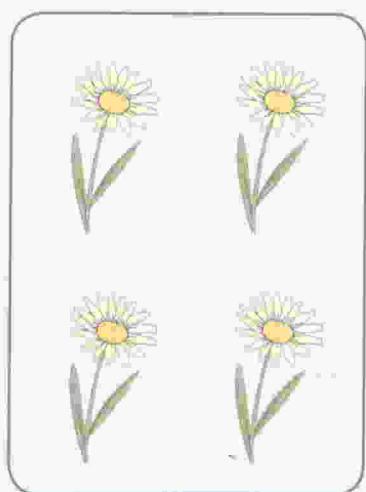
**0**

zero

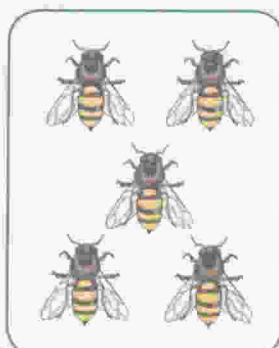
## Practice exercise 1

Count the number of objects in the set.

1.



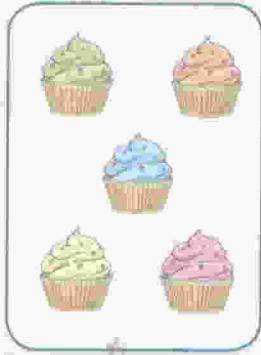
2.



3.



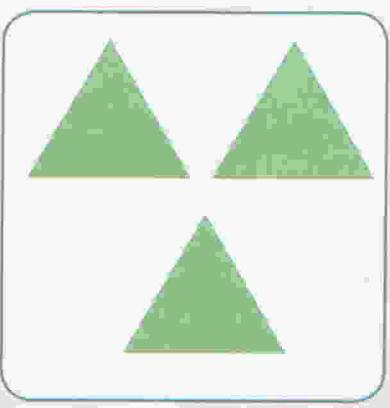
4.



5.



6.



## Writing numbers in words

Example:

Write down the following numbers in numerals and words.

0	=	zero
1	=	one
2	=	two
3	=	three
4	=	four
5	=	five

## Practice Exercise 2

Write numbers in words.

1. 0      2. 5      3. 4

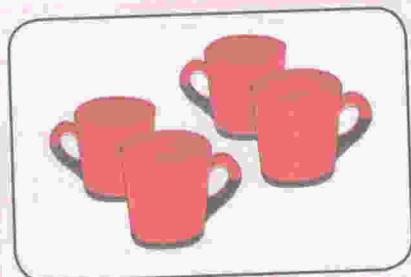
Write the numbers in numerals.

4. zero      5. two      6. four

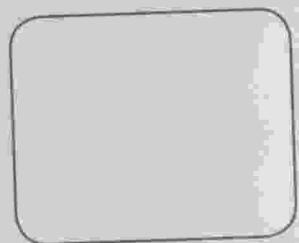
## Practice Exercise 3

Count the number of objects in the set.

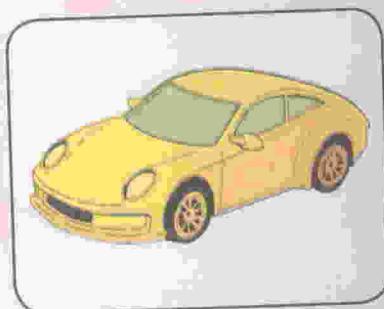
1.



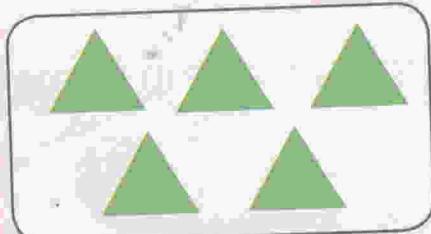
2.



3.



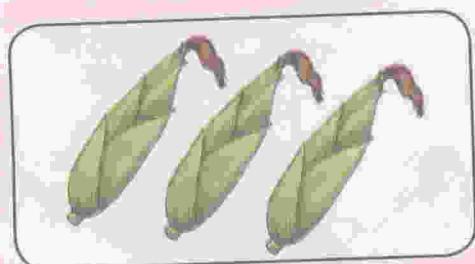
4.



6.



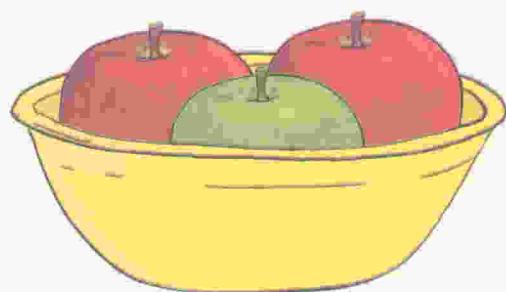
5.



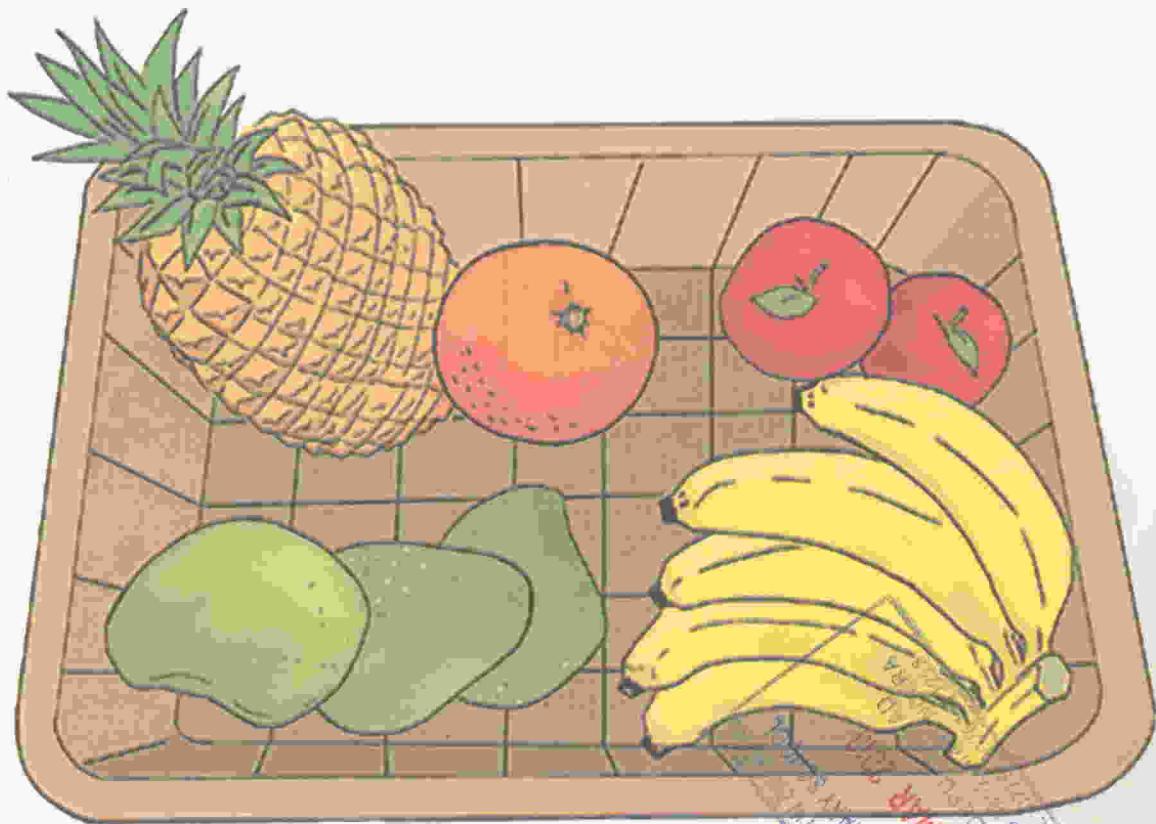
## Counting stories

**Example:** Count how many apples are in the bowl?

**Answer:** 3 apples



### Oral Activity



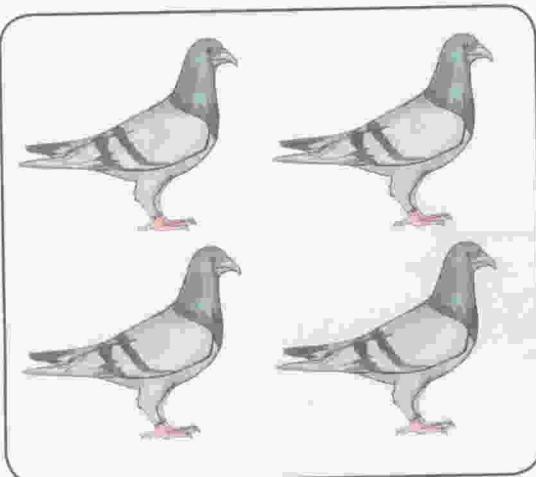
Look at the picture.

What do you see?

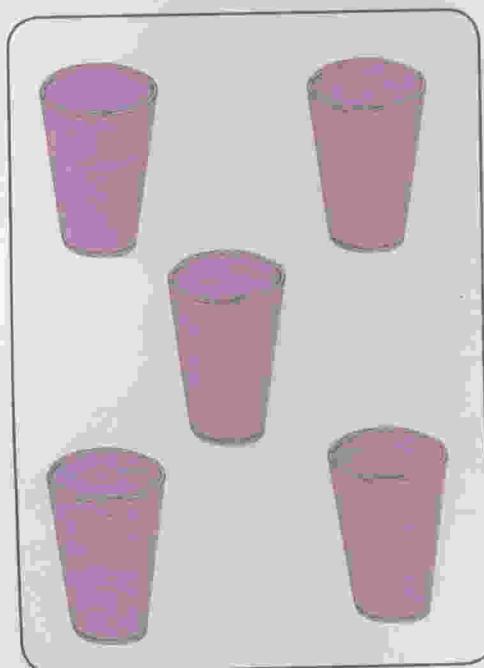
## Making a set

**Example:** Look at the sets with

- (i) 4 birds
- (ii) 5 tumblers
- (iii) 2 teddy bears



4 birds



5 tumblers



2 teddy bears

### Practice Exercise 4

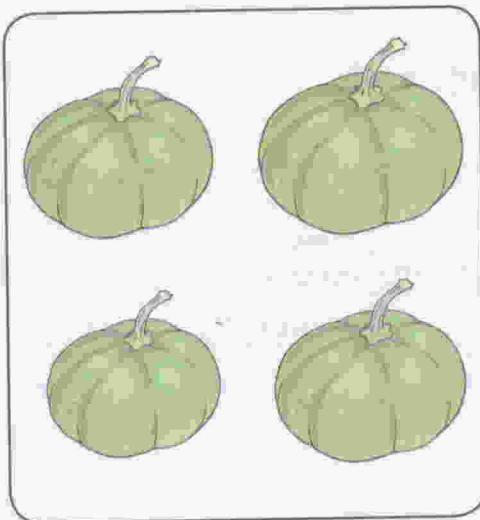
Now make a set with:

- |             |             |            |
|-------------|-------------|------------|
| 1. 4 stones | 2. 5 sticks | 3. 1 coin  |
| 4. 3 leaves | 5. 2 balls  | 6. 4 shoes |

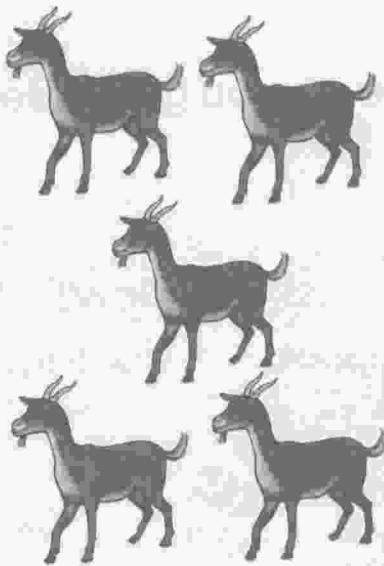
## Assessment test

How many objects are in the following sets:

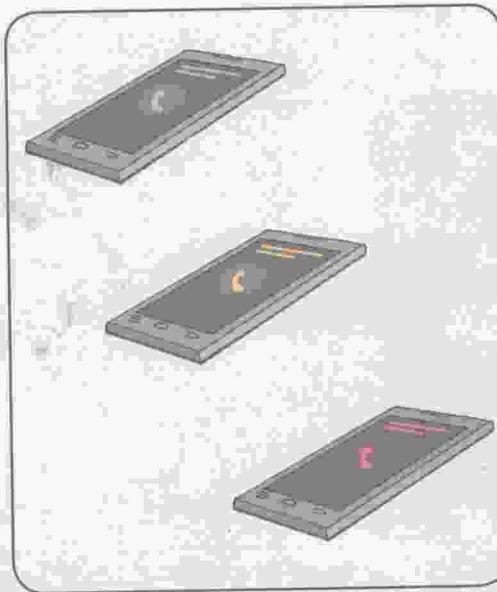
1.



2.



3.



4.



Make sets with the following objects

5. 4 eggs

6. 5 rulers

7. 1 stone

## Flashback

Where do you get water from at home?

### Key words

tasteless

flows

wet

float

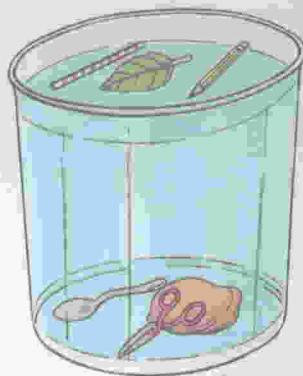
odourless

contaminate

flood

## Sink or float

Look at the picture.



### Practice Exercise 1

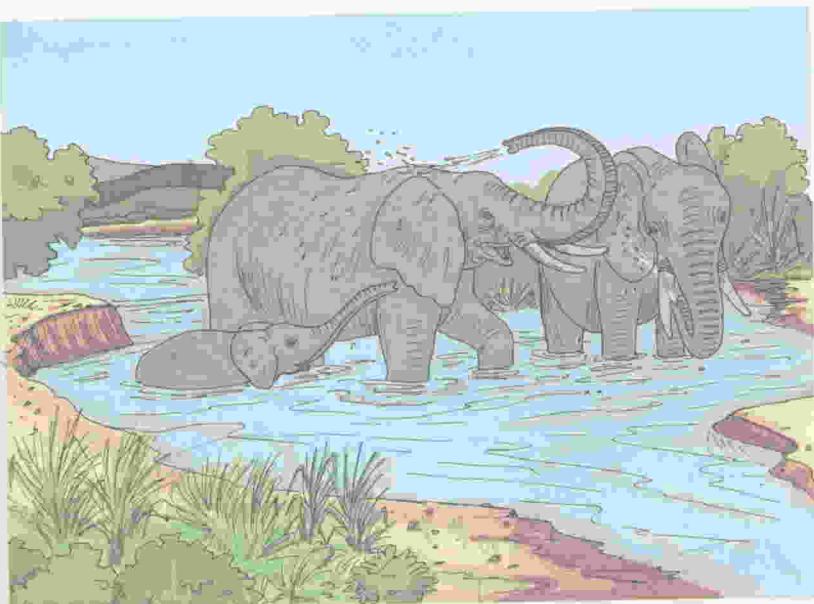
1. List all the objects that are floating on water.
2. List all the objects that are sinking in water.

## Activity 1

Set up experiment like in the picture.  
Find out which objects sink in water.

## Plants and animals need water

Plants need water. If you do not water plants they wither.



Animals need water.  
At home we give water to our pets.  
Where do wild animals get their water from?

## Practice Exercise 2

1. If you do not water plants they (grow/wither).
2. Animals need water to (eat/drink).
3. Draw animals bathing in water.

### People need water



People need to drink water  
to keep healthy.  
People use water to bathe.  
People use water to wash clothes.



Water is used to clean floors.  
Water is used to clean plates.  
Water is used to clean walls.



People use water to wash hands.  
People wash hands with running water and soap.  
We wash hands before preparing food and drink.  
We wash hands before we eat food.  
We wash our hands after visiting the toilet.

### Practice Exercise 3

1. People use water to \_\_\_\_ plates.
2. People wash hands with \_\_\_\_\_ and \_\_\_\_\_.
3. People \_\_\_\_\_ water to keep healthy.

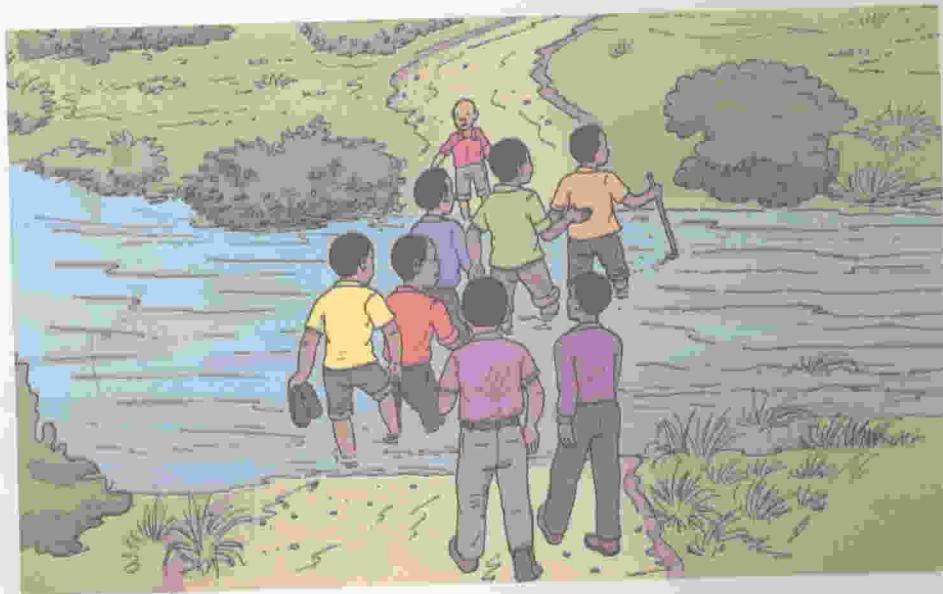
### Activity 2

Learners experiments with water; touching, smelling and tasting clean water.

## Water can be dangerous



Do not play in dirty water.  
Dirty water can carry germs.  
Germs cause diseases.



Do not play in deep water.  
You can drown in deep water.  
Do not cross a flooded river.  
You can drown in a flooded river.

## Practice Exercise 4

1. Do not — (live/play) in dirty water.
2. Germs in water can cause — (diseases/drowning).
3. Do not — (play/cross) a flooded river.
4. You can — (drown/grow) in deep water.

## Assessment test

1. A — (key/leaf) floats in water.
2. Water is — (colourless/blue).
3. Plants — (need/do not need) water.
4. We wash our hands with — and —.
5. Dirty water can carry — (leaves/germs).
6. Animals use water for \_\_\_\_\_ and \_\_\_\_\_.

**Flashback**

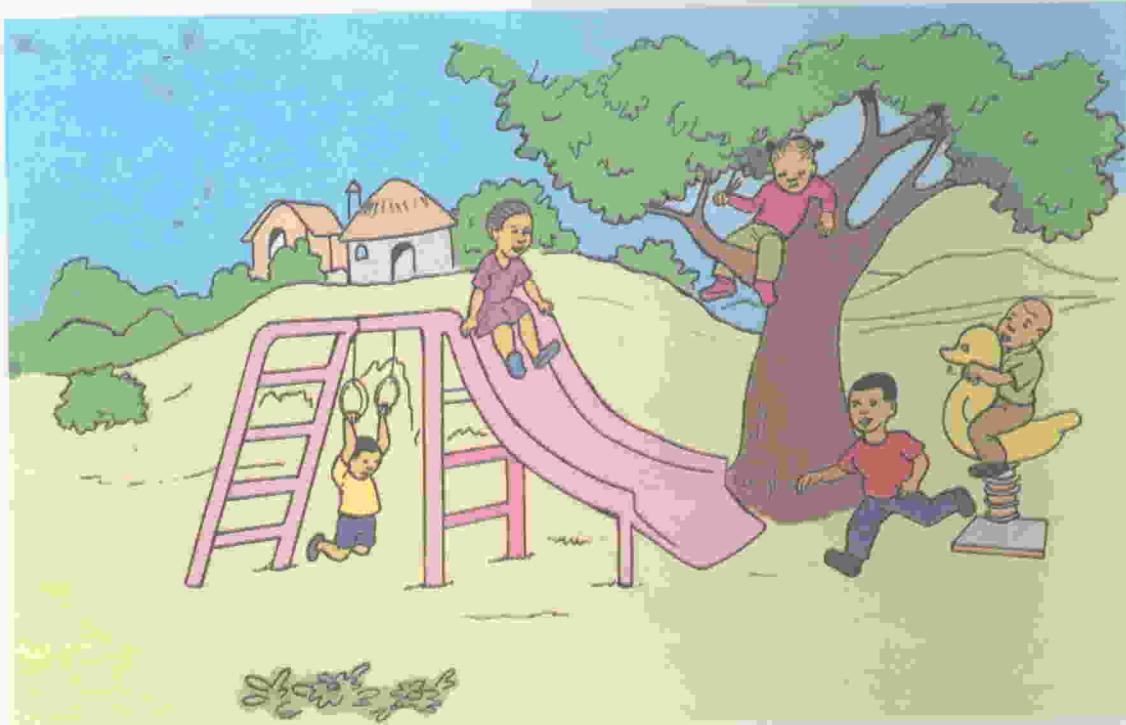
To add means to put together.

**Key words**

addition      equals      calculator  
plus            make        sum

**In the park**

Look at the picture.

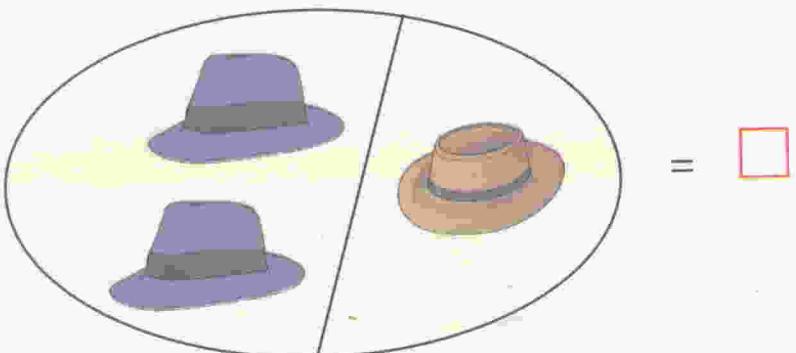


## Put together people

Number of girls = 2

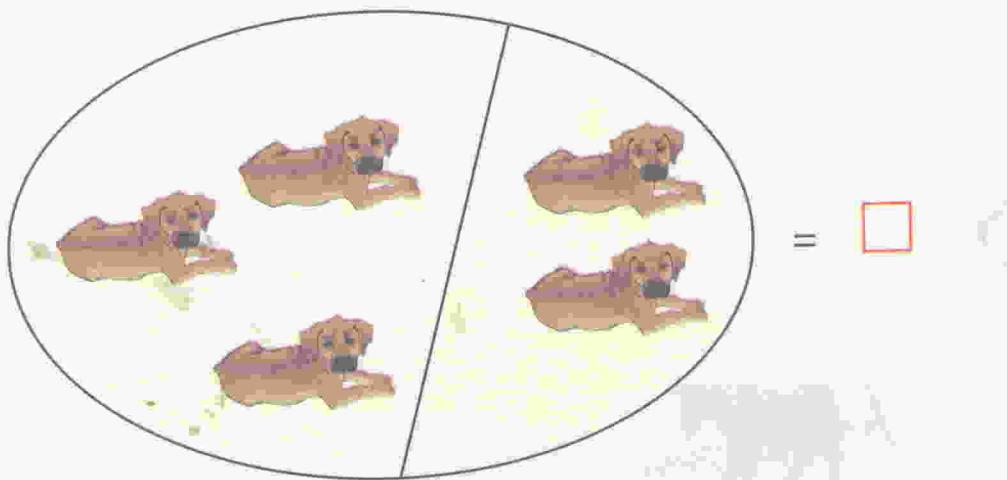
Number of boys = 3

**Total number of children = 5**



2 blue hats and 1 brown hat make 3 hats

2 and 1 make 3

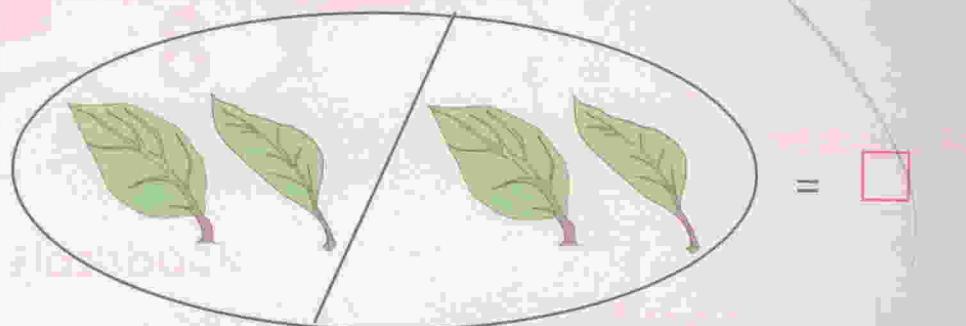


Sum of 3 brown dogs and 2 brown dogs make

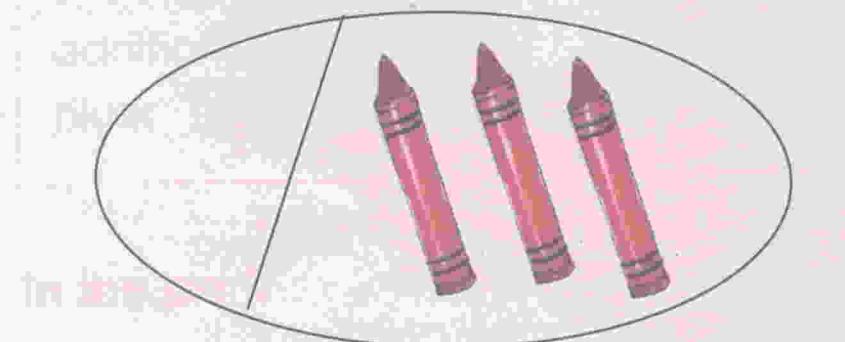
5 brown dogs

3 and 2 make 5

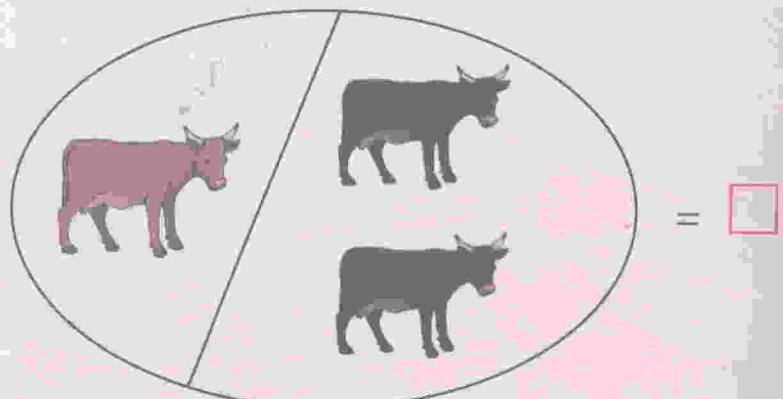
## Practice Exercise 1



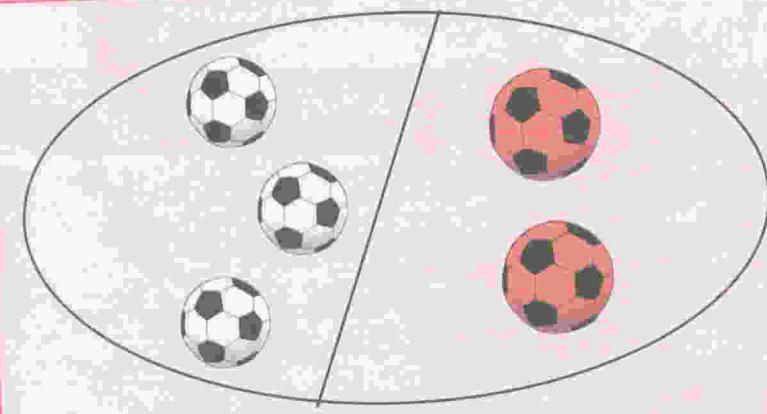
1. 2 leaves and 2 leaves make  leaves.  
2 and 2 make



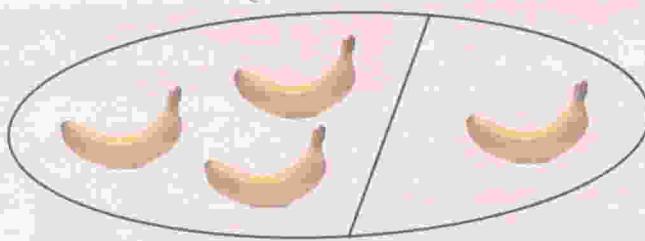
2. Zero and 3 crayons make  crayons.  
0 and 3 make



3. 1 cow added to 2 cows make  cows.  
1 and 2 make

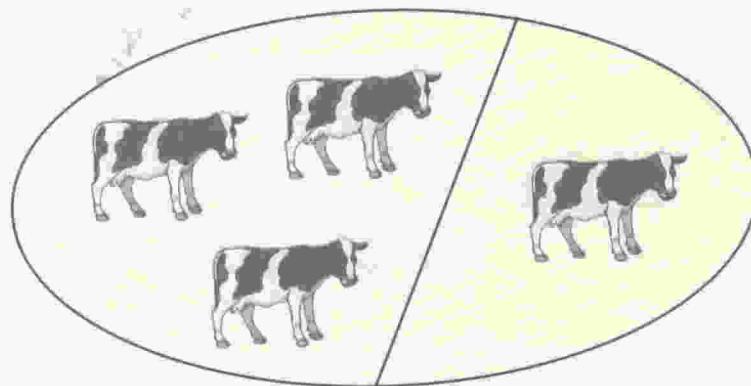


4. The sum of 3 balls and 2 balls is   
3 and 2 make



5. 3 bananas and 1 banana altogether   
3 and 1 make

### Plus; equal



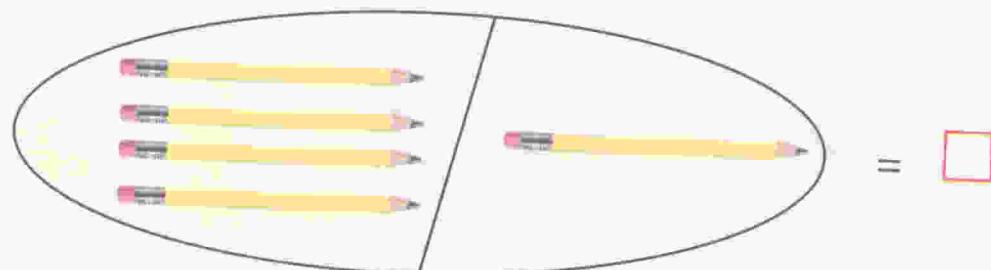
3 cows and 1 cow make 4 cows  
3 plus 1 equal 4

## Practice Exercise 2

Now do the following:

1. 1 plus 1 equals
2. 1 plus 0 equals
3. 2 plus 3 equals
4. 3 plus 2 equals
5. 4 plus 1 equals

## Addition sign (+); equal sign (=)



4 pencils      add      1 pencil      make      5 pencils  
4 plus      1 equals 5

$$4 + 1 = 5$$

## Practice Exercise 3

Complete:

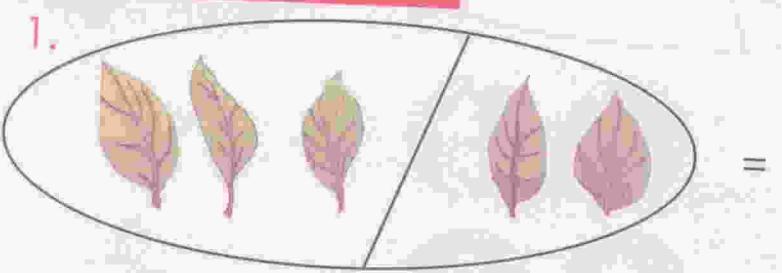
1.  $2 + 1 = \square$
2.  $3 + 1 = \square$
3.  $2 + 2 = \square$
4.  $2 + 3 = \square$
5.  $1 + 4 = \square$

## Addition stories

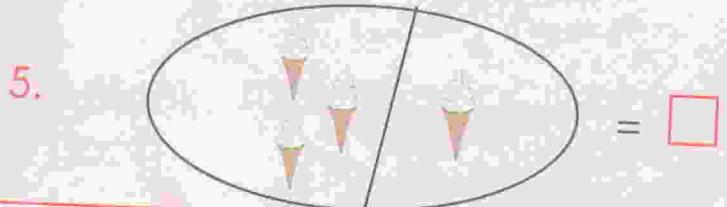
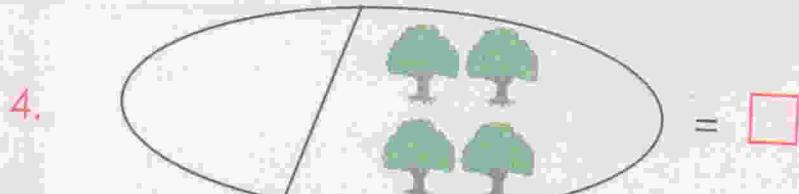
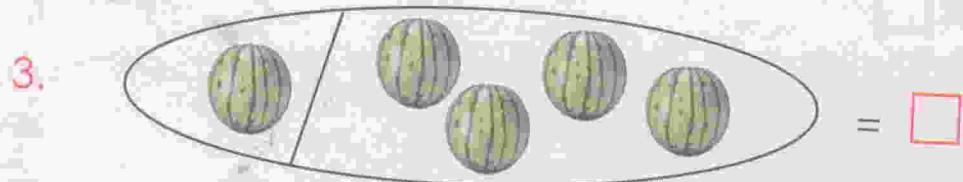
### Practice Exercise 4

1. The sum of 2 cats and 1 cat is  cats.
2. 3 books added to 2 books is  books.
3. 4 sweets and 1 sweet make a total of  sweets.
4. 2 leaves added to a leaf make  leaves.
5. 5 cups and 0 cups altogether  cups.

### Practice Exercise 5



2.  $3 + 2 = \square$



## Assessment test

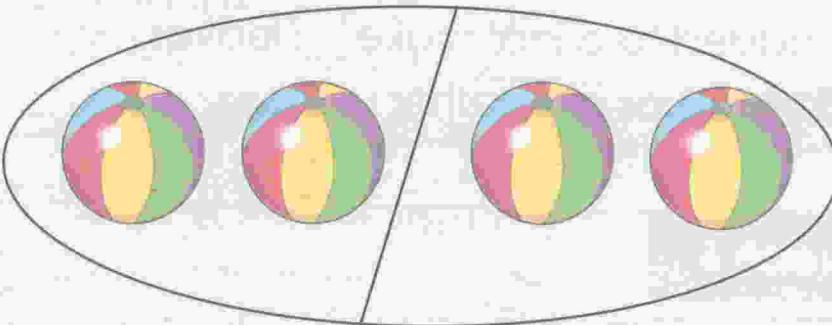
1. 2 plates added to 1 plate =

2. 3 plus 1 =

3.  $0 + 2 = \square$

4. 2 shoes added to 2 shoes make  shoes.

5.



=

6.  $4 + 1 = \square$

7.  $3 + 2 = \square$

8.  $2 + 1 = \square$

9.  $0 + 5 = \square$

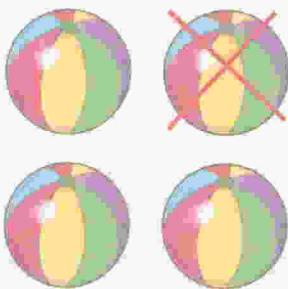
10.  $0 + 4 = \square$

**Flashback**

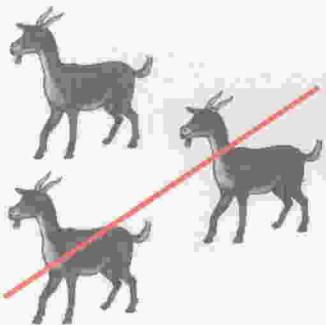
To take away is to remove from a set or group.

**Key words**

subtract      take away      minus

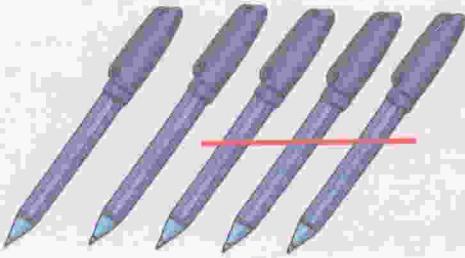
**Take away**

4 balls    take away 1 ball    you remain with 3 balls



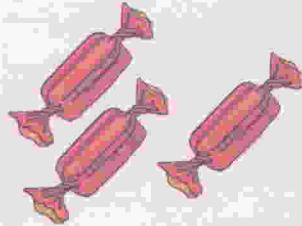
3 black    take away      2 black    is 1 black  
goats                         goats                 goat

## Practice Exercise 1



1. 5 blue pens take away 3 blue pens you are left with  
 blue pens.

5 take away 3 is



2. 3 sweets take away 3 sweets is zero sweets.

3 take away 3 is

3. 3 donkeys take away 1 donkey is

3 take away 1 is

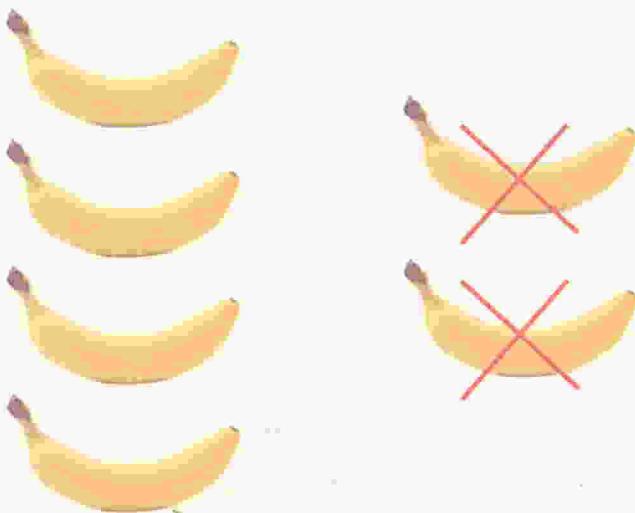
4. 4 fish take away 2 fish is  fish.

4 take away 2 is

5. 5 eggs take away 2 eggs is  eggs.

5 take away 2 is

## Minus, equal



6 yellow bananas you eat 2 yellow bananas you get 4 yellow bananas.

6 minus 2 equals 4

### Practice Exercise 2

Fill in.

1. 2 minus 0 equals
2. 4 minus 4 equals
3. 3 minus 1 equals
4. 2 minus 1 equals
5. 3 minus 2 equals

## Minus sign, equal sign



5 hats take away 2 hats is 3 hats.  
5 minus 2 equals 3

$$5 - 2 = 3$$

### Practice Exercise 3

Complete:

1.  $5 - 1 = \square$

2.  $4 - 2 = \square$

3.  $3 - 3 = \square$

4.  $2 - 1 = \square$

5.  $1 - 0 = \square$

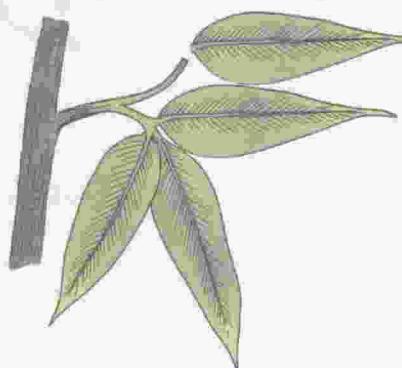
## Subtraction stories

### Practice Exercise 4

1. Two eggs are in the basket. Take away two eggs. How many eggs are in the basket now?
2. Four sweets in a packet. One is red and the rest are green. How many sweets are green?
3. A vendor has three cabbages at a market. Two are bought. How many are left?
4. Four oranges in a plate. Father takes one. How many are left?
5. Father has five rabbits, he sells three rabbits. How many are left?

## Practice Exercise 5

1.



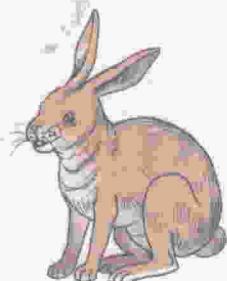
4 take away 1 equals   
 $4 - \square = \square$

2.

4 minus 1 equals   
 $4 - 1 = \square$



3.



1 minus 1 equals   
 $1 - \square = \square$

4.

Complete

(a)  $3 - 2 = \square$

(b)  $5 - 1 = \square$

(c)  $4 - 2 = \square$

(d)  $4 - 3 = \square$

## Assessment test

1.  $4 - 2 = \square$
2.  $2 - 0 = \square$
3.  $4 - 4 = \square$
4.  $3 - 2 = \square$
5.  $5 - 3 = \square$
6. 3 mangoes take away 1 mango gives  $\square$
7. 5 hens minus 2 hens equals  $\square$
8. 4 rulers subtract 2 rulers gives  $\square$

**Flashback**

Count materials and complete puzzles.

**Key word**

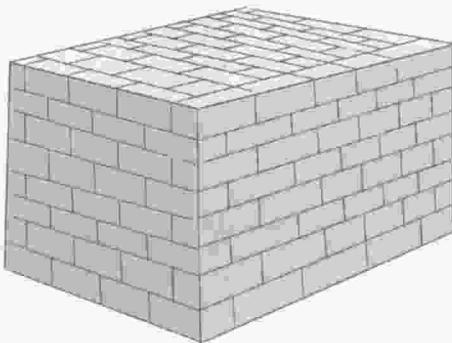
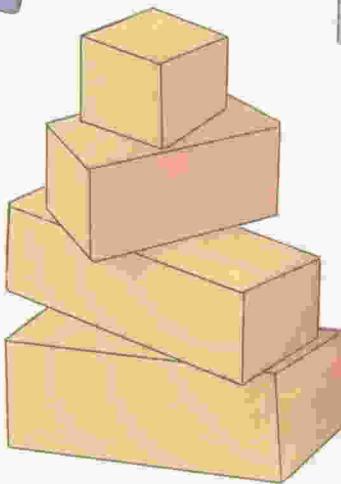
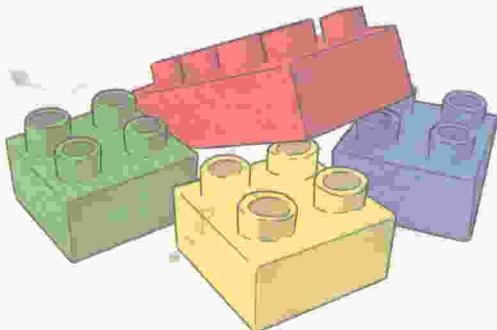
puzzles      construction

**Construction materials**

Count materials.

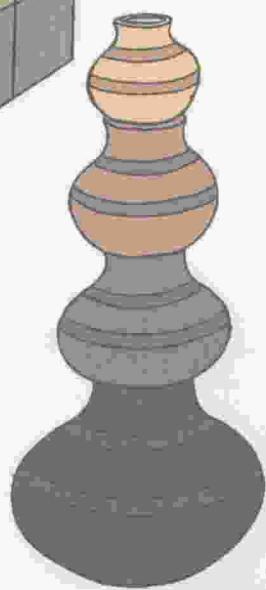
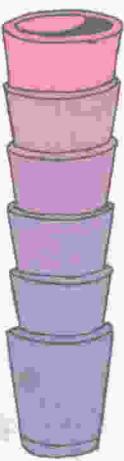
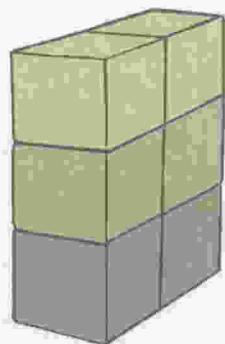
What are the materials used for?

Collect construction materials.



## Pillars

Look at the picture.



We can make pillars from different materials.

### Activity 1: Making block pillars

1. Bring different materials to school, such as, boxes, building blocks, bricks and tumblers.
2. Make block pillars.

## Activity 2: Making models

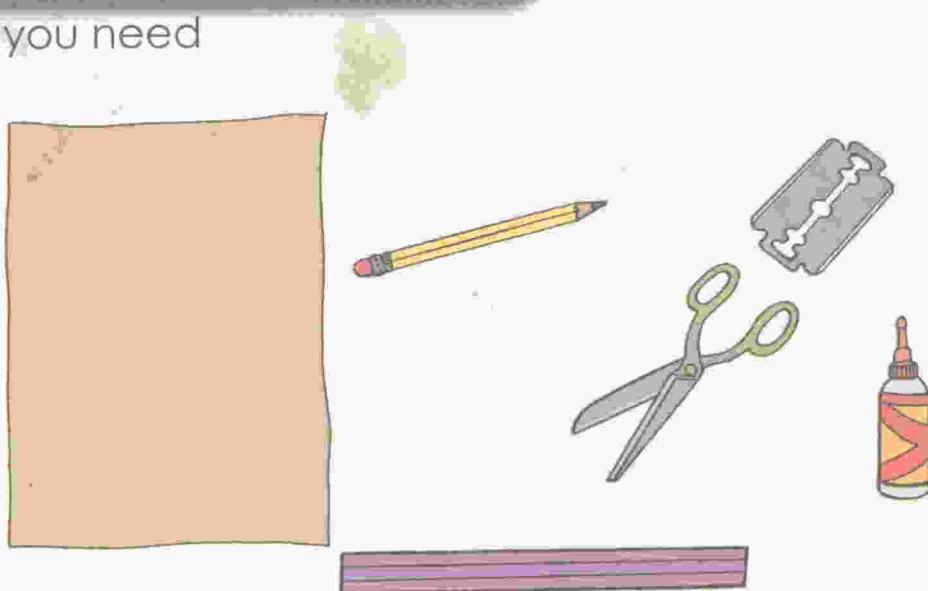
Look at the pictures.

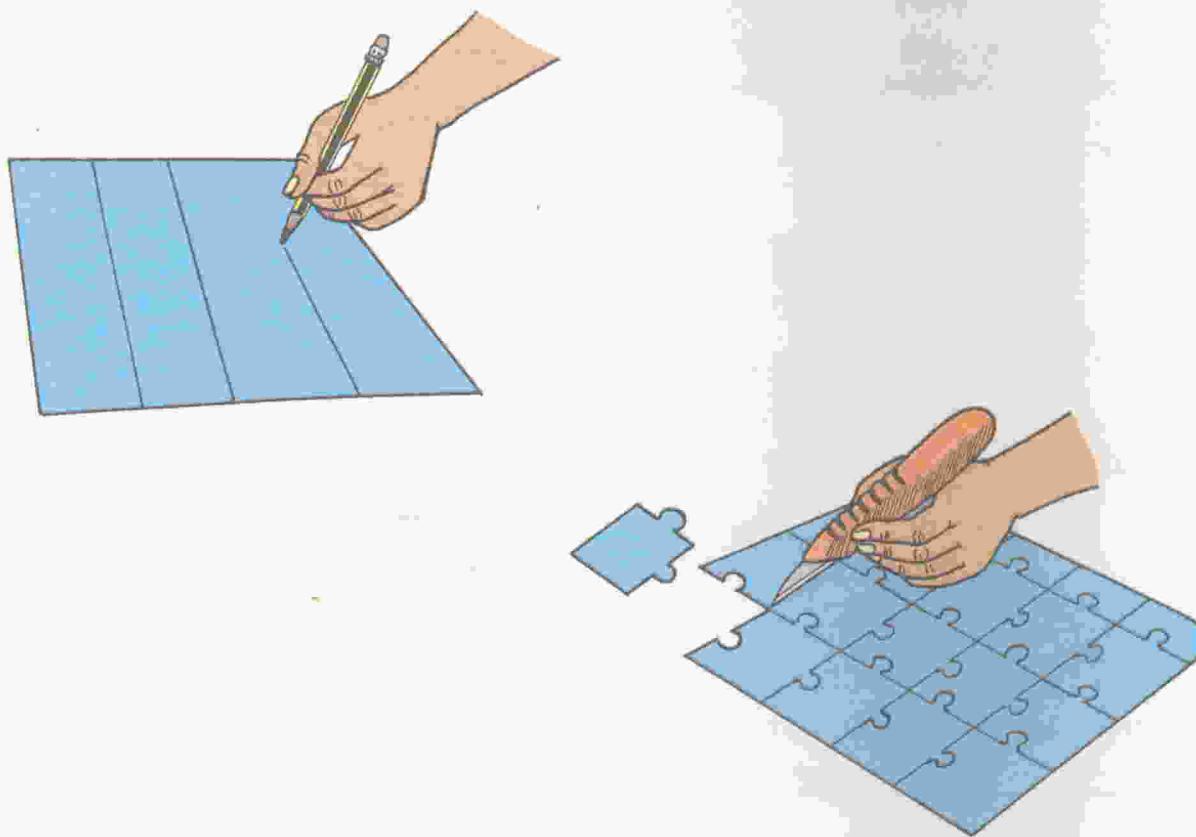


- (a) Design a classroom block or dam on paper.
- (b) Make a classroom block or dam.

## Activity 3: Making a puzzle

What you need





1. Make a puzzle.
2. Complete puzzles constructed.

### Assessment test

Match the following materials with objects they are used to construct, for example:

Cement - floor.

1. Asbestos
2. metal
3. Glass
4. Cement

- floor  
window frame  
doors, window panes  
roof

**Flashback**

Name days of the week.

**Key words**

today

yesterday

tomorrow

**The days of the week**

The days of the week are:

Sunday, Monday, Tuesday, Wednesday, Thursday, Friday,  
Saturday

**Practice Exercise 1**

Do the following:

1. Name the first day of the week.
2. The second day is \_\_\_\_.
3. The sixth day is \_\_\_\_.
4. Name the last day of the week.

## Fill in

### Practice Exercise 2

Listing the days of the week in their correct sequence.

1. Sunday, \_\_\_\_\_, Tuesday.
2. \_\_\_\_\_, Friday, Saturday.
3. \_\_\_\_\_, Wednesday, \_\_\_\_\_.
4. Wednesday, \_\_\_\_\_, \_\_\_\_\_.
5. Thursday, \_\_\_\_\_, Saturday.

## Today, Tomorrow, Yesterday

### Practice Exercise 3

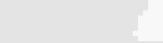
1. Read the words today, tomorrow, yesterday.
2. Today is \_\_\_\_\_. 
3. Yesterday was \_\_\_\_\_. 
4. Tomorrow will be \_\_\_\_\_. 
5. Make your own sentence using today, tomorrow and yesterday.

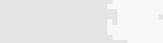
### Activity 1

#### Sing time rhymes:

Sunday, Monday, Tuesday,  
Wednesday, Thursday,  
Friday and Saturday.

### Activity 2

Play games involving days of the week, such as, I am Monday, tomorrow it will be \_\_\_\_\_. 

I am Saturday yesterday it was \_\_\_\_\_. 

### Practice Exercise 4

Match days of the week with activities you usually do.

#### Day of the week

1. Sunday
2. Monday
3. Tuesday
4. Wednesday
5. Thursday
6. Friday
7. Saturday

#### Activity

- |                    |
|--------------------|
| watching wrestling |
| Resting at home    |
| Test               |
| maths              |
| singing            |
| church             |
| sports             |

### Practice Exercise 5

1. Today is \_\_\_\_.
2. Yesterday was \_\_\_\_.
3. Tomorrow will be \_\_\_\_.
4. In 2 days time it will be \_\_\_\_.
5. In 5 days time it will be \_\_\_\_.

### Assessment test

1. The first day of the week is \_\_\_\_.
2. The last day of the week is \_\_\_\_.
3. The first working day of the week is \_\_\_\_.
4. The last working day of the week is \_\_\_\_.
5. Sunday, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_.
6. Monday \_\_\_\_\_, \_\_\_\_\_, Thursday, Friday.
7. Today is \_\_\_\_.
8. Yesterday was \_\_\_\_.
9. Tomorrow will be \_\_\_\_.
10. I usually go to church on \_\_\_\_.

**Flashback**

What plant do you like? Tell your friend why you like it.

**Key words**

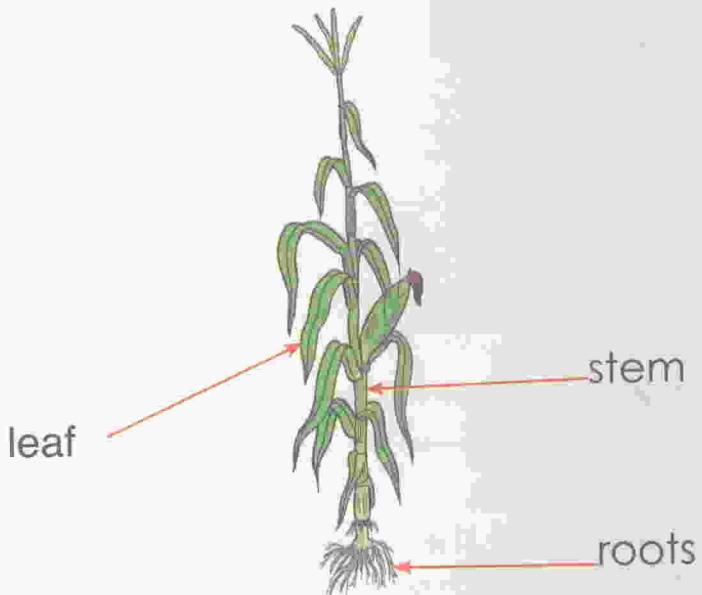
flower

fruits

prickle

thorns

seeds

**Parts of a plant**

Plants have parts.

Different parts of plants do different things.

Some fruits contain seed.

**Activity 1**

Draw a picture of the plant you like.

Go outside and pick up plants.

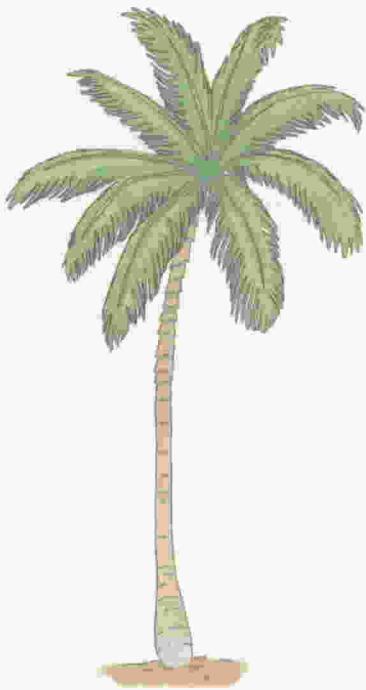
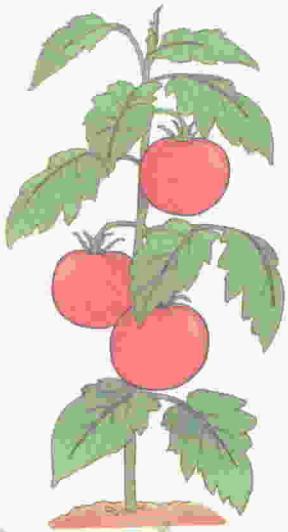
## Some plants have flowers and bear fruit

Some plants have flowers.

Plants with flowers bear fruit.

### Activity 2

Look at the pictures.



Name the plants shown.

Show which plant has flowers.

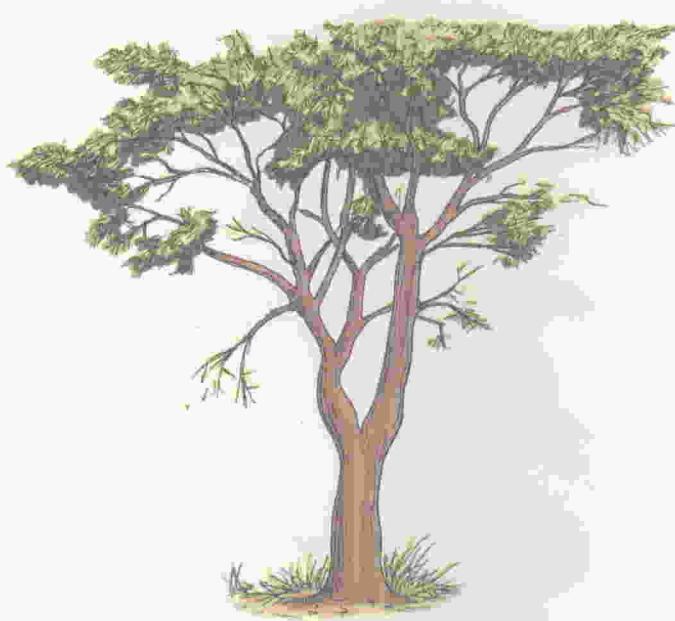
Show which plants bear fruits.

## Some plants have thorns and prickles

Some plants have thorns and pickles.



aloe vera



Acacia tree

### Assessment test

1. Draw and label a plant. Show roots, trunk, branches, leaves, flowers, fruits.
2. \_\_\_ and \_\_\_ are plants that have flowers and bear fruits.
3. \_\_\_ has thorns and prickles.
4. Name one plant that bears fruit seeds.

**Flashback**

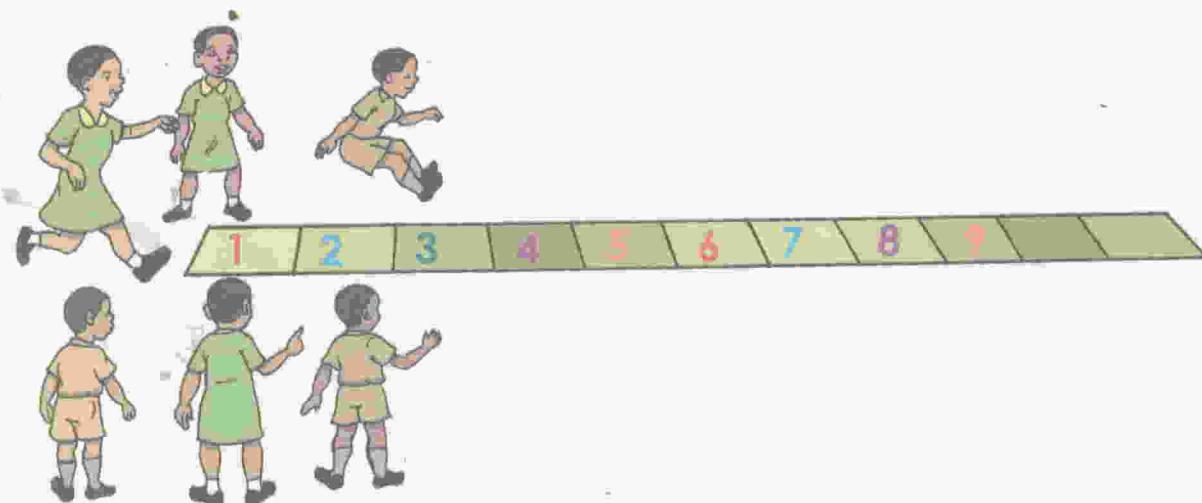
Say out the following numbers to your friend:

0      1      2      3      4      5

**Key words**

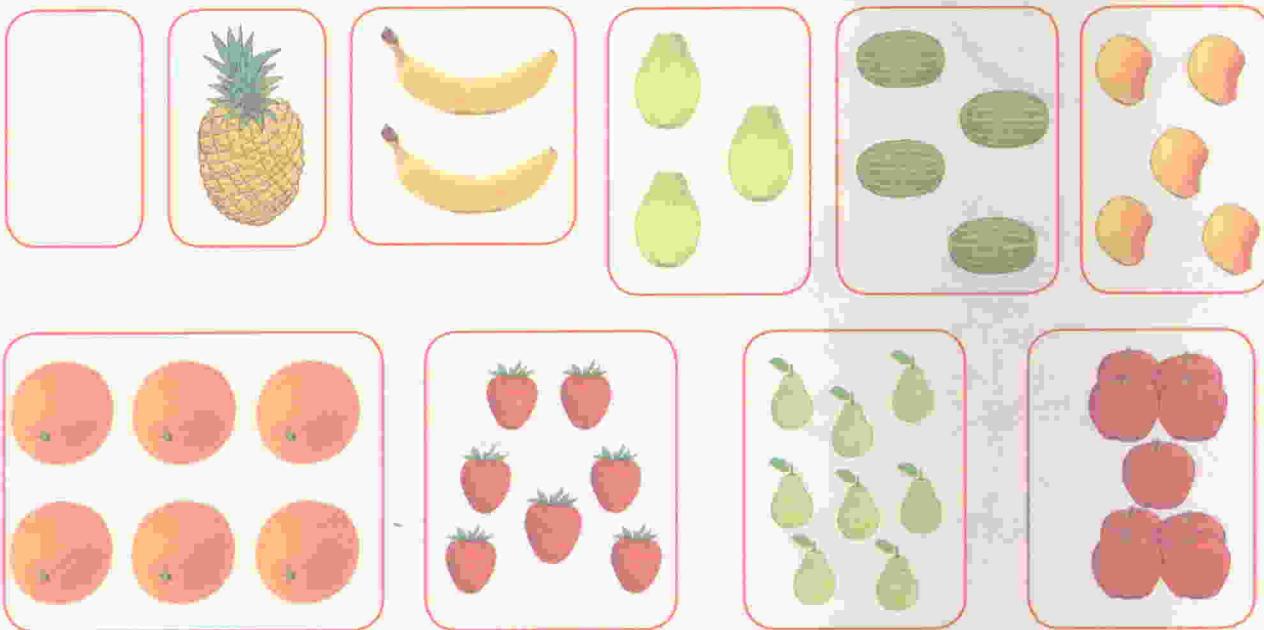
count count forward

count backwards

**Activity 1: Fieldwork**

1. Mark a big number line outside
2. Learners jump steps forwards and backwards up to 9 and vice-versa. This can be done through a song.
3. Count numbers from 1 to 9 and backwards.

## Count



### Practice Exercise 1

Write down the following numbers in words;

1. 5
2. 3
3. 0
4. 8
5. 2
6. 9

### Missing number

Write down the missing number;

2; 3;  5; 6 **Answer 4**

9; 8;  6; 5 **Answer 7**

### Practice Exercise 2

Complete the following;

1. 1; 2;  4; 5 **Answer 3**

2. 6; 7;  9 **Answer 8**

3. 4; 5;  7; 8 **Answer 6**

4. 9; 8; 7;  5; 4 **Answer 6**

5. 4;  2; 1 **Answer 3**

6. 5;  3; 2; 1 **Answer 4**

## Counting

How many?

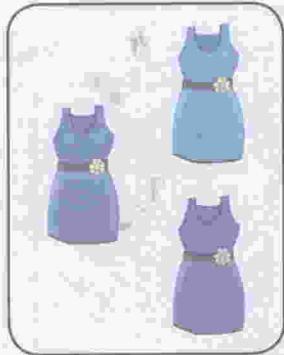


**Answer:** 8 brown shoes

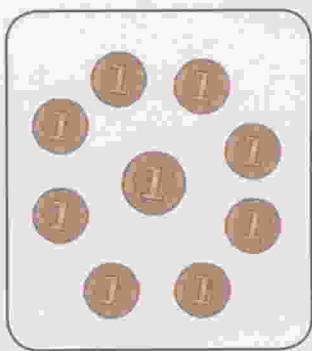
### Practice Exercise 3

Count and write down the number of objects in the following sets.

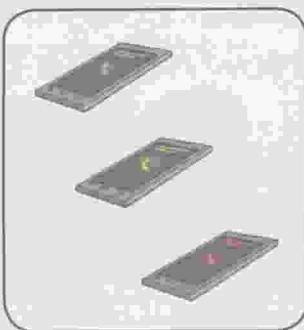
1.



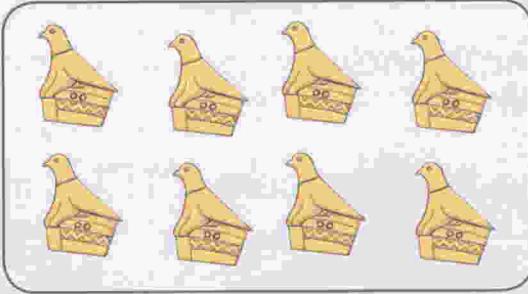
2.



3.



4.



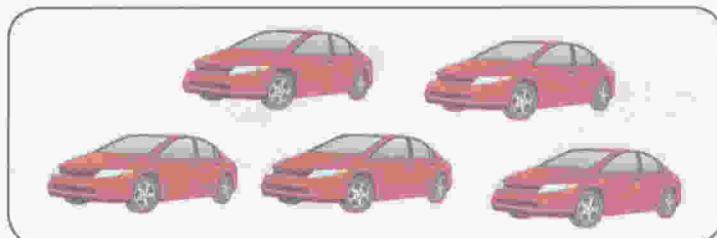
## Making sets

**Example:** Look at the sets with 2 objects; 5 objects and 0 objects

**Set A**



**Set B**



**Set C**



### Practice Exercise 4

Now make a set with:

1. 2 objects
2. 4 objects
3. 6 objects
4. 7 objects
5. 0 objects

## Arranging numbers

**Example:** Arrange the numbers 2; 1; 7; 4 in order.

**Answer:** 1; 2; 4; 7

## Practice Exercise 5

Now do the following. Arrange the numbers in order from smallest to biggest.

1. 6; 3; 2; 9

2. 4; 7; 6; 1

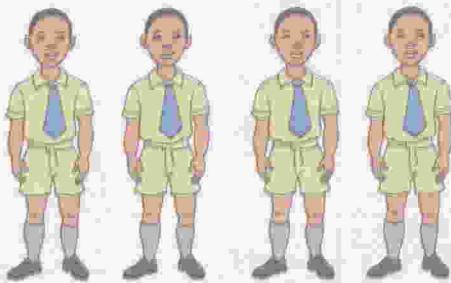
3. 5; 0; 2; 8

4. 9; 8; 5; 7

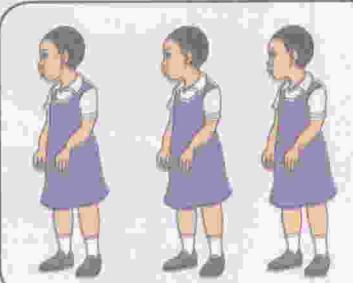
## Assessment test

1. Count objects in the following sets

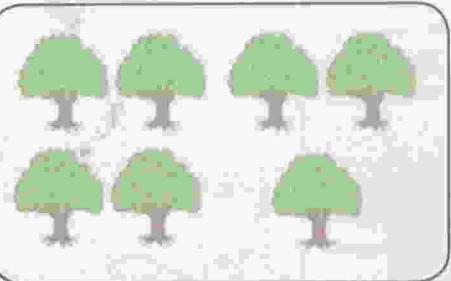
(a)



(b)



(c)



(d)



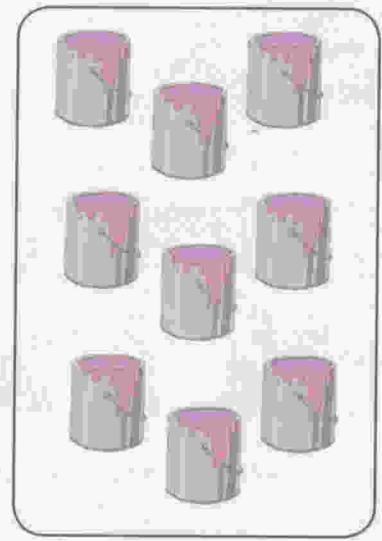
2. Arrange the following numbers from smallest to biggest.

(a) 8; 5; 7; 9; 2

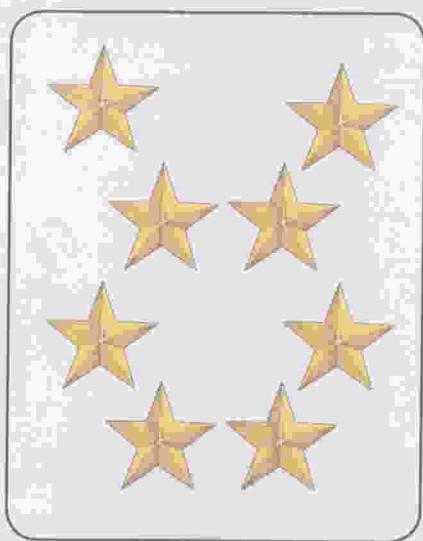
(b) 3; 5; 4; 1; 2

3. Arrange the following numbers from biggest to smallest.
- (a) 6; 9; 5; 1; 4
- (b) 8; 2; 4; 0; 3
4. Draw sets with: 5 objects; 3 objects and 8 objects
5. Write how many.

(a)



(b)



(c)



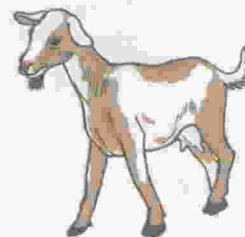
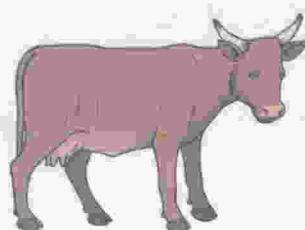
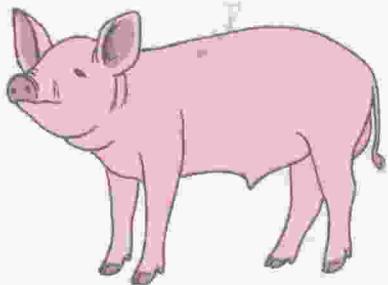
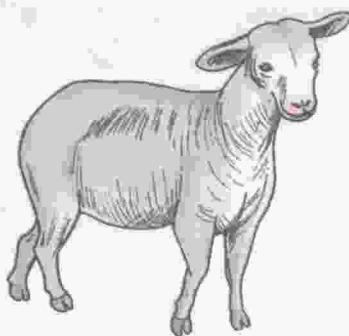
**Flashback**

What is the animal that you like?

Tell your friend why you like it.

**Key words**

wild    domestic    habitat    environment

**Domestic animals**

Domestic animals are animals that people keep.

People keep domestic animals for food.

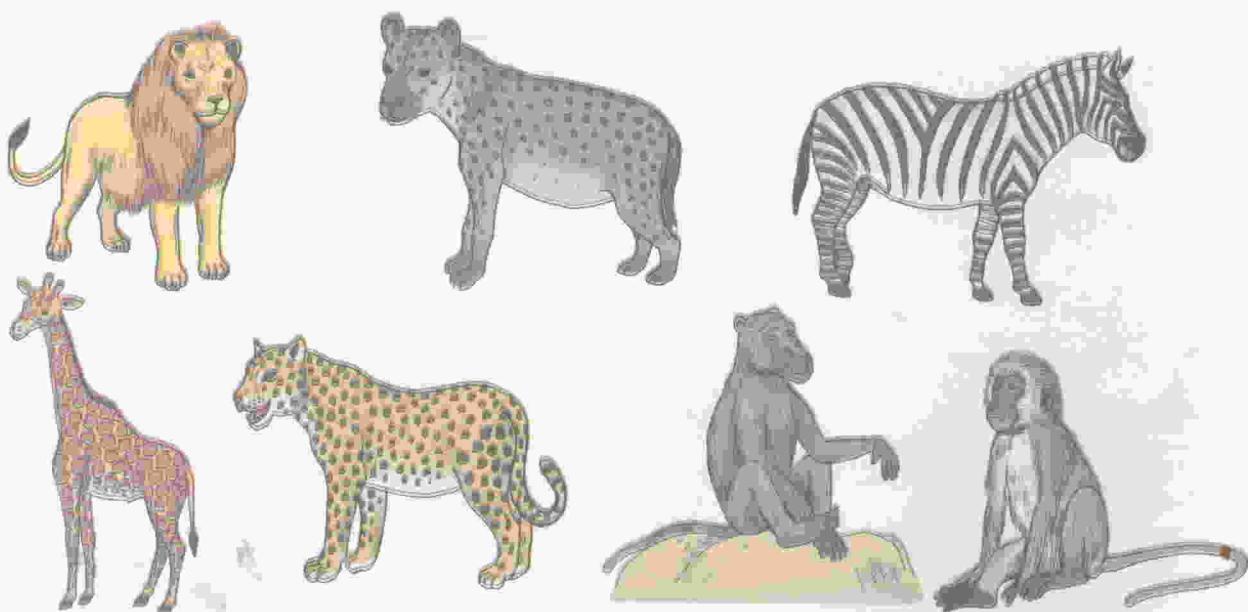
People keep domestic animals for power.

### Practice Exercise 1

Use the following to complete: kept, food, power.

1. Domestic animals are — by people.
2. List names of five domestic animals.
3. People use domestic animals for — and —.

### Wild animals



Wild animals live in their natural environment.

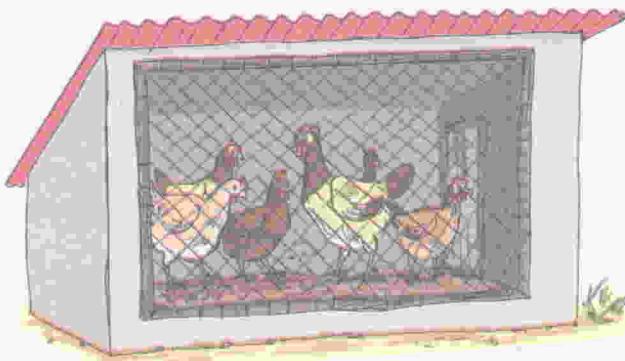
They are not tamed and can often be dangerous.

### Practice Exercise 2

1. List 5 wild animals.
2. Wild animals live in the —.

## Habitats of animals

A habitat is a place where animals live.  
It is a place where there is food, shelter and water.

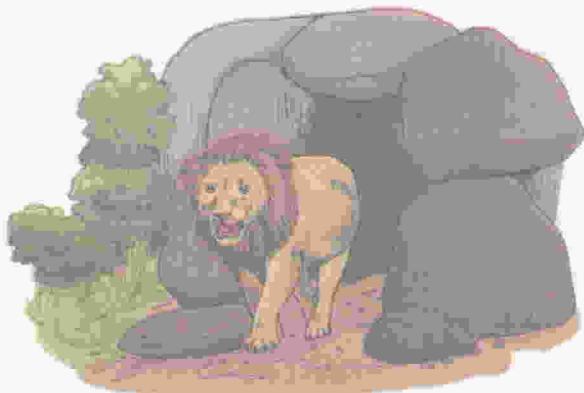


Chickens live in a fowl run.  
The fowl run is made by  
people.

The cattle are in a kraal.  
It is made of sticks and logs.  
Where does the cattle get  
its food and water from?



A bird lives in a nest.  
Where does it get its food and water from?  
Who builds the bird's nest?



A lion lives in a den.  
Where does it get its food from?  
Who builds the lion's den?

### Practice Exercise 3

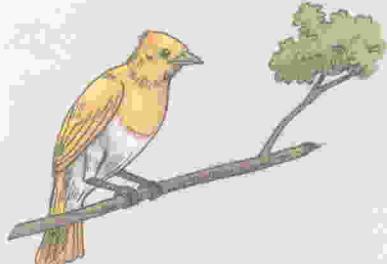
Fill in using the words. **nest, kraal, lion, hen, dog,**

1. A \_\_\_\_\_ lives in a kennel.
2. A bird lives in a \_\_\_\_\_.
3. A \_\_\_\_\_ lives in a den.
4. A \_\_\_\_\_ lives in a fowl run.
5. Cattle live in a \_\_\_\_\_.

### Practice Exercise 4

Match the animals to their shelters.

1.



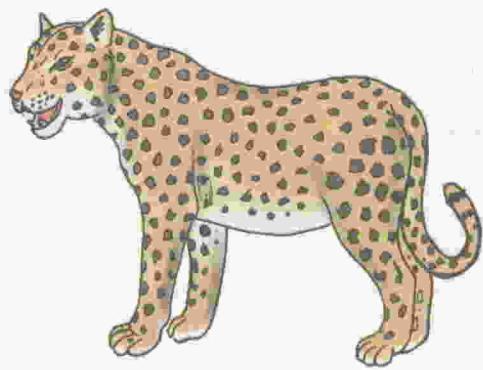
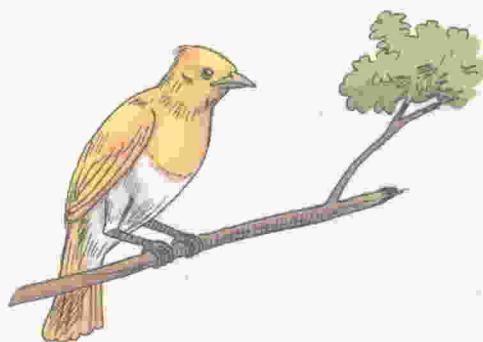
2.



3.



### Activity 1



Draw an animal and label its parts.

### Assessment test

1. Name any 3 domestic animals.
2. List any 3 wild animals you know.
3. Draw and label any animal you know.
4. Use den, fowl run to match the following animals to their habitats.
  - (a) Chicken
  - (b) Lion
5. Write 3 sentences about your favourite animal. Show that it is wild or domesticated.

**UNIT  
15**

# Ten and Ordinal Numbers

## Flashback

Read the following numbers to your friend:

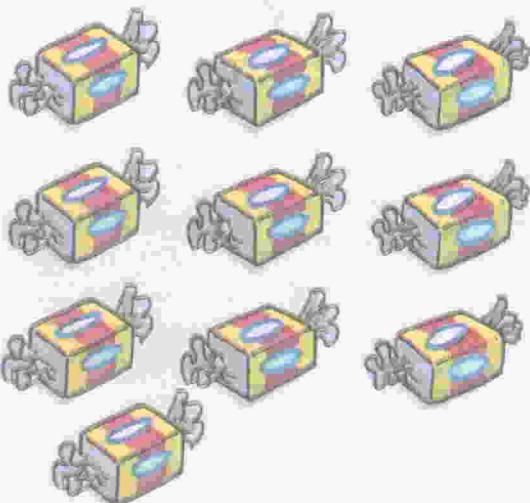
0    1    2    3 4    5 6    7    8 9

## Key words

ten    ordinal number    rounding off

## Activity 1

Through play count numbers from 1 to 10.

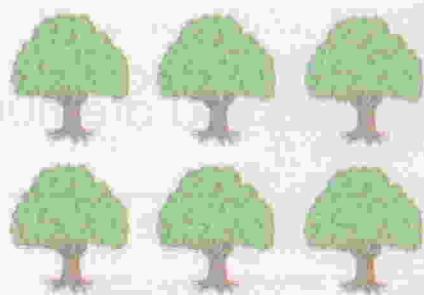


**10** ten

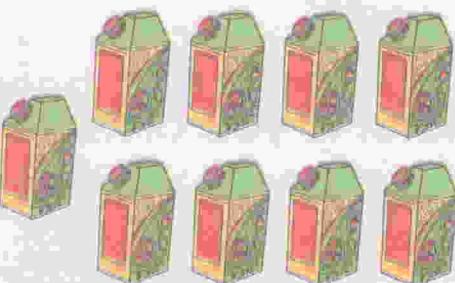
## Practice Exercise 1

Count members of the following sets.

1.



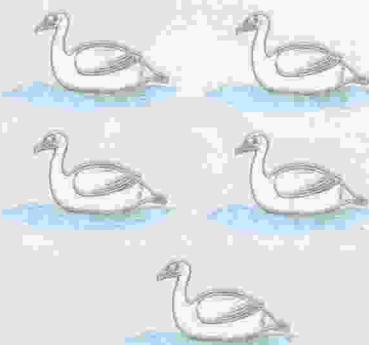
2.



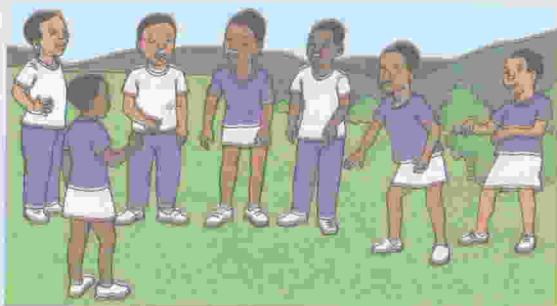
3.



4.



5.



## Practice Exercise 2

Read numbers on the number line.



Write down the numbers on the number line

- a) in numerals    b) in words.

## Ordinal numbers

Numbers can also be written in ordinal form as follows:

- 1 is first
- 2 is second

**Note:** If you are running a race and you are number 1; then we say you came first.



### Practice Exercise 3

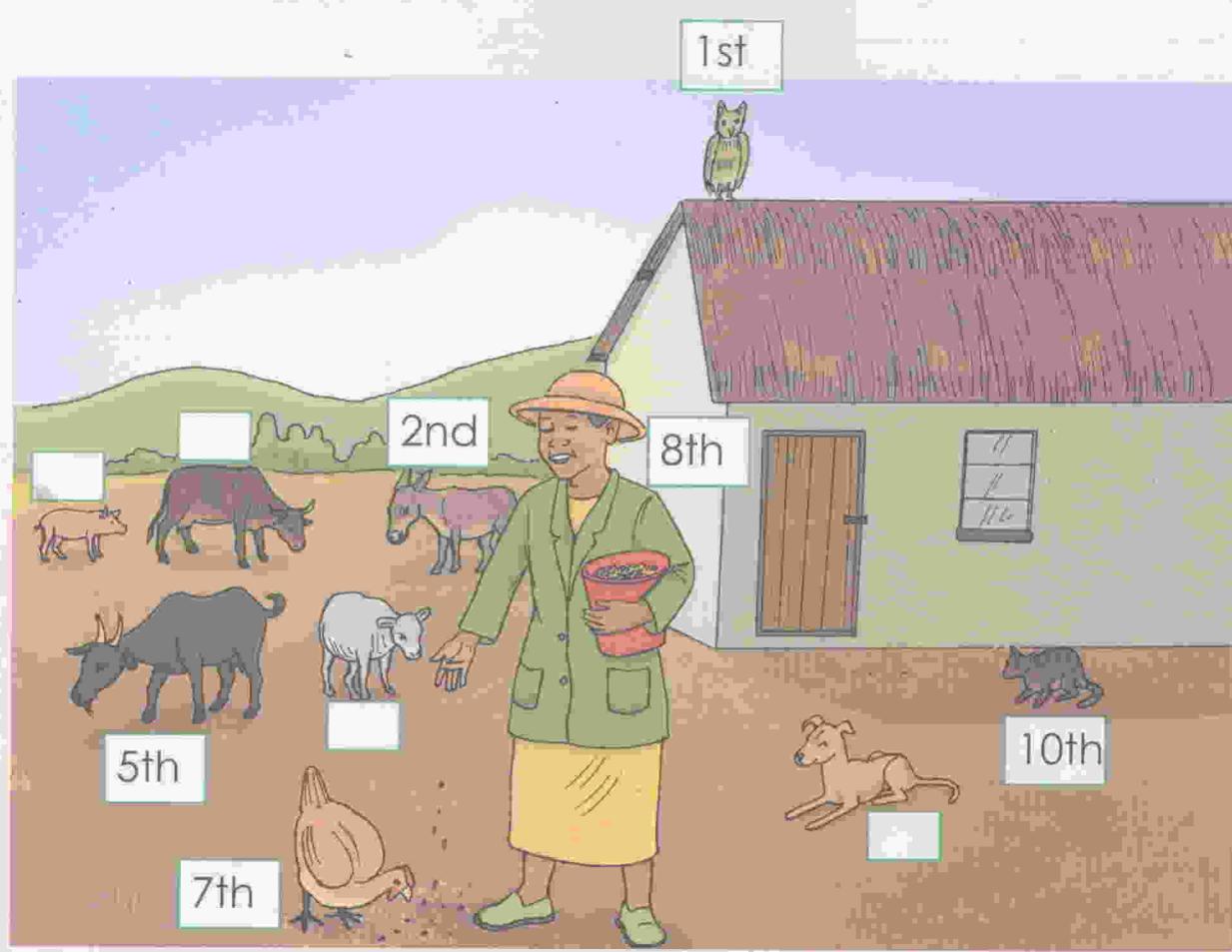
Copy and complete the following:

1. 3 is third
2. 4 is fourth
3. 5 is fifth
4. 6 is
5. 7 is
6. 8 is
7. 9 is
8. 10 is

## Activity 2

1. Go outside and take a race. Assign the possibility as first, second, third, fourth.
2. Through play or song say: first, second, third, fourth, fifth up to tenth.

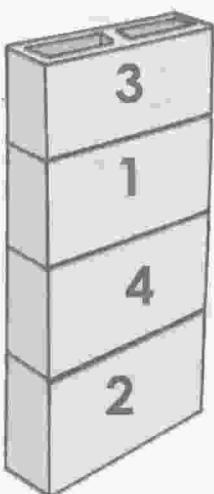
## Practice Exercise 4



Answer the following:

1. The cow is on the \_\_\_\_ position.
2. The woman is on the \_\_\_\_ position.
3. The pig is on the \_\_\_\_ position.
4. The dog is on the \_\_\_\_ position.
5. The owl is on the \_\_\_\_ position.

### Arrange numbers



Arrange the number blocks from smallest to biggest.

Answer: 1, 2, 3, 4

### Practice Exercise 5

Arrange the following numbers from smallest to biggest.

1. 9; 10; 1; 3; 4; 5
2. 6; 5; 2; 1; 3; 4
3. 2; 4; 3; 8; 6; 5
4. 3; 2; 7; 8; 5; 1; 6; 4; 9

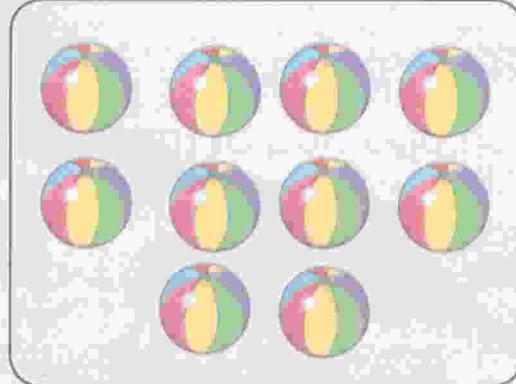
## Assessment test

1. Count the following objects.

(a)



(b)



2. Copy and complete.

(a) 2 is second

(2nd)

(b) 3 is third

(3rd)

(c) 4 is

( )

(d) 5 is

( )

(e) 6 is

( )

(f) 9 is

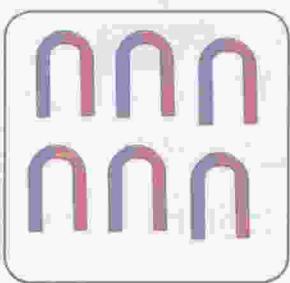
( )

(g) 10 is

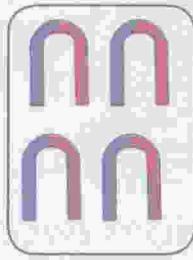
( )

3. How many?

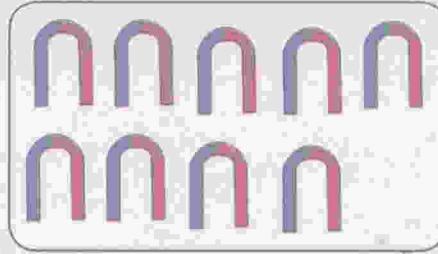
(a)



(b)



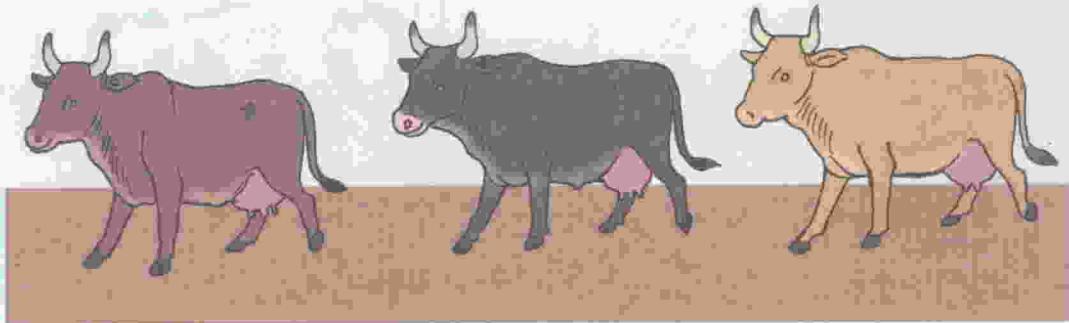
(c)



4. Match the following numbers

- |     |    |       |
|-----|----|-------|
| (a) | 5  | ten   |
| (b) | 10 | seven |
| (c) | 7  | five  |

5. Match



second

third

first

**Flashback**

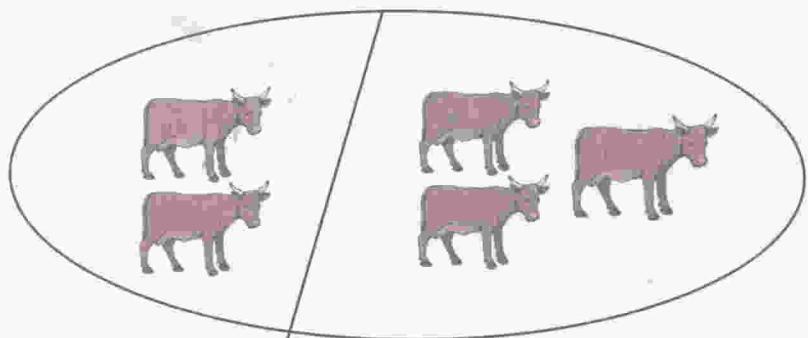
Words like add, sum, altogether, total means to put together.

**Key words**

add    addition    sum    altogether    make

**Activity 1**

1. Through song or play, count numbers from 1 to 10.
2. Play a game of addition.

**Addition**

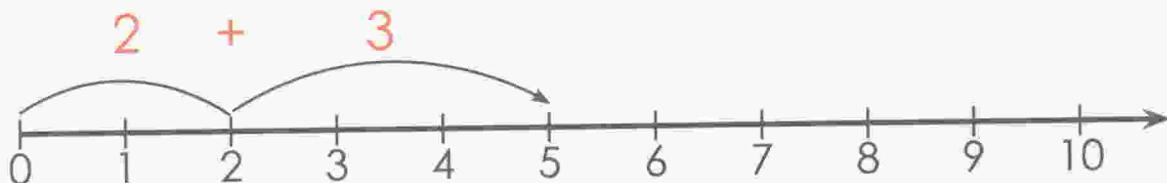
2 cows added to 3 cows makes

2 cows plus 3 cows equals

$$2 + 3 = 5$$

Or

Using a number line



### Practice Exercise 1

Now use the numberline to do the following:

1.  $3 + 4 = \boxed{\phantom{00}}$

2.  $8 + 2 = \boxed{\phantom{00}}$

3.  $7 + 3 = \boxed{\phantom{00}}$

4.  $9 + 1 = \boxed{\phantom{00}}$

5.  $6 + 0 = \boxed{\phantom{00}}$

6.  $0 + 10 = \boxed{\phantom{00}}$

7.  $1 + 4 = \boxed{\phantom{00}}$

8.  $6 + 4 = \boxed{\phantom{00}}$

### Addition stories

**Example:** The sum of 5 and 4 is  $\boxed{\phantom{00}}$

$5 + 4 = 9$

- Sum means put together
- Altogether means add
- Make means add
- Plus means add

## Practice Exercise 2

Now do the following:

1. 4 eggs plus 3 eggs is  eggs.
2. Chipo has 2 sweets. Peter has 4 sweets.  
Altogether they have  sweets.
3. 2 cows and 7 cows make  cows.
4. The sum of 4 girls and 5 girls is  girls.

## Calculator

**Example:**  $3 + 7 =$

Start the machine

Press the number 3

Press the + sign

Press the number 7

Press the = sign

Read the answer that comes out

Thus  $3 + 7 = 10$



## Practice Exercise 3

Now do the following using a calculator:

1.  $8 + 2 =$

2.  $1 + 4 =$

3.  $5 + 4 =$

4.  $7 + 0 =$

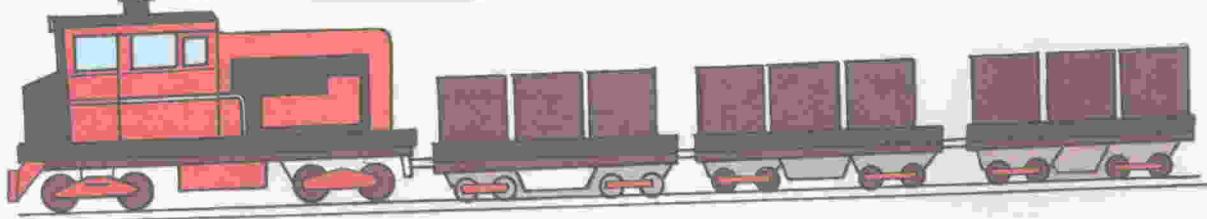
5.  $0 + 9 =$

6.  $3 + 6 =$

## Activity 2

Work out the problems.

$$\begin{array}{ccc} 6 + 3 = & 4 + 3 = & 0 + 1 = \\ 1 + 7 = & 3 + 2 = & \end{array}$$



### Assessment test

1. Use a number line to add the following:

(a)  $2 + 3 =$

(b)  $1 + 4 =$

(c)  $8 + 2 =$

(d)  $3 + 4 =$

(e)  $9 + 0 =$

2. Work out the following:

(a)  $7 + 3 =$

(b)  $4 + 5 =$

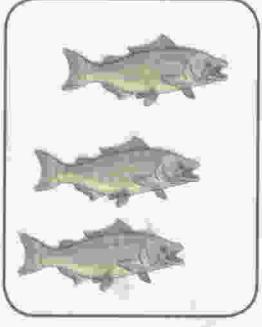
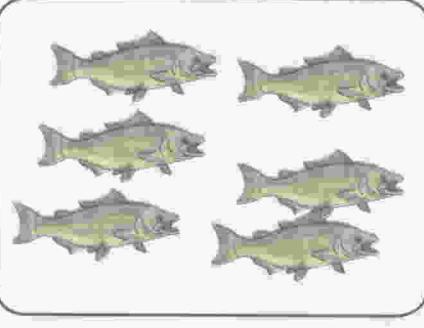
(c)  $1 + 8 =$

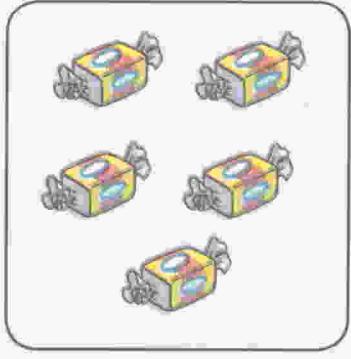
(d)  $0 + 10 =$

(e)  $1 + 7 =$

3. 7 donkeys plus 2 donkeys make  donkeys  
4. The sum of 6 and 3 is   
5. 4 books added to 5 books altogether is  
 books  
6. Use a calculator or cell phone to do the following:

(a)  $8 + 2 =$    
(b)  $4 + 3 =$    
(c)  $0 + 6 =$    
(d)  $6 + 0 =$    
(e)  $9 + 1 =$    
(f)  $1 + 9 =$

7.  +  =   
 $\square + \square = \square$

8.  +  =   
 $\square + \square = \square$

**Flashback**

Subtraction is when something is taken away.

**Key words**

subtract    difference    minus

**Subtraction**

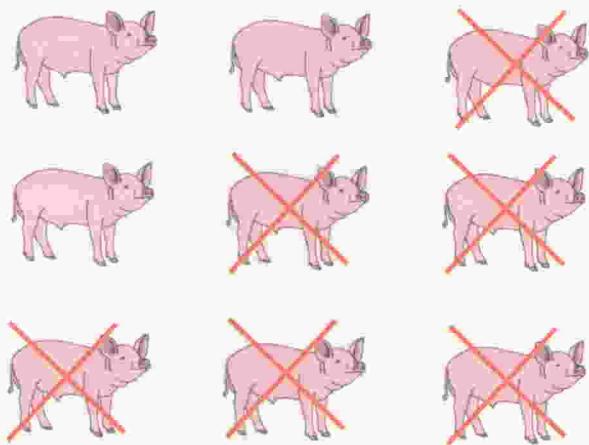
Use the number line to perform subtraction.

**Example:**  $9 - 7 =$



Subtract; go to the left of the number line

**Answer:**  $9 - 7 = 2$



9 pigs minus 7 pigs equals 2 pigs

9 pigs take away 7 pigs equals 2 pigs

$$9 \text{ pigs} - 7 \text{ pigs} = 2 \text{ pigs}$$

We remain with 2 pink pigs in the first set which is the same as the last set.

$$\text{So } 9 - 7 = 2$$

**Example:**  $8 - 3 = \square$



**Answer:**  $8 - 3 = 5$

## Practice Exercise 1

1. Use the number line to do the following.

(a)  $10 - 7 =$

(b)  $6 - 5 =$

(c)  $3 - 3 =$

(d)  $5 - 5 =$

(e)  $9 - 3 =$

(f)  $7 - 6 =$

(g)  $8 - 3 =$

(h)  $3 - 2 =$

(i)  $4 - 1 =$

(j)  $5 - 4 =$

2. Use sets to do the following.

(a)  $6 - 4 =$

(b)  $10 - 7 =$

(c)  $7 - 4 =$

(d)  $8 - 4 =$

(e)  $7 - 1 =$

## Subtraction words

**Example:** 6 balls take away 2 equals

**Answer:** 6 balls take away 2 equals 4

## Practice Exercise 2

Now do the following:

1. 5 take away 3 equals =
2. 4 take away 3 equals =
3. 10 take away 3 equals =
4. 9 minus 7 equals =
5. 6 minus 0 equals =

## Subtraction stories

**Example:** Chipo has 10 oranges. She eats 7 oranges. She has  oranges left.

**Answer:**  $10 - 7 = 3$

## Practice Exercise 3

Now do the following:

1. John has 4 sweets. He eats 3 sweets. He has  sweets left.
2. The difference between 10 and 6 is .
3. 9 minus 8 equals .
4. 8 subtract 5 is .

## Using a calculator to subtract

Example:  $7 - 4 = \square$



Start the calculator or cellphone  
Press the number 7  
Press the - sign  
Press the number 4  
Press the = sign  
Read the answer  
Hence  $7 - 4 = 3$

### Practice Exercise 4

Now do the following:

1.  $8 - 5 = \square$

3.  $7 - 5 = \square$

5.  $6 - 6 = \square$

2.  $10 - 6 = \square$

4.  $5 - 5 = \square$

6.  $9 - 1 = \square$

### Activity 1: Extra work

Recite subtraction poems.

## Assessment test



1. Use a number line to show
  - (a)  $7 - 5 = \square$
  - (b)  $5 - 3 = \square$
  - (c)  $8 - 7 = \square$
  - (d)  $9 - 1 = \square$
2. Draw pictures to show
  - (a)  $9 - 6$
  - (b)  $6 - 0$
  - (c)  $10 - 7$
  - (d)  $8 - 2$
3. Rudo has 8 guavas. She eats 3. She has  $\square$  guavas left.
4. 10 minus 8 is  $\square$
5. The difference between 7 and 3 is  $\square$
6. Use a calculator, cellphone or computer to work out;
  - (a)  $9 - 5$
  - (b)  $8 - 7$
  - (c)  $5 - 5$
  - (d)  $6 - 6$
  - (e)  $3 - 0$
  - (f)  $10 - 0$
  - (g)  $8 - 1$
  - (h)  $6 - 4$
7. 10 take away 3 equals  $= \square$
8. 5 minus 3 equals  $= \square$
9. 6 take away 1 equals  $= \square$
10. 3 take away 0 equals  $= \square$

**Flashback**

There are different types of soil.  
Name the soil type you know.

**Key words**

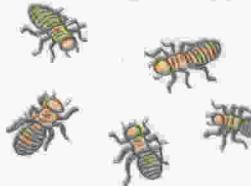
habitat    soil    mulching    care    grow

**Activity 1**

Go to the garden at school or home. Dig up the soil in there. Put it in a container and bring it to class. Put the soil on a piece of paper. Do you see any small animals.

**Small animals that live in soil**

Some small animals live in soil.  
Below are pictures of small animals that live in soil.



### Practice Exercise 1

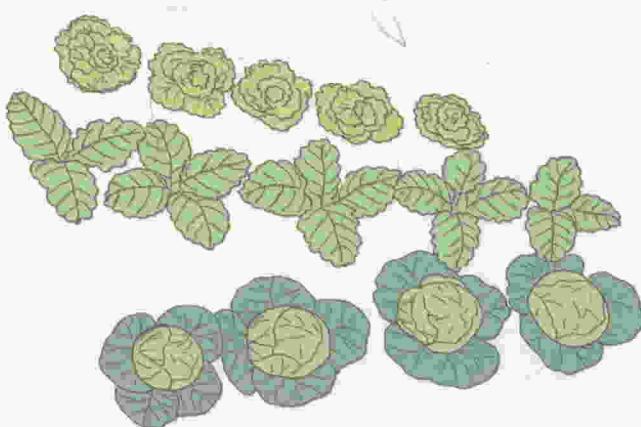
1. Name 2 small animals that live in soil.

### Caring for soil

We need soil to grow plants.

Plants get their water and minerals from the soil.

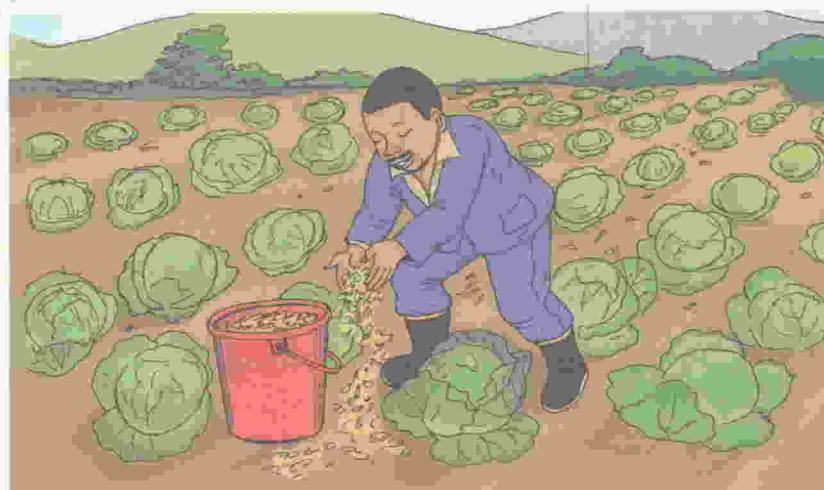
We need to take care of the soil.



To keep moisture in the soil we need to protect it from the sun.

We protect the soil from the sun by mulching.

We use straw and stones to mulch.



## Practice Exercise 2

1. What materials can be used for mulching?
2. We place mulch in the garden to \_\_\_\_.

## Planting trees



Trees are important.  
They protect soil.  
We should plant trees.

We put manure in soil to make it rich.  
We use cow manure and chicken manure to make soil rich.

### Practice Exercise 3

Complete:

**mulching, planting trees, chicken, cow**

1. We protect soil by \_\_\_\_\_ and \_\_\_\_\_.
2. We use \_\_\_\_\_ manure and \_\_\_\_\_ manure to make soil rich.

### Assessment test

1. Give any 3 animals that live in soil.
2. Two methods of caring for soil are — and —.
3. Soil needs to be — for.
4. Mulching is done to preserve —.
5. — help the soil by loosening it.

(**worms, mice, crickets, cared, moisture, mulching, growing plants, caterpillar, frogs, snakes**)



**Flashback**

Compare your heights by using words such as short, shorter, shortest, tall, taller and tallest.

**Key words**

short shorter shortest long longer longest

**Long or short****Practice Exercise 1**

Say which one is longer and which one is shorter.

1. wrong

A

B

C

2.

D

3.

E

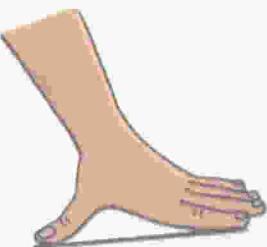
4.



F



## Span



Span is the length from your thumb to the little finger. Span is used to measure different lengths.

### Activity 1: Group work

1. Measure your tables using span.  
**For example:** length of my desk is 14 spans  
width of my desk is 8 spans
2. Compare length of tables and width of tables.
3. Use strings to measure length and width of classroom.
4. Measure distance using steps and feet.

### Practice Exercise 2

Compare lengths, widths, heights using non-standard units.

1. The distance from our classroom to the sports field is \_\_\_\_\_ steps.
2. The distance right round our track is \_\_\_\_\_ steps.
3. The length of our classroom is \_\_\_\_\_ steps.
4. The width of our classroom is \_\_\_\_\_ steps.

## longer; shorter

### Example



The bean seed is shorter than the chalk.

The chalk is longer than the bean seed.

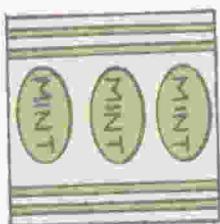
### Practice Exercise 3

Measure the following objects:



1. The rope is — (longer/shorter) than the nail.
2. The nail is — (longer/shorter) than the rope.

Measure with your centimetre ruler

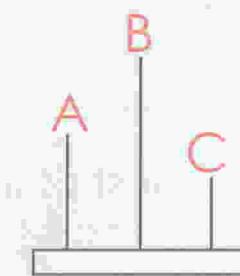


3. The mint packet is — (longer/shorter) than the match stick.
4. The match stick is — (longer/shorter) than the mint packet.
5. The eraser is — (longer/shorter) than the lace.
6. The lace is — (longer/shorter) than the eraser.

### Activity 2

Measure different objects in your classroom. Measure lunch boxes, scissors, chalk box and so on.

## Assessment test



1. A is \_\_\_\_\_ than B. (short/shorter/shortest)
2. B is the \_\_\_\_\_. (tall/taller/tallest)
3. C is the \_\_\_\_\_. (short/shorter/shortest)



Anna



Tonderai



Andile

4. \_\_\_\_\_ is the shortest.
5. \_\_\_\_\_ is the tallest.
6. \_\_\_\_\_ is taller than Andile but shorter than Anna.

**Flashback**

A habit is something you do most of the time.  
Discuss good habits with your friend.

**Key words**

health nutrition safety unhealthy bad habits accident

**Caring for your body**

Wash your hands after using the toilet.  
We use soap and wash our hands under running water.  
Wash your hands before and after you eat food.  
Wash fruits before you eat them.

**Practice Exercise 1**

Use the before/after to answer the questions below.

1. We should wash hands \_\_\_\_\_ using the toilet.
2. We wash our hands \_\_\_\_\_ and \_\_\_\_\_ taking food.
3. We should always wash a fruit \_\_\_\_\_ eating it.

## Unhealthy eating

Healthy eating leads to good health.

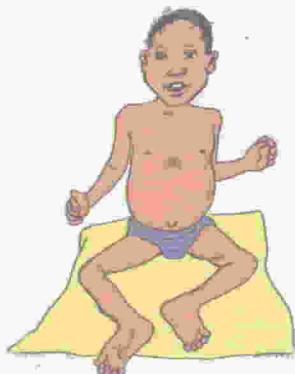
Unhealthy eating leads to bad health.



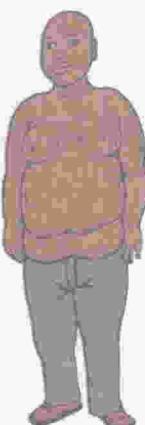
goitre



marasmus



kwashiorkor



obesity

Look at the pictures. What is wrong?

### Practice Exercise 2

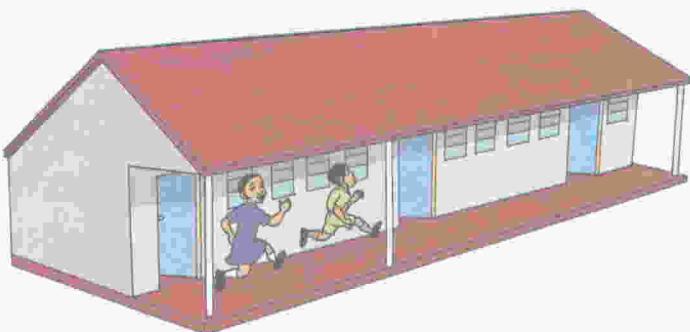
Complete: **bad, goitre, obesity, good**

1. Healthy eating leads to \_\_\_\_\_ health.
2. Unhealthy eating causes \_\_\_\_\_ health.
3. G\_\_\_\_\_ is caused by unhealthy eating.
4. O\_\_\_\_\_ is caused by un healthy eating.

### Activity 1

Draw a picture of a sick person and of a healthy person.

## Accidents at school



Look at the pictures. What is going on?

Accidents happen. If we run in the classroom or corridor we can trip and fall.

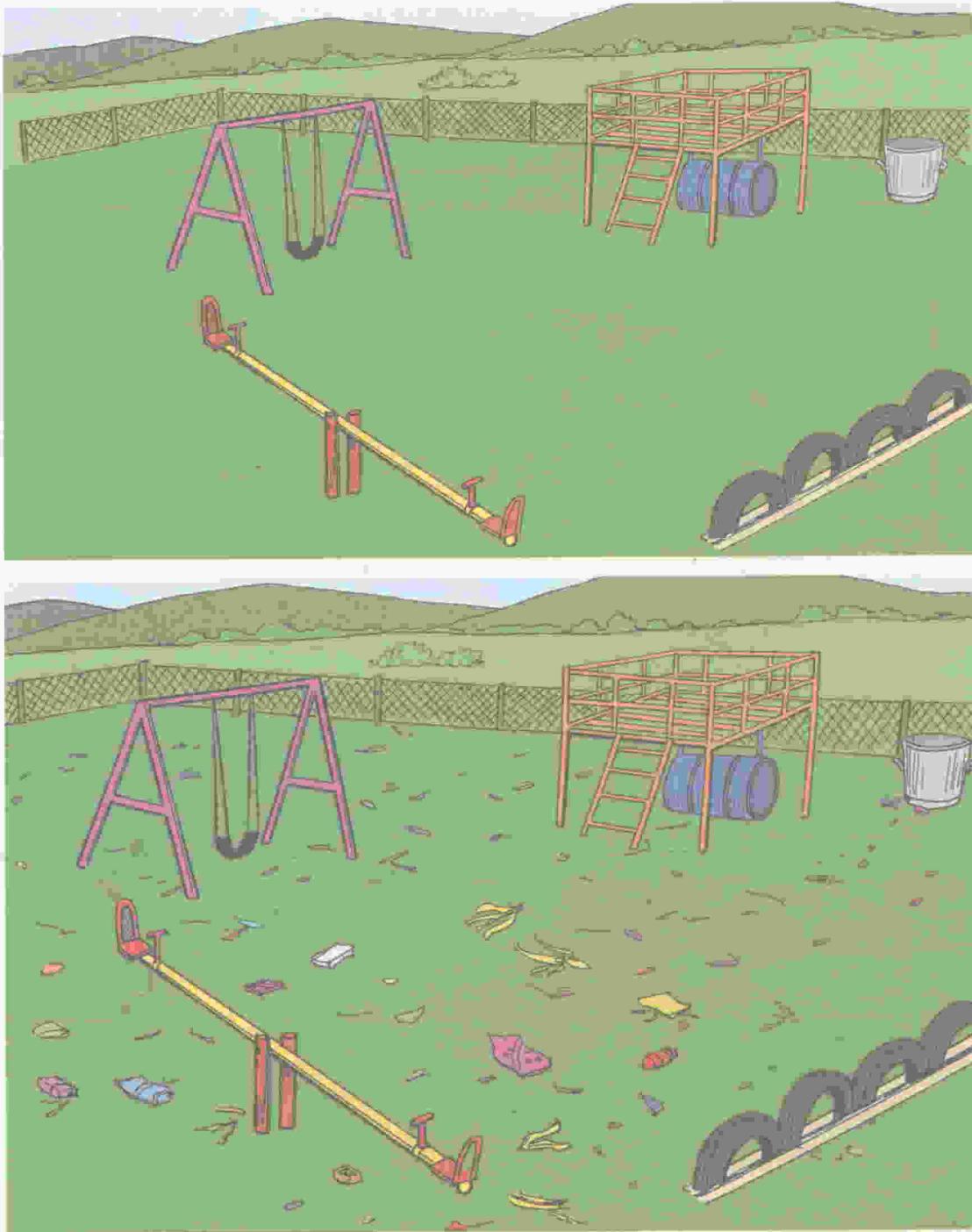
If we climb on chairs and tables we can fall and hurt ourselves.

If we overcrowd in a bus we can get into an accident.

### Practice Exercise 3

1. Running in the classroom can lead to a — (fall/corridor).
2. — (Chairs/Overcrowding) in a bus can cause an accident.
3. Do not — (run/climb) tables.

## Our environment



Look at the two pictures. Spot the difference.  
We need to keep our environment clean.  
Playing in a dirty environment is not good.  
You may be hurt or get sick.

## Activity 2

As a class, collect rubbish from the environment.  
Discuss the importance of a clean environment.



## Practice Exercise 4

1. Name 2 ways of keeping the environment clean.

## Assessment test

1. Unhealthy eating leads to — health.
2. Healthy eating leads to — health.
3. — and — can cause accidents at school
4. We care for the environment by — and —.

**UNIT  
21**

# Mass

## Flashback

Mass is the amount of matter found in an object.

### Key words

heavy

bigger than

tallest

light

less than

short

heavier

tall

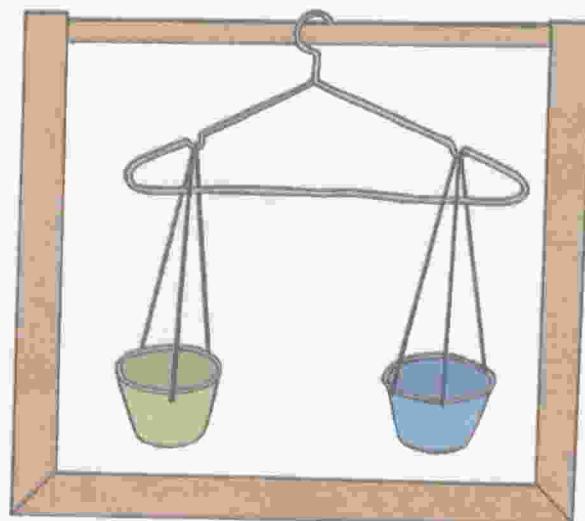
shorter

lighter

taller

shortest

### Activity 1

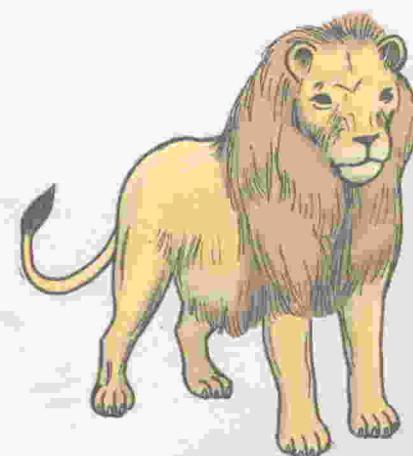


Look at the pictures.  
Make a balance scale.

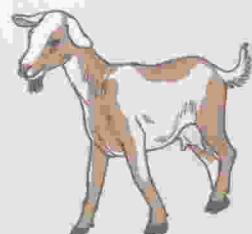
### Practice Exercise 1

Compare mass and say which one is heavier or lighter.

1.



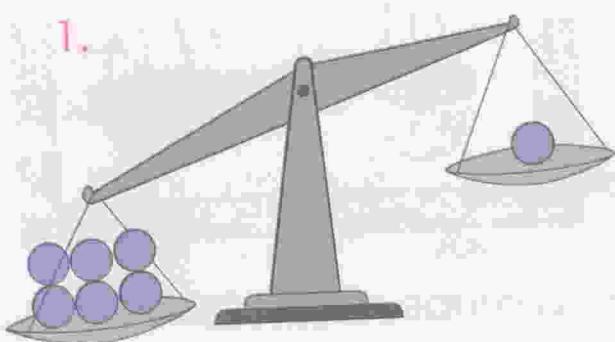
2.



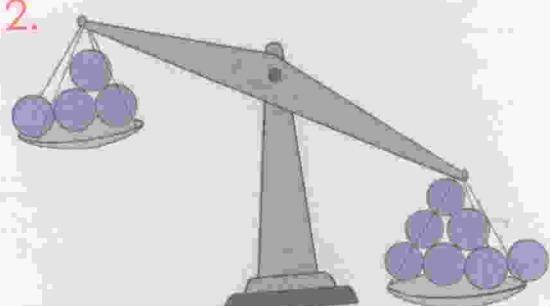
### Practice Exercises 2

Compare masses on scale.

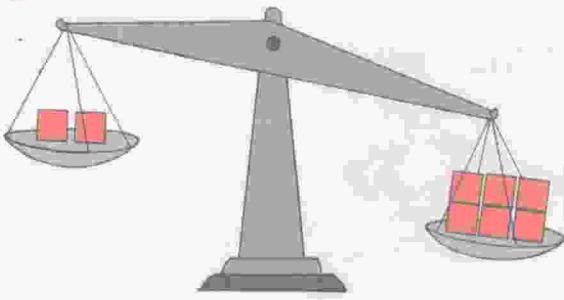
1.



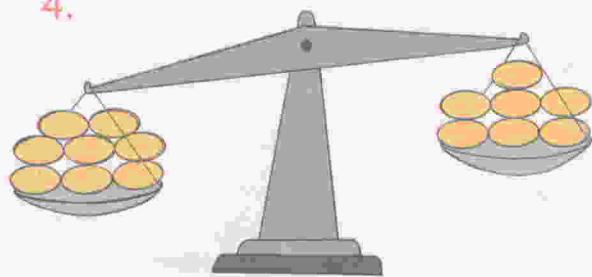
2.



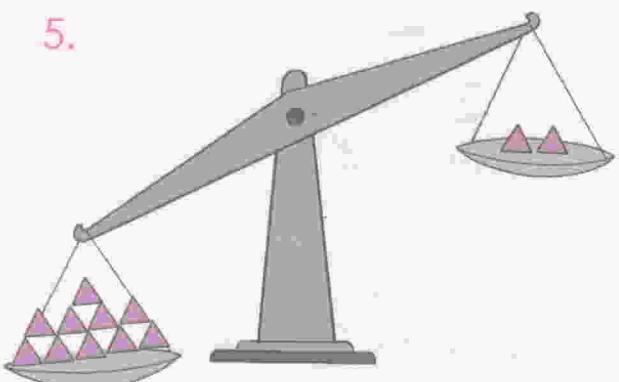
3.



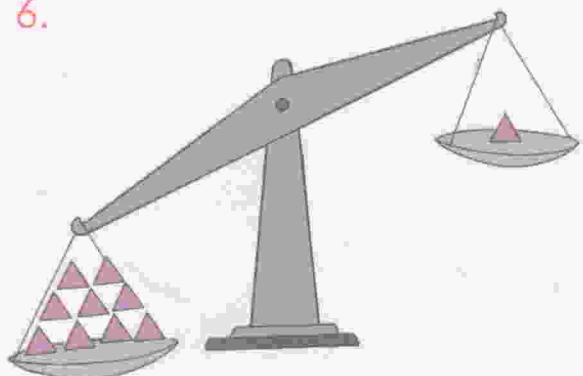
4.



5.



6.



### Practice Exercise 3

John  
20kg

Mary  
17kg

1. John is heavier than Mary by \_\_\_\_\_ kg.

Fungai



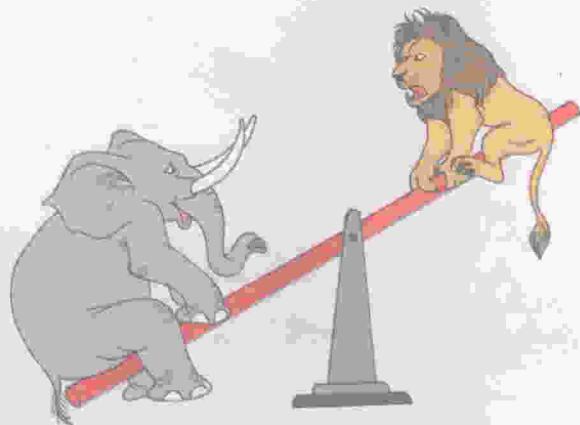
Thando

23kg

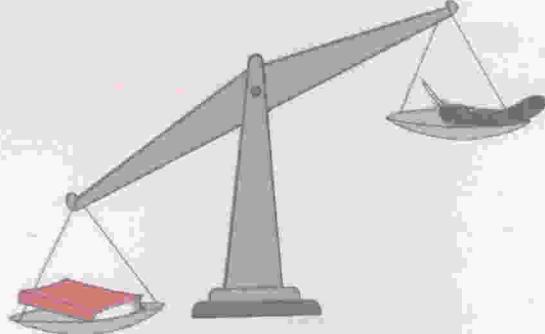


2. Thando is lighter than Fungai by \_\_\_\_\_ kg.

3. An elephant is \_\_\_\_\_ than a lion.  
(lighter/heavier)



4. A book is \_\_\_\_\_ than a feather. (heavier/lighter)



5. A ball is \_\_\_\_\_ than a brick.  
(heavier/lighter).



### Practice Exercise 4

Which one is heavier from the following:

1.



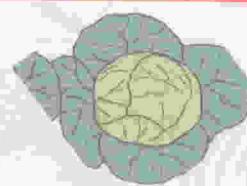
2.



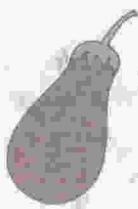
3.



4.



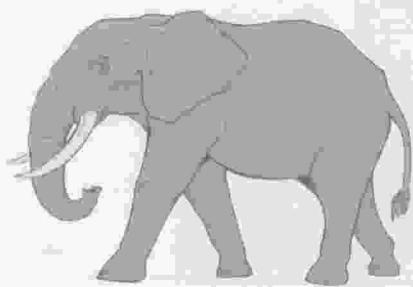
5.



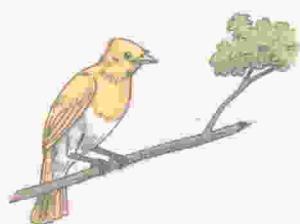
### Practice Exercise 5

Which one is lighter from the following:

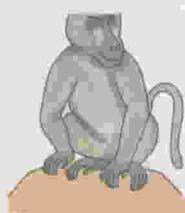
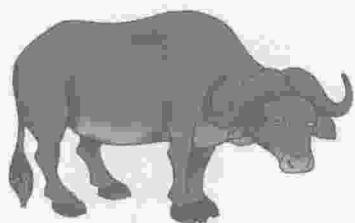
1.



2.



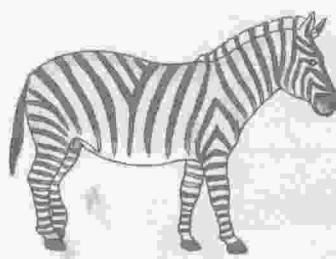
3.



4.



5.



### Assessment test

Use lighter or heavier to fill in the following:

1. A lion is \_\_\_\_\_ than a hare.
2. An elephant is \_\_\_\_\_ than a tortoise.
3. A hippotamus is \_\_\_\_\_ than a bird.
4. A grape is \_\_\_\_\_ than a water melon.
5. A tomato is \_\_\_\_\_ than a pumpkin.

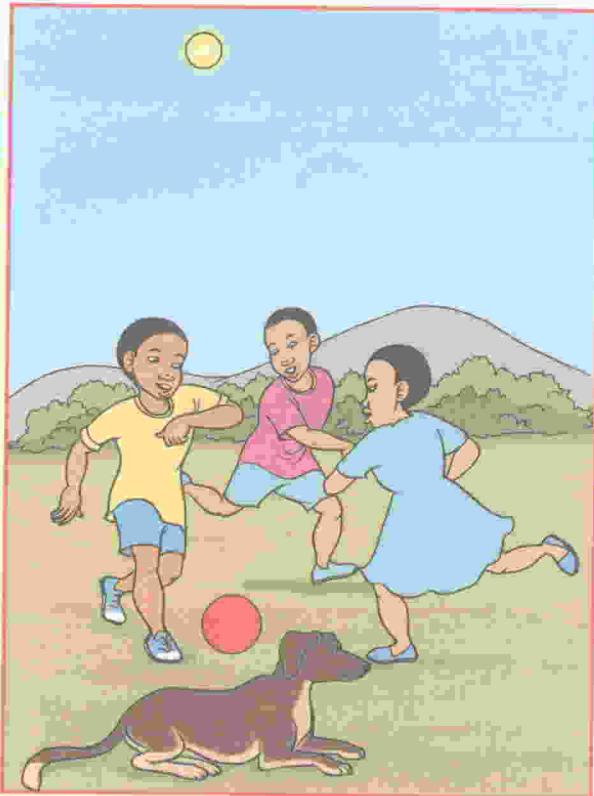
**Flashback**

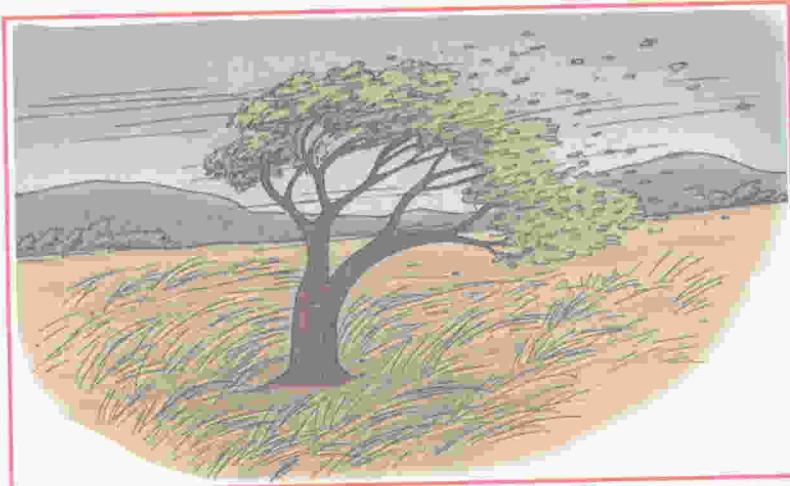
Look at the weather outside.  
How is the weather today?

**Key words**

weather	hot	cold	humid
windy	sunny	cloudy	rainy

Look at the pictures.





When there is hot weather, children play outside. In rainy, cold and windy weather they stay inside.

### Practice Exercise 1

Use the words given to answer the following:

**a jersey, swimming, stay indoors, raincoat**

1. In warm weather we go \_\_\_\_\_.
2. We \_\_\_\_\_ in windy weather.
3. I wear \_\_\_\_\_ in cold weather.
4. I wear a \_\_\_\_\_ in rainy weather.

### What does it show?

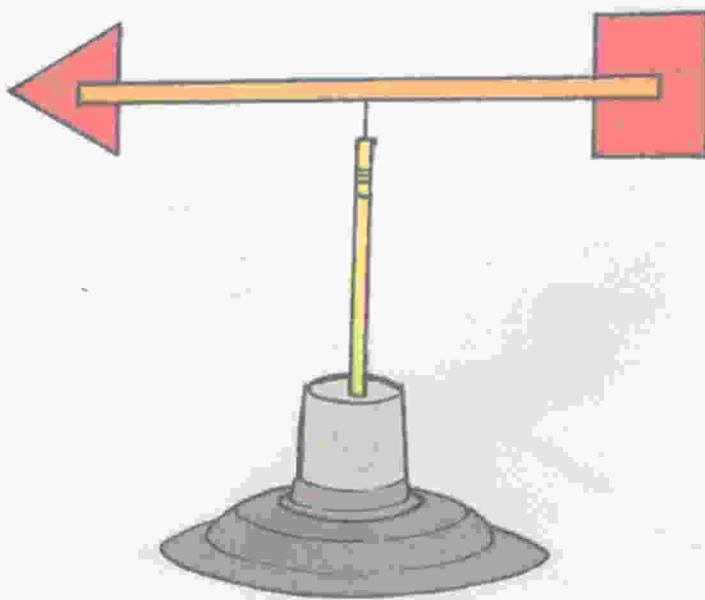


We do many things everyday.  
When the weather is cold we stay indoors.  
When the weather is warm we play outside.

## Activity 1

Draw your favourite weather condition.

## Make a model wind vane



### Assessment test

1. Today the weather is — (windy, cloudy, sunny, rainy).
2. The day-to-day conditions of a particular place is called — (temperature, weather).
3. Early in the morning in June its — (sunny, cold, hot).
4. Draw one instrument for measuring weather.

**Flashback**

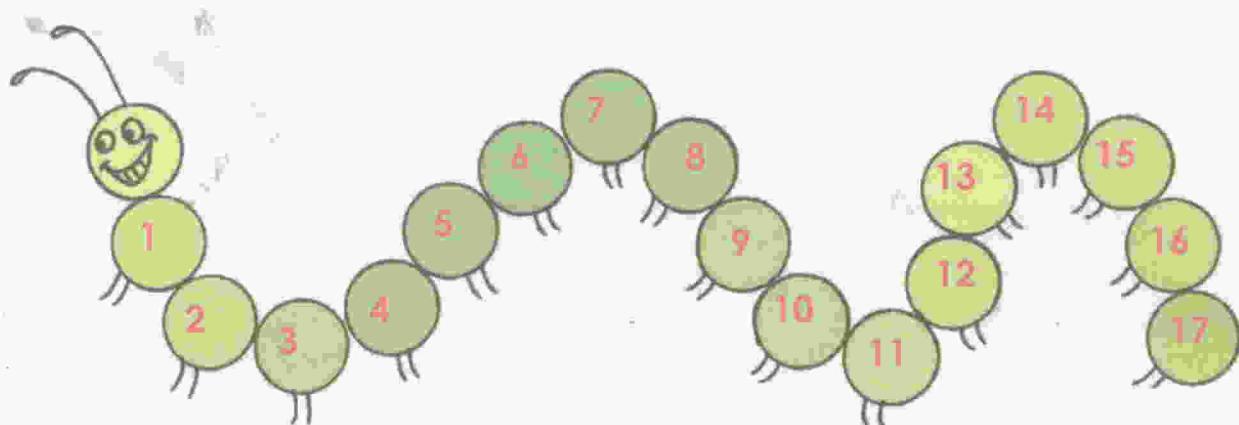
Do you remember the following numbers

**0 1 2 3 4 5 6 7 8 9 10**

Say them to a friend.

**Key words**

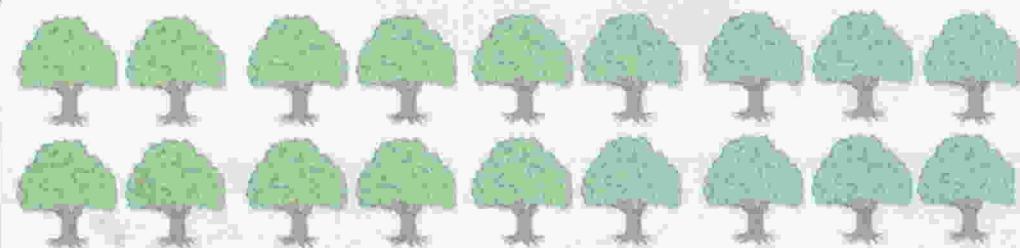
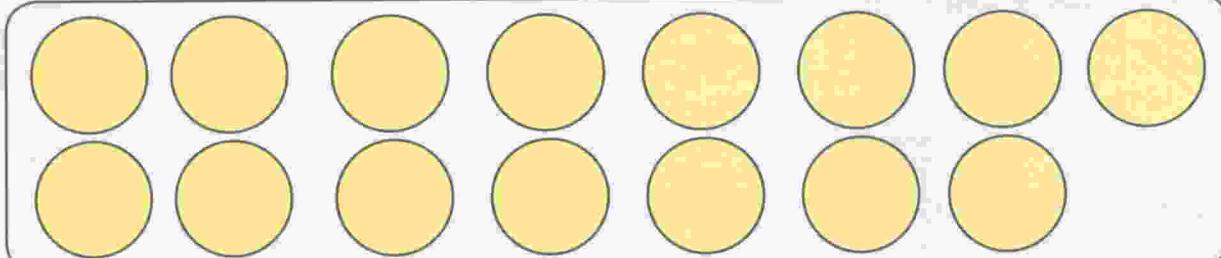
count    smallest    biggest    round off  
estimate    quantity

**Number caterpillar**

Count the numbers on the caterpillar.

## Practice Exercise 1

Count objects in the following sets:



## Activity 1

Count numbers on the number line or number strips



Take turns to count.

## Numbers

numeral	words	numeral	words
1	one	11	eleven
2	two	12	twelve
3	three	13	thirteen
4	four	14	fourteen
5	five	15	fifteen
6	six	16	sixteen
7	seven	17	seventeen
8	eight	18	eighteen
9	nine	19	nineteen
10	ten	20	twenty

### Practice Exercise 2

Write down the following numbers in words:

- |    |    |    |    |    |    |
|----|----|----|----|----|----|
| 1. | 4  | 2. | 7  | 3. | 0  |
| 4. | 11 | 5. | 13 | 6. | 15 |
| 7. | 16 | 8. | 17 | 9. | 20 |

## Arranging numbers

### Example 1.

Arrange the following numbers from smallest to biggest.  
10; 8; 13; 7; 15

Answer:

7; 8; 10; 13; 15

### Example 2.

Arrange the following numbers from biggest to smallest  
10; 8; 13; 7; 15; 1

Answer:

15; 13; 10; 8; 7; 1

### Practice Exercise 3

Now do the following:

1. Arrange the following from smallest to biggest.
  - (a) 7; 4; 8; 2; 10; 15; 14
  - (b) 9; 6; 4; 1; 11; 5; 13
  - (c) 18; 4; 7; 5; 8; 12; 15; 19; 20
  - (d) 7; 4; 13; 10; 19; 16
  - (e) 20; 17; 11; 14; 8; 5
2. Arrange the following numbers from biggest to smallest.
  - (a) 2; 9; 5; 3; 12
  - (b) 13; 15; 10; 11; 4
  - (c) 5; 15; 10; 20
  - (d) 1; 5; 13; 9; 17
  - (e) 12; 13; 15; 14; 16; 17

### Comparing numbers

**Note:**  $<$  means less than  
 $>$  means greater than  
 $=$  means equal to

**For example:**

2 is less than 7	$2 < 7$
8 is greater than 5	$8 > 5$
3 is equal to 3	$3 = 3$

### Practice Exercise 4

Now do the following:

Put the sign  $>$ ,  $<$  or  $=$  to make the statement true.

1.  $4 \square 9$

2.  $10 \square 15$

3.  $3\text{kg} \square 5\text{kg}$

4. 8 sweets  $\square$  9 sweets

5. 15 mangoes  $\square$  2 mangoes

6.  $9 \square 7$

7. 6 sweets  $\square$  4 sweets

8.  $8 \square 0$

9.  $4 \square 4$

10.  $2 \square 2$

11.  $0 \square 0$

12.  $1 \square 0$

### Rounding off numbers



#### Example:

Round off the following numbers to the nearest 10

6; 9; 11; 8; 4; 3

#### Answer:

6 is nearer 10 = 10

9 is nearer 10 = 10

11 is nearer 10 = 10

8 is not nearer 10 = 0

4 is not nearer 10 = 0

### Practice Exercise 5

Round off the following to the nearest 10

1. 7

2. 9

3. 10

4. 2

5. 1

6. 0

7. 13

8. 14

### Practice Exercise 6

**Example:** 12 is nearer 10

17 is nearer 20



Say which numbers are nearer to 20.

1. 13

2. 16

3. 17

4. 19

5. 14

6. 15

7. 18

8. 11

### Assessment test

1. Count numbers on the number line from 1 to 20.
2. Arrange the following numbers from smallest to biggest.
  - (a) 6; 5; 9; 15; 3
  - (b) 7; 8; 1; 3; 14
  - (c) 20; 4; 12; 16; 18
  - (d) 18; 15; 11; 7; 13
3. Arrange the following numbers from biggest to smallest.
  - (a) 7; 4; 2; 8; 14
  - (b) 12; 11; 14; 6; 5

- (c) 5; 7; 11; 19; 17; 13  
(d) 4; 8; 6; 16; 10; 12; 14

4. Put the sign  $>$ ;  $<$ ; and  $=$  to make the statement true.

- (a)  $2 \square 0$       (b)  $3 \square 15$       (c)  $10 \square 11$   
(d)  $15 \square 15$       (e)  $8 \square 12$       (f)  $13 \square 17$   
(g)  $9 \square 12$       (h)  $8 \square 6$       (i)  $0 \square 0$

5. Round off the following numbers to the nearest 10.

- (a) 8      (b) 9      (c) 11      (d) 14  
(e) 1      (f) 6      (g) 5      (h) 12

**Flashback**

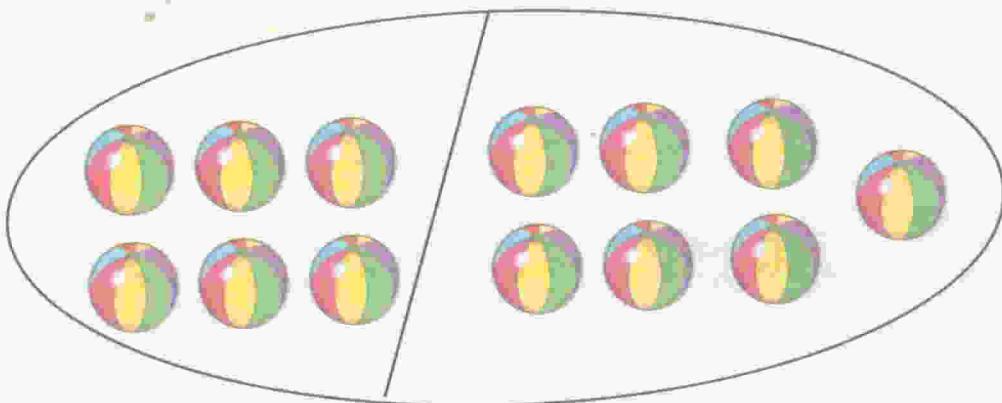
A calculator is an electronic device that can be used to perform number operations. When using a calculator you need to input the correct number and signs. In addition we use the addition sign (+).

**Key words**

add    twenty    addition    sum  
total    altogether    count on

**Add**

To add is to put together. Another word for addition is sum or put together.

**Example 1**

6 balls added to

7 balls make

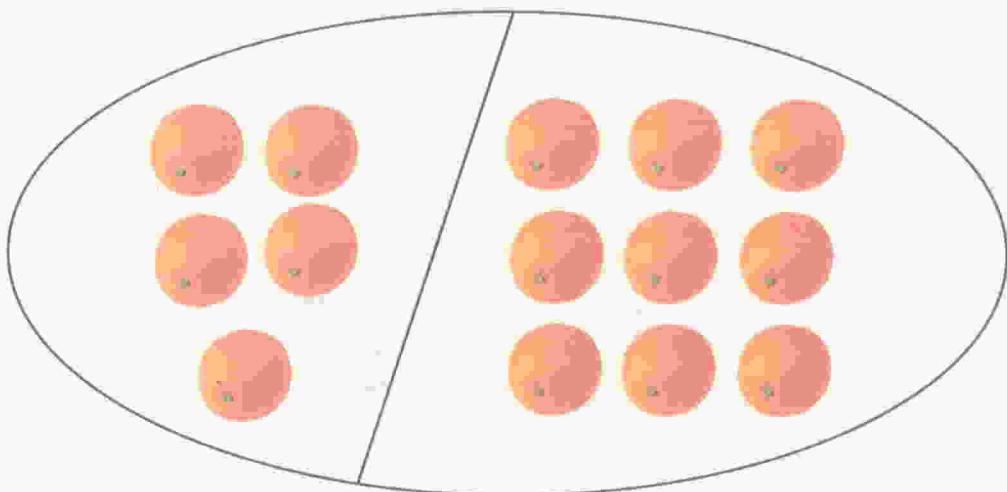
13 balls

To add is to put things together.

Thus, 6 balls + 7 balls = 13 balls

$$6 + 7 = 13$$

### Example 2

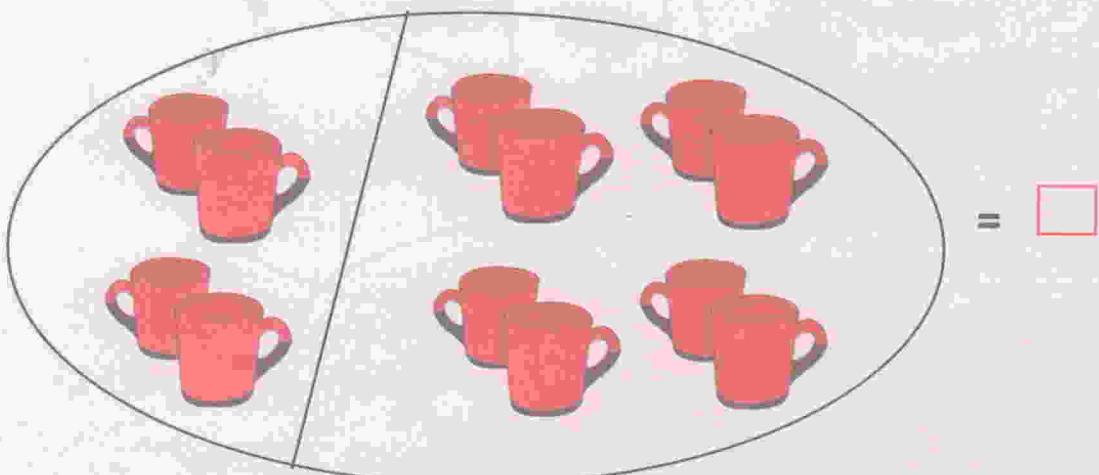


5 oranges added to 9 oranges make 14 oranges  
5 oranges + 9 oranges = 14 oranges

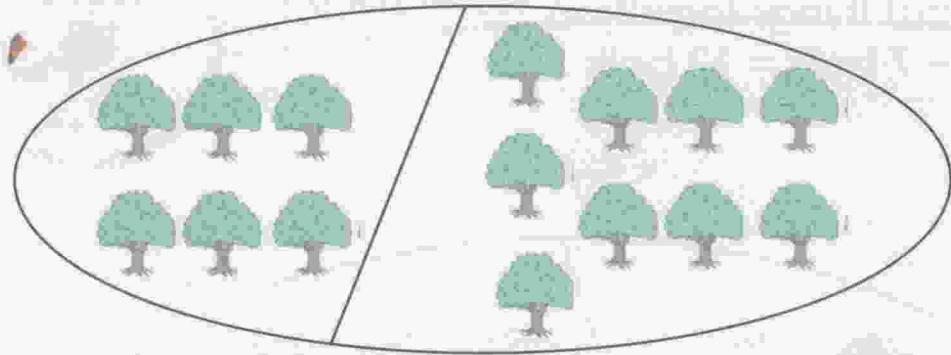
$$5 + 9 = 14$$

### Practice Exercise 1

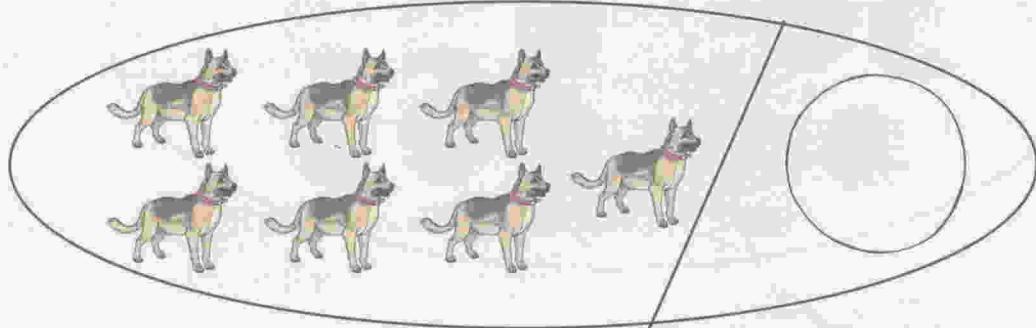
How many altogether?



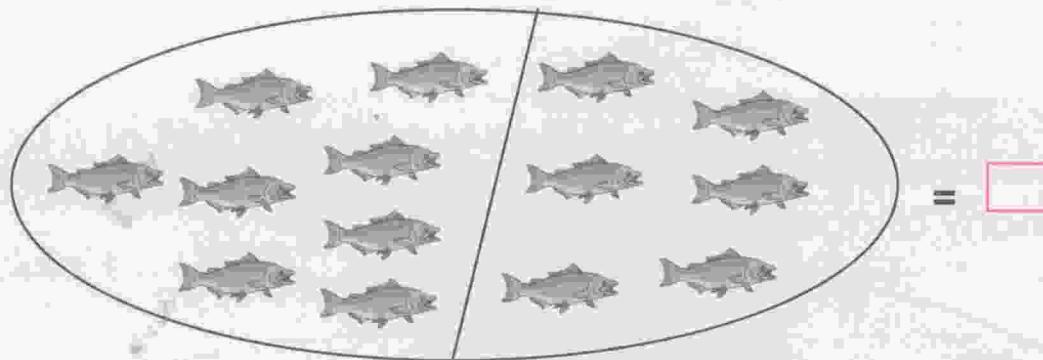
1. 4 red cups added to 8 red cups



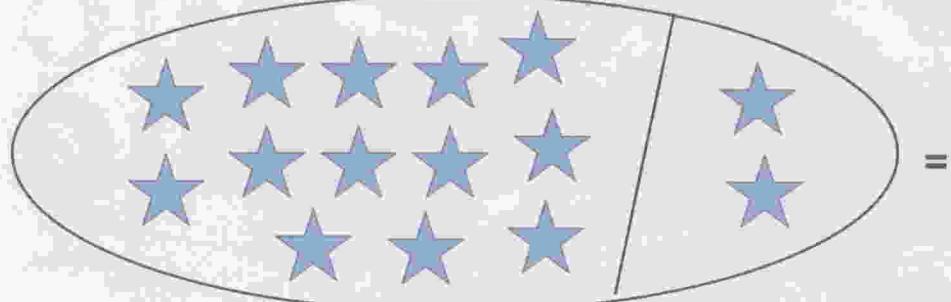
2. 6 green trees      added to      9 green trees



3. 7 brown dogs      added to      zero brown dogs



4. 8 fish      added to      6 fish



5. 13 stars      added to      2 stars

## Addition

A number line can be used to add 2 numbers together. For example:

1.  $10 + 6 = \square$



$$10 + 6 = 16$$

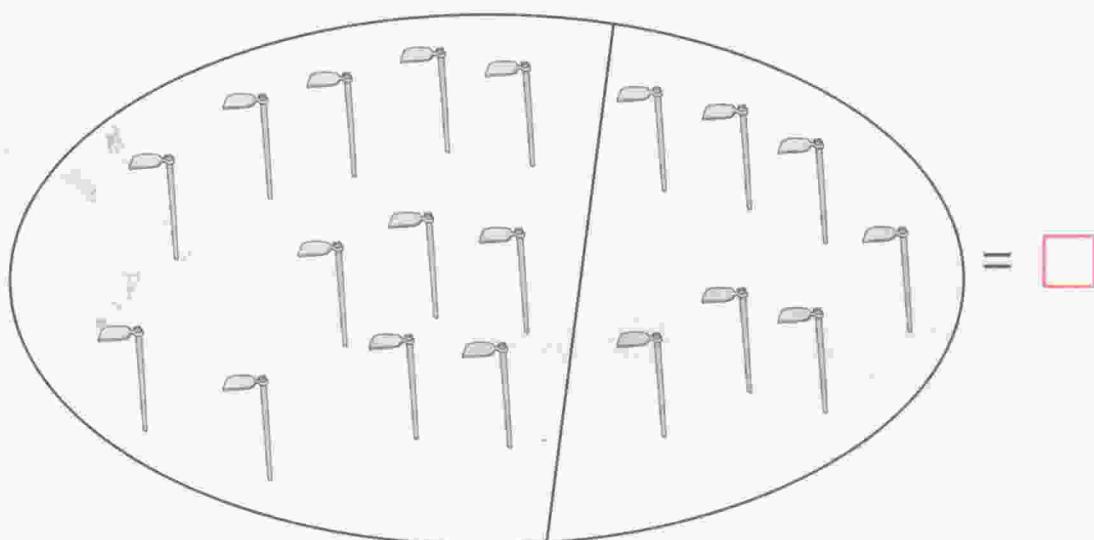
10 count on 6 gives 16

2.  $8 + 9 = \square$



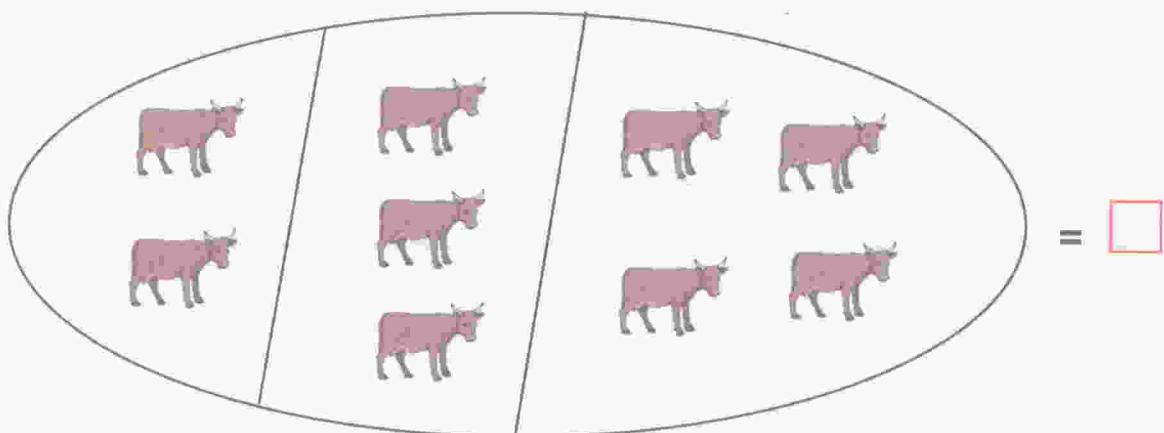
count on 9 is 17

$$8 + 9 = 17$$



3. 12 hoes      count on      7 hoes      =      19 hoes

4.

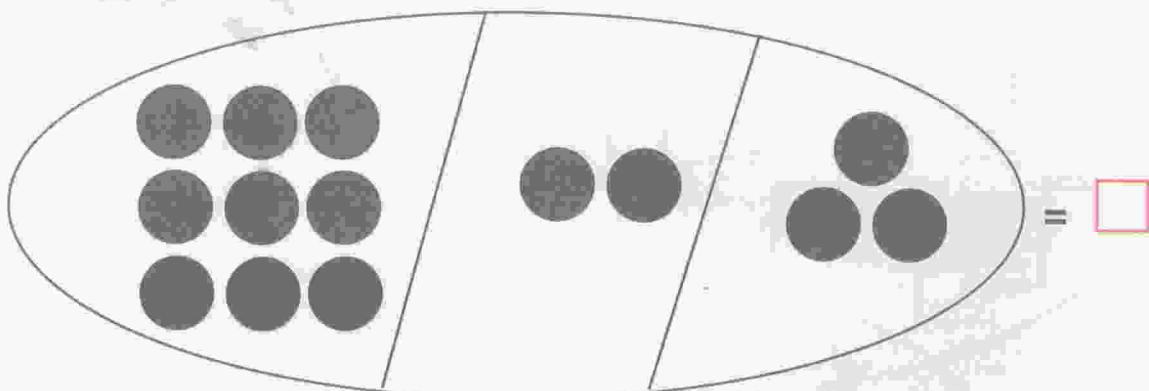


$$2 \text{ cows} + 3 \text{ cows} + 4 \text{ cows} = 9 \text{ cows}$$

5.  $11 + 8 = \square$



$$11 + 8 = 19$$



6. 9 black balls + 2 black balls + 3 black balls  
= 14 black balls

## Practice Exercise 2

Now do the following

1.  $1 + 2 + 3 = \boxed{\phantom{0}}$
2.  $3 + 12 = \boxed{\phantom{0}}$
3.  $6 + 2 + 4 = \boxed{\phantom{0}}$
4.  $8 + 9 + 2 = \boxed{\phantom{0}}$
5.  $6 + 8 = \boxed{\phantom{0}}$
6.  $10 + 10 = \boxed{\phantom{0}}$
7.  $10 + 9 = \boxed{\phantom{0}}$
8.  $8 + 10 = \boxed{\phantom{0}}$
9.  $0 + 20 = \boxed{\phantom{0}}$
10.  $20 + 0 = \boxed{\phantom{0}}$

## Addition stories

Altogether means sum or add

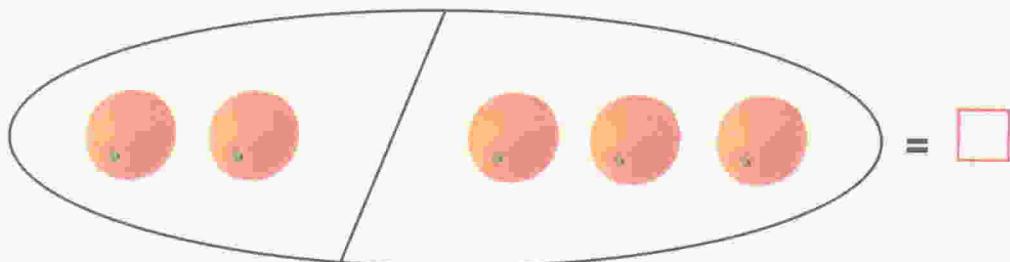
+ plus sign

= equal sign

1. 3 add 4 is                  Add  $\longrightarrow +$                   is  $\longrightarrow =$   
 $3 + 4 = 7$
2. 9 count on 8 is                  Count on  $\longrightarrow +$                   is  $\longrightarrow =$   
 $9 + 8 = 17$
3. 10 and 9 altogether is                  Altogether  $\longrightarrow +$  is  $\longrightarrow =$   
 $10 + 9 = 19$

4. The sum of 2 oranges and 3 oranges is

Sum is  $\square + \square = \square$



2 oranges + 3 oranges = 5 oranges

$$2 + 3 = 5$$

5. Paidi has a banana. Tafara has 9 bananas.

How many bananas altogether?

$$1 + 9 = 11$$

### Practice Exercise 3

Now do the following.

1. James has 7 sweets. Sipho has 8 sweets.

How many sweets altogether?

2. Father has 2 goats. He buys 11 more. He now has  $\square$  goats.

3. John has 7 cents. Mother gave him 6 cents.

He now has  $\square$ .

4. Sihle has 8 pens. Tariro has 7 pens. Altogether they have  $\square$  pens.

5. The sum of 9 and 4 is  $\square$ .

6. 11 count on 5 =  $\square$ .

7. 3 count on 16 =  $\square$ .

8. 8 bananas and 7 bananas make  $\square$  bananas.

9. The sum of 10 and 8 is  $\square$ .

10. 12 and 8 altogether is  $\square$ .

### Practice Exercise 4

Use a calculator or cellphone or computer to do the following:

1.  $11 + 2 + 5 = \boxed{\phantom{0}}$
2.  $19 + 1 = \boxed{\phantom{0}}$
3.  $0 + 18 + 2 = \boxed{\phantom{0}}$
4.  $8 + 3 + 7 = \boxed{\phantom{0}}$
5.  $17 + 3 = \boxed{\phantom{0}}$
6.  $16 + 4 = \boxed{\phantom{0}}$
7.  $13 + 4 + 3 = \boxed{\phantom{0}}$
8.  $12 + 5 + 3 = \boxed{\phantom{0}}$
9.  $0 + 20 = \boxed{\phantom{0}}$
10.  $20 + 0 = \boxed{\phantom{0}}$

### Practice Exercise 5

Use a calculator:

1.  $3 + 12 = \boxed{\phantom{0}}$
2.  $13 + 2 = \boxed{\phantom{0}}$
3.  $9 + 5 = \boxed{\phantom{0}}$
4.  $11 + 0 = \boxed{\phantom{0}}$
5.  $0 + 6 = \boxed{\phantom{0}}$
6.  $14 + 1 = \boxed{\phantom{0}}$
7.  $8 + 4 = \boxed{\phantom{0}}$
8.  $11 + 4 = \boxed{\phantom{0}}$

9. Eve has 13 sweets. Thembu has 2 sweets.

Altogether they have  $\boxed{\phantom{0}}$  sweets.

10. Tisa has 4 apples. Mother gave him 8 more.

He now has  $\boxed{\phantom{0}}$  apples.

## Assessment test

1.  $10 + 6 = \square$
2. 10 count on 5 gives  $\square$
3.  $9 + 7 = \square$
4.  $11 + 8 = \square$
5.  $5 + 11 = \square$
6. 11 count on 4 =  $\square$
7. The sum of 15 and 5 is  $\square$
8. 10 and 9 altogether is  $\square$
9. John has 13c and Tapiwa has 7c. They have a total of  $\square$  cents.
10. 17kg and 3kg make  $\square$  kg.

**UNIT  
25**

# Subtraction (without exceeding 20)

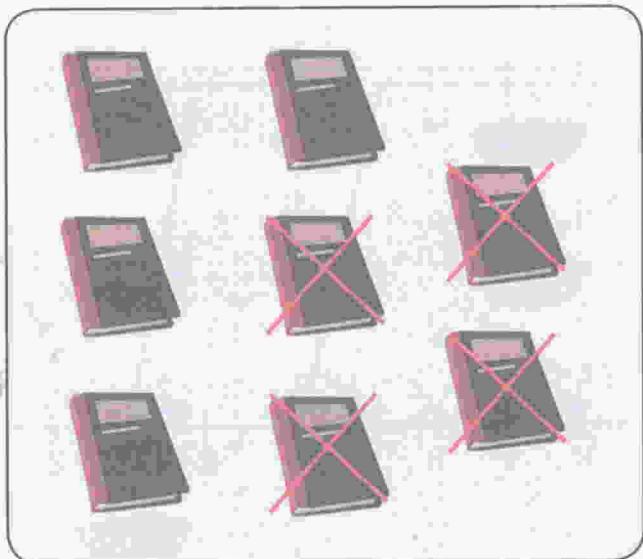
## Flashback

In Unit 24 you used a calculator to do addition. In this Unit you will use a calculator to do subtraction.

### Key words

subtract    take away    difference

## Take away



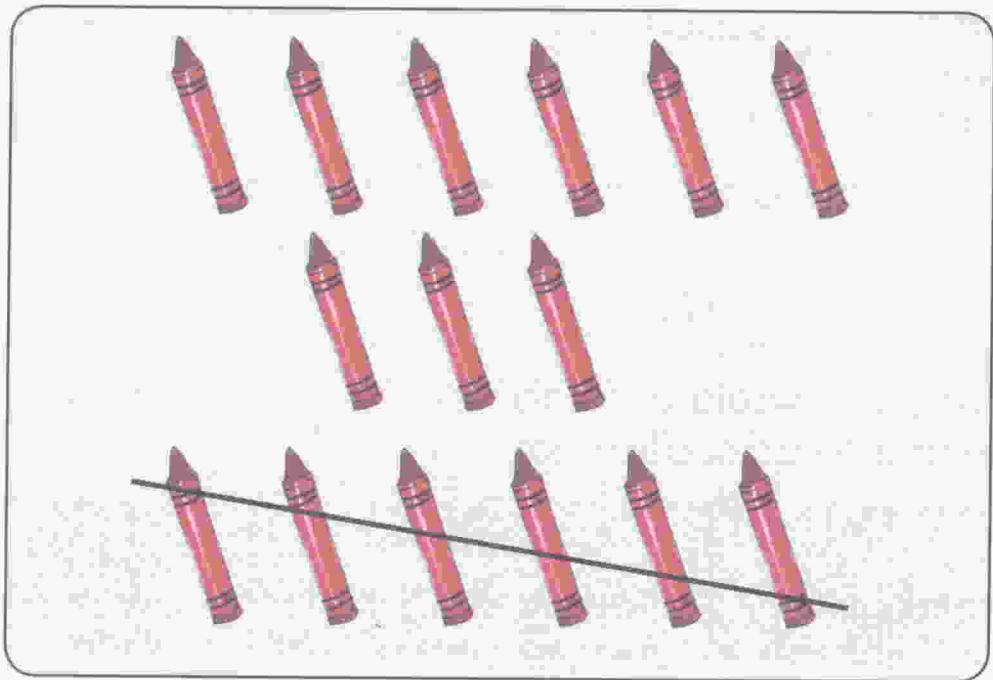
8 books  
8  
8

take away  
take away  
-

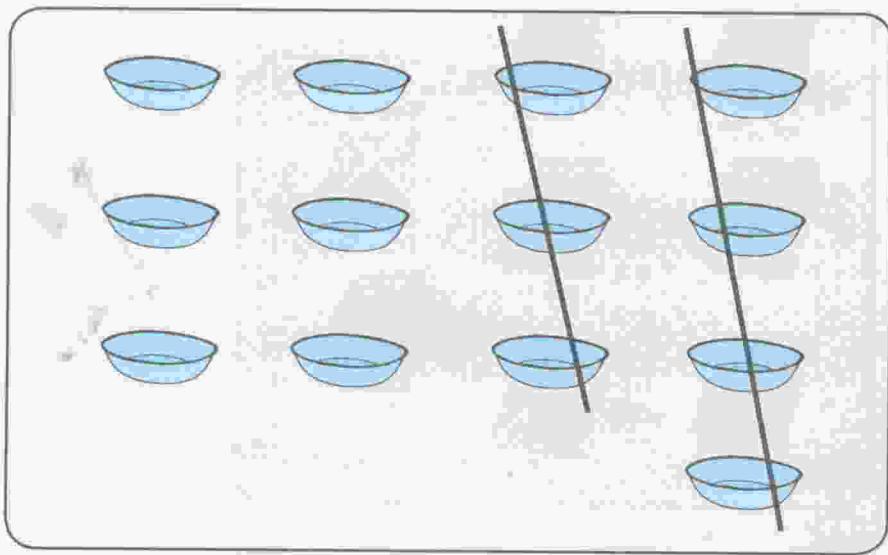
4 books  
4  
4

is  
is  
=

4 books  
4  
4



$$\begin{array}{r}
 15 \text{ red pens} \\
 - 15 \\
 \hline
 15
 \end{array}
 \quad \begin{array}{l}
 \text{take away} \\
 \text{take away} \\
 \hline
 -
 \end{array}
 \quad \begin{array}{r}
 6 \text{ red pens} \\
 6 \\
 \hline
 6
 \end{array}
 \quad \begin{array}{l}
 \text{is} \\
 \text{is} \\
 \hline
 =
 \end{array}
 \quad \begin{array}{r}
 9 \text{ red pens} \\
 9 \\
 \hline
 9
 \end{array}$$



$$13 \quad - \quad 7 \quad = \quad \boxed{\phantom{0}}$$

13 plates remove 7 plates. Count the plates left.  
The answer is 6.

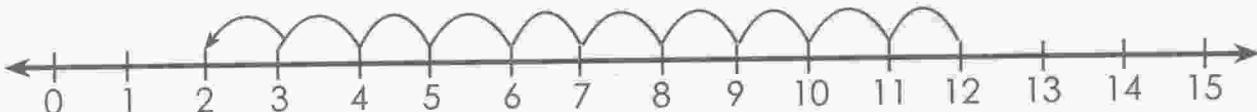
### Practice Exercise 1

Do the following.

1. 14 bags of mealie meal take away 12 bags =
2. 15 packets of salt take away 15 packets of salt =
3. 12 mealie cobs take away 5 mealie cobs =
4. 9 bottles of milk take away 5 bottles of milk =
5. 11 bottles of oil take away 3 bottles of oil =
6. 15 cents take away 9 cents =
7. 10kg take away 7kg =
8. 9 goats takeaway 3 goats =

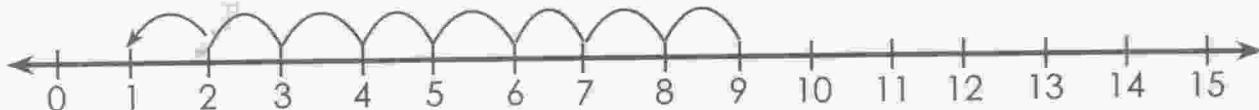
### Count back

(a)  $12 - 10 = \square$



Hence  $12 - 10 = 2$

(b)  $9 - 8 = \square$



$9 - 8 = 1$

(v) 13 count back 2 is



$13 - 2 = 11$

## Practice Exercise 2

Do the following.

1.  $15 - 10 = \boxed{\phantom{00}}$

3.  $17 - 12 = \boxed{\phantom{00}}$

5.  $18 - 18 = \boxed{\phantom{00}}$

7.  $10 - 3 = \boxed{\phantom{00}}$

9.  $18 - 10 = \boxed{\phantom{00}}$

2.  $18 - 2 = \boxed{\phantom{00}}$

4.  $15 - 10 - 3 = \boxed{\phantom{00}}$

6.  $16 - 10 - 3 = \boxed{\phantom{00}}$

8.  $17 - 16 = \boxed{\phantom{00}}$

10.  $16 - 16 = \boxed{\phantom{00}}$

## Words that mean subtraction

Take away, minus, from and count back are words that mean the same as subtraction.

## Practice Exercise 3

1. 6 take away 2 =  $\boxed{\phantom{00}}$

2. 9 take away 7 =  $\boxed{\phantom{00}}$

3. 20 minus 11 =  $\boxed{\phantom{00}}$

4. 13 from 20 =  $\boxed{\phantom{00}}$

5. 9 from 17 =  $\boxed{\phantom{00}}$

Use the number line to do the following;



6. From 20 count back 5

7. From 19 count back 10

8. From 17 count back 9

9.  $16 - 7$

10.  $13 - 5$

### Practice Exercise 4

Use a calculator.

1.  $8 - 4 =$
2.  $9 - 5 =$
3.  $5 - 3 =$
4.  $12 - 10 =$
5.  $13 - 12 =$
6.  $19 - 13 =$
7.  $18 - 14 =$
8.  $20 - 10 =$

### Assessment test

1. 10 books take away 6 books makes
2. 20 cents take away 9 cents makes
3. 18 hens take away 12 hens makes
4. 7 from 19 =
5. 16 from 18 =
6.  $13 - 9 =$
7.  $8 - 8 =$
8.  $10 - 10 =$
9.  $15 - 13 =$
10.  $20 - 17 =$

**Flashback**

Show that air takes up space.

**Key words**

air    space    balloon    blow

**Air takes space**

Air is around us.

We cannot see air.

We cannot touch air.

How then do we know air is there?

**Activity 1**

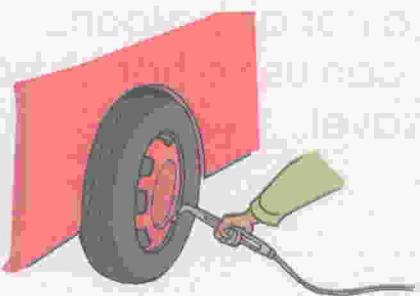
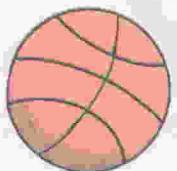
Look at the picture.

Blow air into a plastic bag or a balloon as shown.



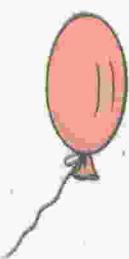
## Practice Exercise 1

Look at the pictures.



1. What is inside the ball?
2. What is inside the balloon?
3. What is inside the the full tyre?
4. Name two items we can keep air in?

## Activity 1



1. Draw balloon patterns in your book and colour them.

## Using air transport

Look at the picture.  
It is a hot air balloon.  
We can use a hot air balloon  
to travel.



### Activity 2

Watch videos showing how a hot air balloon is flown.  
Draw your own hot air balloon and colour it.

### Assessment test

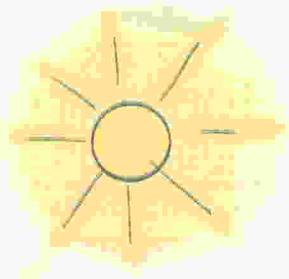
1. Write 5 materials which can be used to keep air.
2. Which tank is heavier; an empty 5kg gas and a full gas tank?

**Flashback**

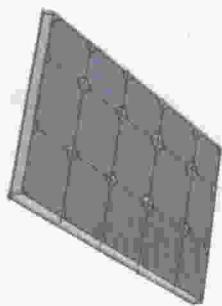
Learners use electricity to move objects.

**Key words**

energy   motion   toy   electrical   battery

**Solar energy**

Sun



solar panel



battery

Electricity from the sun is called solar energy.

Solar energy is saved in batteries.

When we place a battery in a toy it can move.

Batteries store energy. Some batteries can be recharged.

**Practice Exercise 1**

Complete:

- Energy from the sun is called \_\_\_\_.
- What do you need to make a toy car move?

## Activity 1

Connect a battery to a toy to make it move. Collect various types of toys and make them move.

## Practice Exercise 2

Look at the pictures.



Do you know the toy laptop talks?

The toy car also moves?

Why do you think that is so?

## Assessment test

1. A battery \_\_\_\_\_ energy. (stores, does not store)
2. A —— is connected to a toy to make it move. (energy, battery)
3. Which one is not a member of this group?  
 toy car       toy tractor       a stone , a doll

**Flashback**

Compare speeds using the words, slower and faster.

**Key words**

slower    faster    quicker

**Activity 1**

Divide yourselves into three groups. Using various containers such as tins, bottles and cardboard boxes, compete filling the containers. Find out who was quicker and who was slower.

**Activity 2**

In groups of 6 compete running 50m and 75m. Find out who is faster. Find out who is slower.



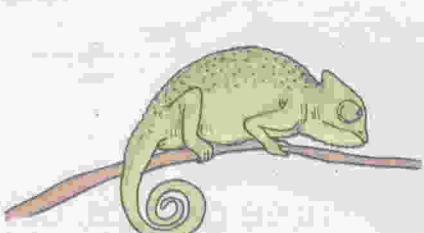
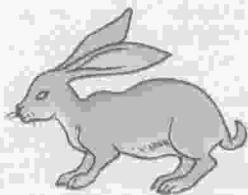
### Activity 3

1. Compete reading a given passage.
2. Compete filling buckets with water.
3. Find out who is faster or who is slower.

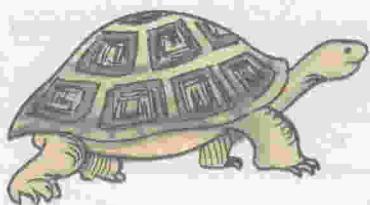
### Practice Exercise 1

Which animal runs faster?

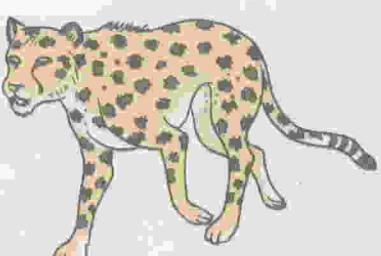
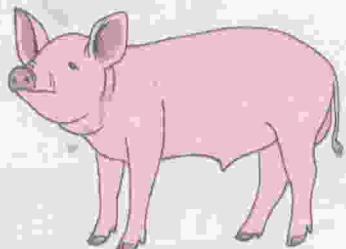
1.



2.



3.



4.



## Activity 4



Playing games – learners play the game *zvamutsana tsuro nembwa*. A dog runs after the hare.

### Assessment test

1. A cheetah runs \_\_\_\_\_ than a pig. (slower/faster)
2. A tortoise moves \_\_\_\_\_ than a rat. (slower/quicker)
3. A bicycle is \_\_\_\_\_ than a car. (quicker/slower)
4. An ox drawn cart is \_\_\_\_\_ than a bicycle.  
(slower/faster)
5. A hare is \_\_\_\_\_ than a chameleon. (quicker/slower)

**Flashback**

Count from 1 to 20.

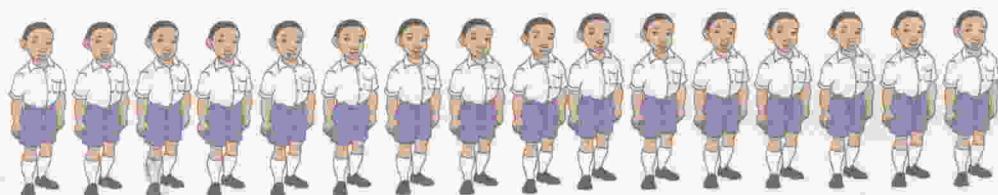
Also count from 1 to 30.

**Key words**

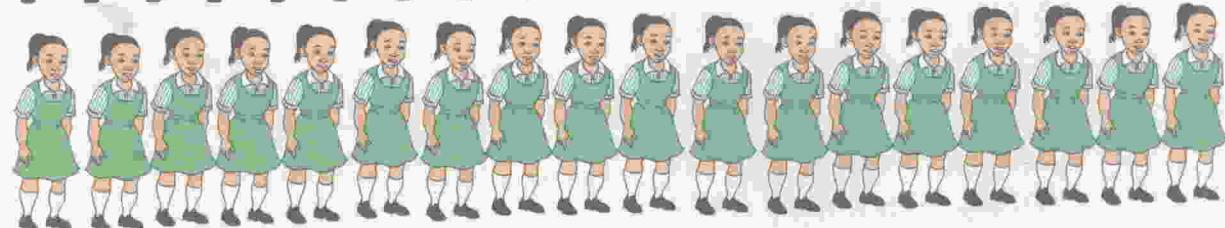
count    smallest    largest    biggest

**How many?**

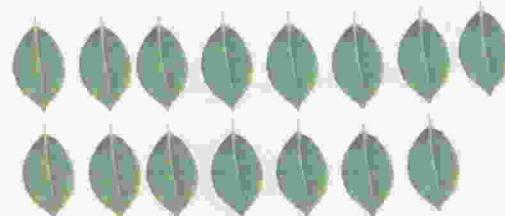
1.



2.



3.



4.

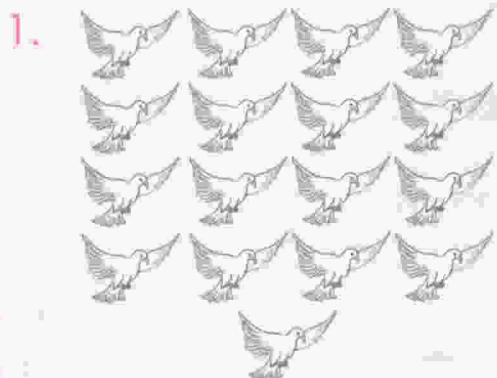


5.

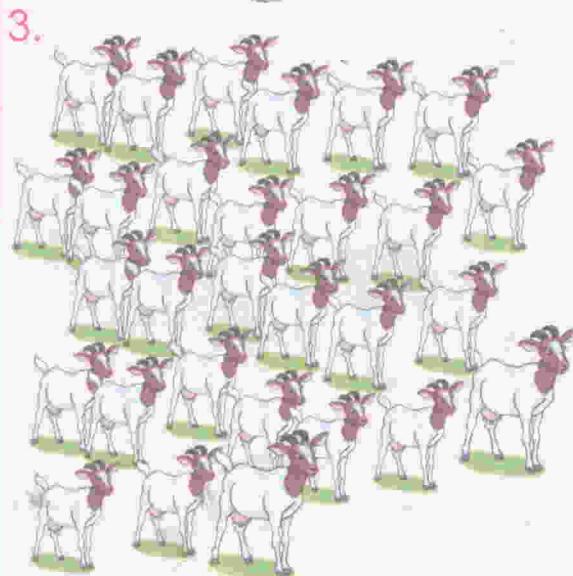
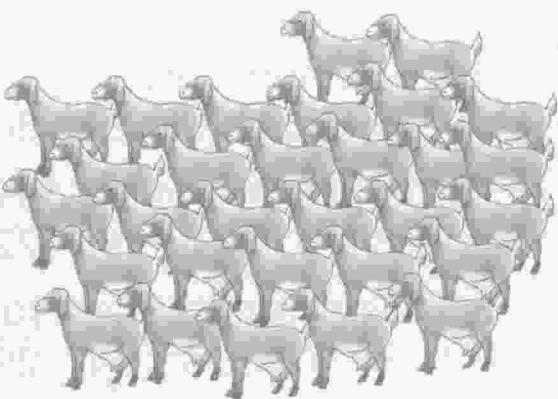


## Practice Exercise 1

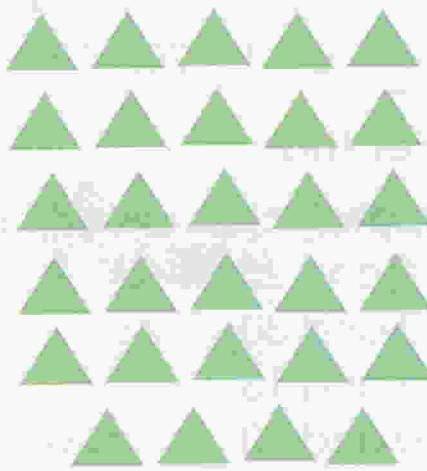
How many members are in each set?



2.



4.



## Number order

Arrange the numbers in correct order;

- (a) 13; 9; 17; 25; 20; 29

**Answer:** 9; 13; 17; 20; 25; 29

- (b) Arrange from largest to smallest

28; 2; 0; 20; 18; 17; 26

**Answer:** 28; 26; 20; 18; 17; 2; 0

## Practice Exercise 2

1. Say the numbers  
0; 10; 20; 30
2. Say the numbers  
5; 10; 15; 20; 25; 30
3. Arrange from lowest to highest  
14; 8; 20; 15; 30; 22
4. Arrange from highest to lowest  
12; 6; 18; 26; 14; 29
5. Arrange from highest to lowest  
30; 0; 1; 20; 15; 10

## Greater than

1. Say which number is bigger  
15 and 25      Answer: 25  
13 and 30      Answer: 30  
29 and 13      Answer: 29  
10 and 20      Answer: 20  
1 and 25      Answer: 25  
25 and 0      Answer: 25
2. We say 25 > 15  
> Means is greater than

## Practice Exercise 3

Now complete the following;

- |    |    |                      |    |    |    |                      |    |
|----|----|----------------------|----|----|----|----------------------|----|
| 1. | 30 | <input type="text"/> | 13 | 2. | 29 | <input type="text"/> | 13 |
| 3. | 20 | <input type="text"/> | 10 | 4. | 25 | <input type="text"/> | 1  |
| 5. | 25 | <input type="text"/> | 0  |    |    |                      |    |

## Less than



**Example:** 2 is less than 5

or

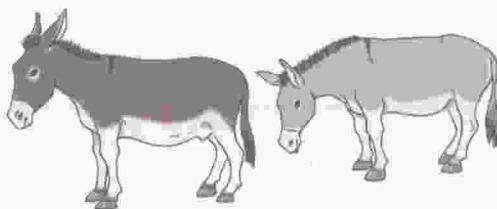
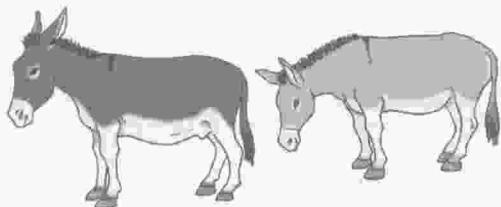
2 is smaller than 5

$$2 < 5$$

**Example:** How many numbers are less than 5?

**Answer:** 0, 1, 2, 3 and 4

## Equal to



a) 2 donkeys      = 2 donkeys  
2                  = 2

Complete the following using  $<$ ,  $>$  or  $=$ .

6. 12  17

7. 4  4

8. 9  10

9. 14  28

10. 25  30

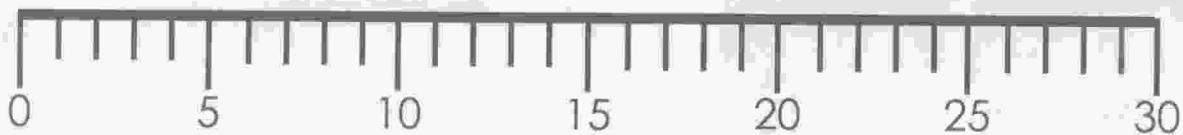
### Practice Exercise 4

Complete the following using  $>$ ,  $=$  or  $<$ .

1. 8  12
2. 10  21
3. 29  30
4. 30  30
5. 21  21
6. 0  0

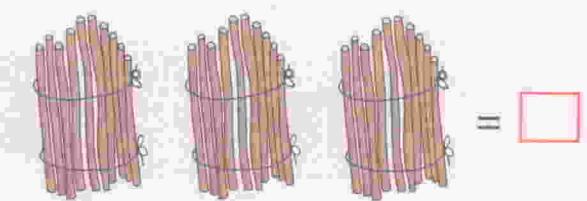
### Practice Exercise 5

Using a number line count in 5



1. 10  20  30
2. 30  25
3. 20  22  24  26
4. 0  5  10  15

5.



## Assessment test

1.



How many 10c coins?

2. Arrange from smallest to biggest.

27 19 24 18 20 30 29 28 25 21 23 22

3. 5    10        20        30

4. Arrange from biggest to smallest.

20 21 30 28 27 25

Fill in the following using >, or <.

5. 25        15

6. 28        30

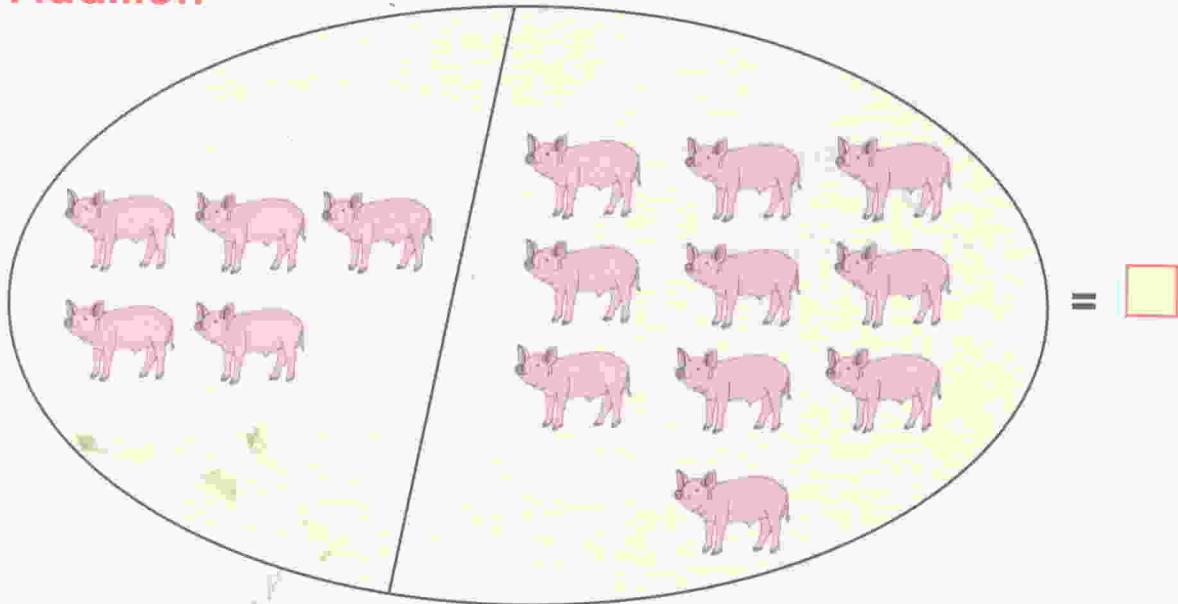
7. 19        29

**Flashback**

We counted numbers up to 30. In this Unit you will learn about addition and subtraction.

**Key words**

add    subtract    sum    difference

**Addition**

5 pigs    add    10 pigs is

$$5 \text{ add } 10 = 15$$

$$5 + 10 = 15$$



15 count on 6

$$15 \text{ count on } 6 = 21$$

$$15 + 6 = 21$$

### Practice Exercise 1

Use calculators.

1.  $16 + 10 = \boxed{\phantom{00}}$

2.  $20 + 5 = \boxed{\phantom{00}}$

3.  $17 + 7 = \boxed{\phantom{00}}$

4.  $30 + 0 = \boxed{\phantom{00}}$

5.  $0 + 1 + 29 = \boxed{\phantom{00}}$

Use the number line to work out the questions below

6.  $14 + 7 = \boxed{\phantom{00}}$

7.  $23 + 4 = \boxed{\phantom{00}}$

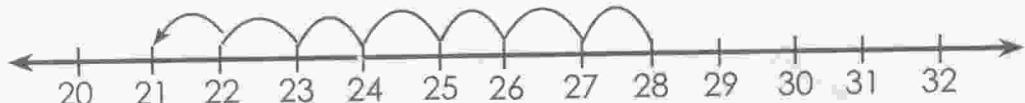
8.  $24 + 2 = \boxed{\phantom{00}}$

9.  $20 + 9 = \boxed{\phantom{00}}$

10.  $27 + 1 = \boxed{\phantom{00}}$

### Subtraction

**Example:** 28 count back 7



**Answer:** 28 count back 7 = 21

$$28 - 7 = 21$$

### Practice Exercise 2

Use a calculator.

1.  $28 - 15 = \boxed{\phantom{00}}$

2.  $30 - 10 = \boxed{\phantom{00}}$

3.  $26 - 9 = \boxed{\phantom{00}}$

4.  $30 - 0 = \boxed{\phantom{00}}$

5.  $27 - 13 = \boxed{\phantom{00}}$

Use the number line

6. 13 count back 7 is  $\boxed{\phantom{00}}$

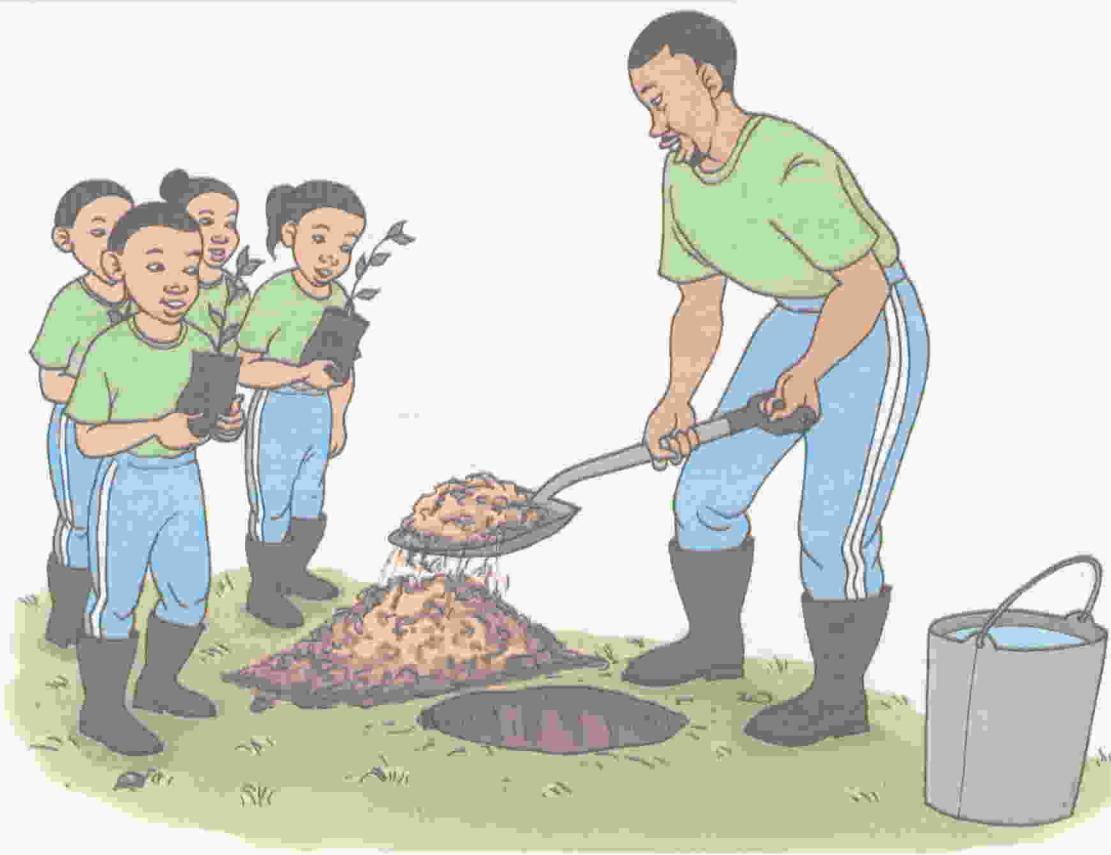
7. 27 count back 14 is  $\boxed{\phantom{00}}$

8. 17 take away 9 is  $\boxed{\phantom{00}}$

9. The difference between 19 and 10 is  $\boxed{\phantom{00}}$

10. From 16 count back 13 is  $\boxed{\phantom{00}}$

## Addition and Subtraction stories



Teacher has 30 tree plants.

Luke planted 6 trees.

Mercy planted 9 trees.

Ben planted 4 trees.

1. How many trees were planted altogether?
2. How many trees were not planted?

**Answers:**

1.  $6 + 9 + 4 = 19$  trees were planted.
2.  $30 - 19 = 11$  trees were not planted.

### Practice Exercise 3

1. Peter has 25 mangoes. Paidamoyo has 3 mangoes. Altogether they have — mangoes.
2. Chenai has 19 pens. Ruvimbo has 11 pens. Altogether they have — pens.
3. 17 count on 13 is —.
4. 29 count back 12 is —.
5. 30 pumpkins take away 9 pumpkins is —.
6. Taurai has 25 cents. He gives Richard 19 cents. He now has — cents left.

### Practice Exercise 4

Use calculator.

1.  $12 + 9 =$

2.  $19 + 11 =$

3.  $27 + 3 =$

4.  $10 - 9 =$

5.  $30 - 19 =$

6.  $18 - 13 =$

7.  $25 - 15 =$

8.  $26 - 21 =$

## Activity 1: Addition and Subtraction game



### Assessment test

1. 24 count on 3 =
2. 22 count on 2 =
3. The sum of 10 and 15 is =
4.  $17 + 13 =$
5. 30 count back 9 =
6. 27 count back 18 =
7.  $30 - 19 =$
8. 20 sweets take away 18 sweets =
9. Anna has 25 cents. She lost 15 cents. She has  cents.

## Flashback

Machines make work easier.

### Key words

machine repair work easy easier

## A machine



A machine is a tool that makes work easier.

## Practice Exercise 1

Complete:

1. A machine is a \_\_\_\_\_. (cup, tool)
2. List 5 examples of machines.

## Using machines

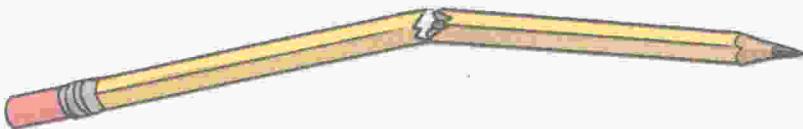


## Activity 1

1. Discuss on how to use machines.
2. Dramatise using the machines given by your teacher.

## Mending machines

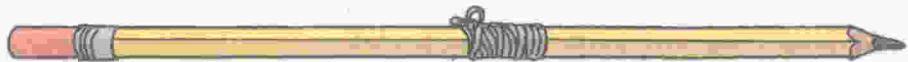
Machines can break down.



Look at the pencil above.

It is broken.

How do you mend the broken pencil.



### Activity 2

1. Discuss on how to mend machines.
2. Bring a broken machine to class.
3. Mend them.

## Making models of simple machines

Sketch the design of the machine you want to model.

Use clay or paper marche to model the design.

Display your model in class.

### Activity 3

1. Discussion on materials used in making simple machines.
2. Constructing models of simple machines.

### Assessment test

1. List 4 materials used in making simple machines.
2. List 5 examples of simple machines.
3. A — makes work easy .
4. A pencil sharpener is an example of a —.
5. My button has fallen off I use a — and — to mend it.  
**(machine, needle, wood, metal, plastic, rubber, thread, bottle opener, tin opener, cooking stick, spoon, knife, scissors)**

**Flashback**

Measure and compare capacity of containers using non-standard units.

**Key words**

volume      capacity      most      least

**How much does it hold?**

Volume is the space taken up by an object.

Capacity is the space taken up by a container.

## Practice Exercise 1

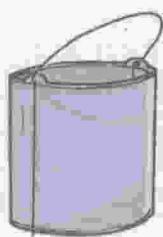
How many cups fill the jug?

1.



How many cups fill the bottle?

2.



How many cups fill the container?

3.



How many cups fill the container?

4.



## Practice Exercise 2

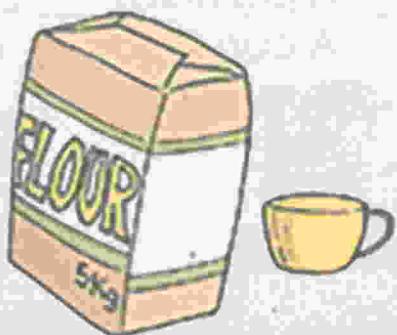
Compare capacity using terms more, less, most, least.

1.



The glass holds \_\_\_\_ than the jug.

2.



The cup holds \_\_\_\_ than the flour packet.

3.



The teapot holds \_\_\_\_ than the teacup.

4.



The suitcase holds \_\_\_\_ than the bag.

5.



- (a) The bucket holds the \_\_\_\_.
- (b) The cup holds the \_\_\_\_.

### Practice Exercise 3

Compare capacity using terms less than and more than.

1. A cup holds \_\_\_\_ contents than a bottle. (more, less)
2. A jug holds \_\_\_\_ contents than a trough. (less, more)
3. A cup holds \_\_\_\_ contents than a teapot. (less, more)
4. A mug holds \_\_\_\_ contents than a jug. (more, less)
5. A \_\_\_\_ holds the least contents. (cup, jug, mug)

### Comparing capacity

#### Practice Exercise 4

Which container holds more?

1. A jug holds \_\_\_\_ than a water glass.
2. A small sauce pan holds \_\_\_\_ than a large bowl.
3. A tomato sauce bottle holds \_\_\_\_ than a 2 litre bucket.
4. A large pot holds \_\_\_\_ than a medium sized bowl.

Which container holds less?

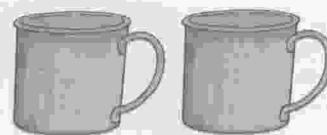
5. A measuring cup holds \_\_\_\_ than a bucket.
6. A jug holds \_\_\_\_ than a spoon.
7. A large saucepan holds \_\_\_\_ than a teacup.
8. A waterglass holds \_\_\_\_ than a fish tank.
9. A Dish holds \_\_\_\_ a measuring cup.
10. A 2 litre milk container holds \_\_\_\_ than a 1 litre milk container.

#### Activity 1

Bring different containers to school. Go outside and measure sand to see which container holds more.

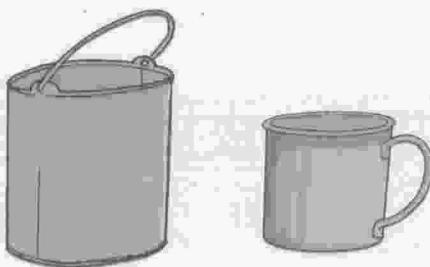
## Assessment test

1. How many cups does the jug fill?



2. A jug holds \_\_\_\_ contents than a cup. (less, more)

3. A cup holds \_\_\_\_ contents than two cups. (more, less)



4. A bucket holds \_\_\_\_ contents than a cup. (more, less)

5. A cup holds \_\_\_\_ contents than a tin. (less, most)



6. A cup holds the \_\_\_\_\_. (least, most)

**UNIT  
33**

# Count to 40

## Flashback

Count to 30

### Key words

count smallest highest nearest estimate

## How many?



Count the number line.

### Practice Exercise 1

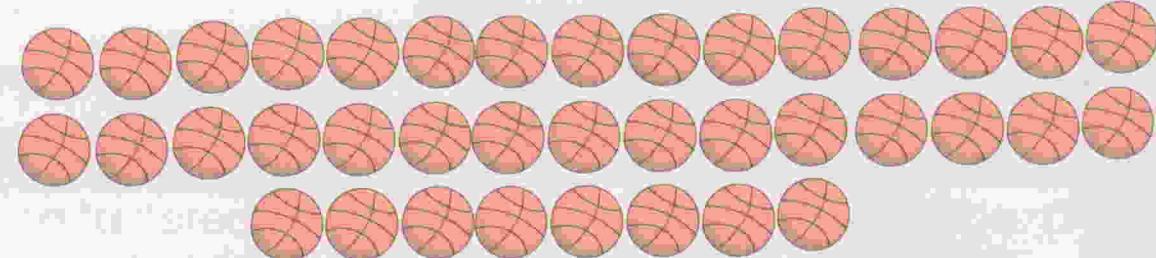
1.



2.



3.



## Practice Exercise 2

Say the following numbers:

1.

20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

2.

30	31	32	33	34	35	36	37	38	39	40
----	----	----	----	----	----	----	----	----	----	----

3.

25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

4.

39	38	37	36	35	34	33	32	31	30	29	28	27	26	25
----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

5.

35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20
----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

Count numbers



## Number sequence

### Example:

- (a) Arrange from lowest to highest.  
37; 35; 40; 38; 36

**Answer:** 35; 36; 37; 38; 40

- (b) Arrange from highest to lowest.  
8; 29; 39; 20; 18

**Answer:** 39; 29; 20; 18; 8

### Practice Exercise 3

Arrange from lowest to highest.

1. 3; 0; 27; 40; 28
2. 9; 17; 6; 1; 33; 3
3. 32; 7; 2; 19; 23; 4

Arrange from highest to lowest.

4. 38; 21; 9; 13; 24; 4
5. 8; 17; 2; 29; 31; 25

## Comparing numbers

- (a) Say which one is smaller  
19 and 21

We write **19 < 21**

(b) Say which one is bigger

28 and 40

40 is bigger than 28

**40 > 28**

(c) Compare the numbers

17 and 17

We say **17 = 17**

#### Practice Exercise 4

Complete by putting  $>$ ,  $<$  or  $=$ .

1. 7  17

2. 40  20

3. 29  29

4. 25c  20c

5. 10c  10c

#### Practice Exercise 5



Say which number is nearer 10

1. 7 and 4    2. 8 and 3

Choose the number which is nearer to 10.

3. 4 and 8    4. 6 and 9    5. 1 and 5

6. Round off 7 to the nearest 10.

7. Round off 4 to the nearest 10.

## Assessment test

1. Count the following



2. Fill in the missing numbers

27 28  30 31 32   35

3. Arrange from smallest to biggest.

33 38 37 34 36

4. Arrange from biggest to smallest.

28 27 25 29 26

5. Put > or < to fill in.

(a) 39  40      (b) 33  23

6. Choose the number which is nearer to 10.

(a) 3 and 7      (b) 6 and 9.

**Flashback**

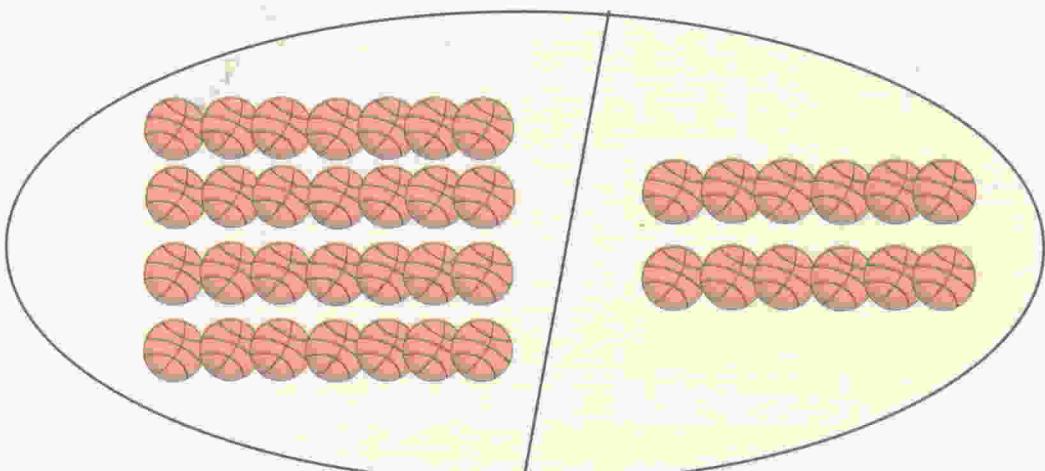
In this Unit, you will learn about addition and subtraction of numbers up to 40.

**Key words**

add    subtract    sum    difference  
count on    count back

**Addition****Example 1**

$$20 + 15 = 20 \text{ count on } 15 \\ = 35$$

**Example 2**

$$28 + 12 = 40$$

### Practice Exercise 1

1.  $30 + 5 = \square$

2.  $20 + 20 = \square$

3.  $17 + 12 = \square$

4.  $11 + 13 = \square$

5.  $25 + 10 = \square$

6.  $22 + 13 = \square$

7. 24 count on 10 is  $\square$

8. 18 and 20 altogether is  $\square$

### Using a calculator

Use a calculator or cellphone or computer to work out

$5 + 12 + 17 = \square$

#### Steps

Put the machine on

- Press 5
- Press +
- Press 12
- Press +
- Press 17
- Press =  $\square$



Read the answer on the machine

**Answer** is 34.

Now do the following:

9.  $8 + 9 + 22 = \square$

10.  $13 + 19 = \square$

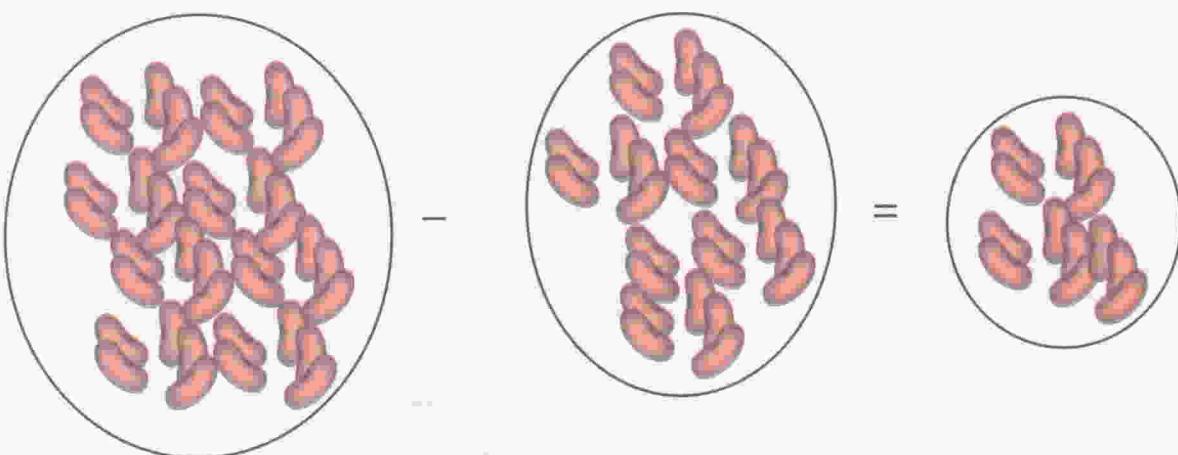
11.  $35 + 4 = \square$

12. 33 add on 6 is

13. 31 and 8 makes

## Subtraction

### Examples



1. 40 brown bean seeds take away 27 brown bean seeds = 13 brown bean seeds

$$40 - 27 = 13$$



2. 39 count back 7 =  $39 - 7 = 32$

### Practice Exercise 2

- |  |   |                        |
|--|---|------------------------|
| 1. $39 - 16 = \square$                     | 2. $37 - 22 = \square$                      | 3. $25 - 11 = \square$ |
| 4. $22 - 10 = \square$                     | 5. $39 - 27 = \square$                      | 6. $17 - 6 = \square$  |
| 7. 35 count back 7 is <input type="text"/> | 8. 38 count back 22 is <input type="text"/> |                        |

Use a calculator or cell phone or computer to work out.

$$37 - 29 = \square$$

- Start the machine
- Press 37
- Press –
- Press 29
- Press =

Read answer on the machine

**Answer** is 8

Now do the following

9.  $38 - 26 = \square$

10.  $37 - 23 - 7 = \square \square$

11.  $21 - 10 - 9 = \square$

12. 40 cows take away 29 cows is \_\_\_\_.

13. Norah has 18 sweets. She eats 4 sweets. She has \_\_\_\_\_ sweets left.

### Addition and subtraction stories



#### Example

Mary had

20 sweets

She got

15 more

Now she has

35 sweets.

### Practice Exercise 3

1. Sipho's hens laid 24 eggs  
Monica's hens laid 16 eggs  
The hens laid  eggs
  
2. Paidamoyo has 35 oranges  
She gets 4 more  
Paidamoyo now has  oranges
  
3. Kudzai has 25 cents  
He spends 19 cents  
Kudzai gets  change
  
4. Linda has 40 c  
She spends 27 c  
Linda gets  c
  
5. Eliot has 18 cards  
He lost 4 cards  
Now he has  cards

### Practice Exercise 4

Use calculator

- |  |  |
|--|--|
| 1. $7 + 2 + 1 =$ <input type="text"/>  | 2. $5 + 8 + 13 =$ <input type="text"/> |
| 3. $9 + 4 + 28 =$ <input type="text"/> | 4. $16 + 14 =$ <input type="text"/>    |
| 5. $8 - 7 =$ <input type="text"/>      | 6. $10 - 6 =$ <input type="text"/>     |
| 7. $19 - 14 =$ <input type="text"/>    | 8. $38 - 17 =$ <input type="text"/>    |

## Activity 1: Addition and Subtraction game

Play nhodo with your friends.

### Assessment test

1.  $19 + 11 + 2 = \square$

2.  $29 + 10 = \square$

3. 18 count on 9

4.  $39 - 7 = \square$

5. 25 count on 15

6. 27 count back 13

7. Nomsa has 40 sweets  
She eats 18 sweets  
She has  $\square$  sweets left

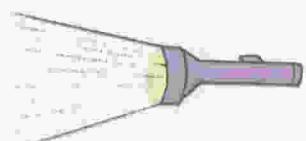
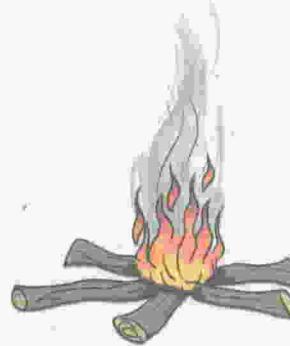
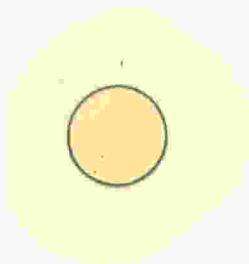
**Flashback**

How do we know that it is now night? What do we do at night?  
Which lights do we see at night.

**Key words**

light

travel

**Sources of light**

The sun gives out heat and light.

We have other sources of light, such as, candle, torch, fire, stars and the moon.

Close your eyes. What do you see?

When there is no light you cannot see anything.

## Practice Exercise 1

Do this:

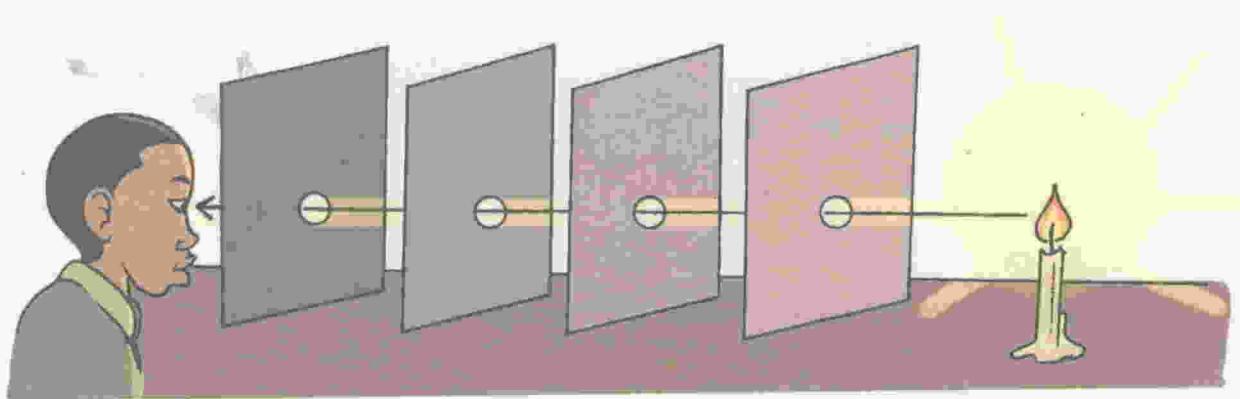
1. Light comes from \_\_\_\_ and \_\_\_\_.
2. You cannot see without \_\_\_\_\_. (light/ darkness)
3. List three sources of light.
4. Draw a source of light and colour it.

## Light travels in a straight line

Set up an experiment.

### Materials

3 cardboard  
small piece of modeling clay  
candle  
hole puncher  
ruler



## Practice Exercise 2

Look at the pictures and answer the following questions.

1. We need \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_ to carry out the experiment.
2. When the boards are not in a straight line we do not see \_\_\_\_\_.
3. Light travels in a \_\_\_\_\_.

(cardboards, modelling clay, flashlight, hole puncher, ruler, light, straight line)

## Assessment test

1. We have light during the \_\_\_\_\_.
2. How do we know the sun gives heat?
3. Energy from the sun is called \_\_\_\_\_.
4. \_\_\_\_\_ travels in a straight line.
5. Sources of light are \_\_\_\_\_.

(torch, candle, light, by the heat we feel, day, solar).

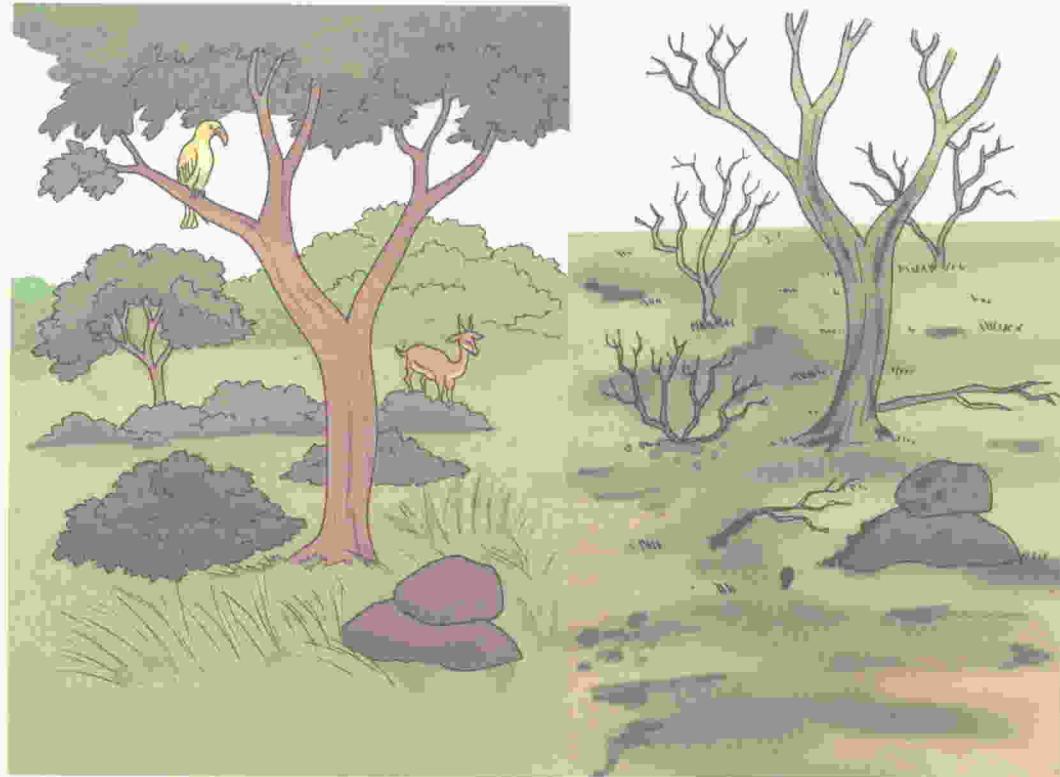
**Flashback**

Fire produces light and heat.

What do we use fire for?

**Key words**

fire    put out    fire extinguisher    sand bucket

**Fire is dangerous**

Fire is very dangerous.

It can kill or harm people and animals.

Fire destroys property and vegetation.

## Practice Exercise 1

Complete:

1. \_\_\_\_\_ is dangerous.
2. Fire can kill or harm \_\_\_\_\_ and \_\_\_\_\_.
3. Fire destroys \_\_\_\_\_ and \_\_\_\_\_.

## Fire can be put out



Fire can be put out.

We put out fire using water, a fire extinguisher, soil in a sand bucket, branches and blankets.

When there is a fire rush to tell an adult.

Do not put out a fire on your own.

## Practice Exercise 2

1. When there is a fire \_\_\_\_\_ an adult.
2. \_\_\_\_\_ can be put out.
3. We can use \_\_\_\_\_ to put out a fire.

### Activity 1

View videos of different types of fire.  
Dramatise how to put out fire.

### The fire extinguisher

Look at the picture of a gadget. It is called a fire extinguisher.

A fire extinguisher is used to put out fire.

They are usually kept at a point used for getting into a building.



### Activity 2

Find out where a fire extinguisher is kept at your school.

### Assessment test

1. We can put out fire using \_\_\_\_\_ and \_\_\_\_\_.
2. A fire extinguisher is a — used to put out fire.
3. Draw a fire extinguisher and colour it.

**UNIT**

**37**

# Count to 50

## Flashback

Count from 0 to 40.

### Key words

count on      count back

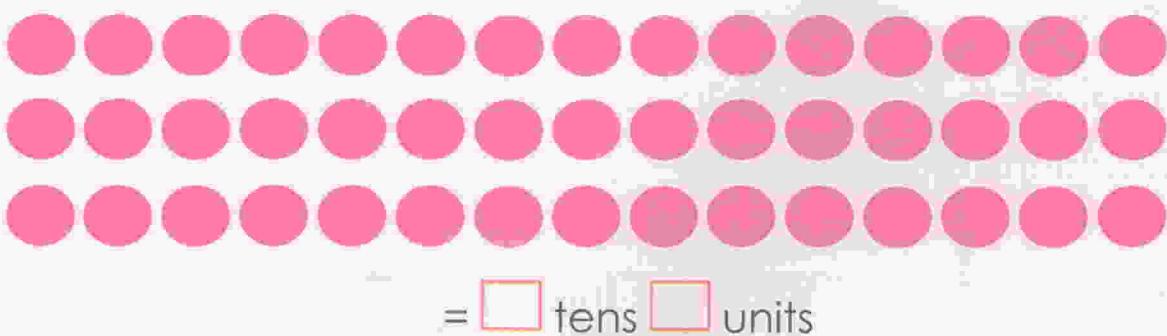
## How many?

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50

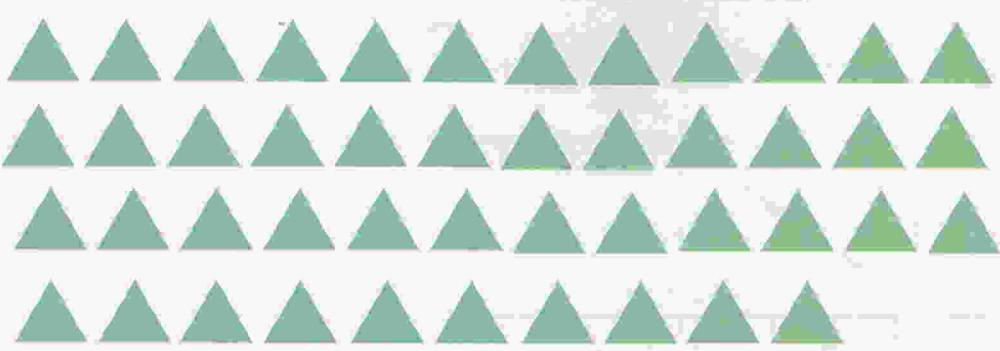
## Practice Exercise 1

How many members are in the set? Write them in tens and units.

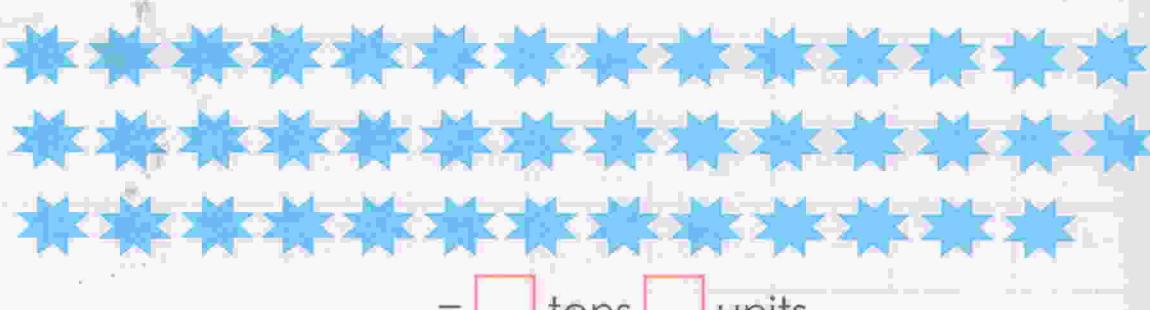
1.



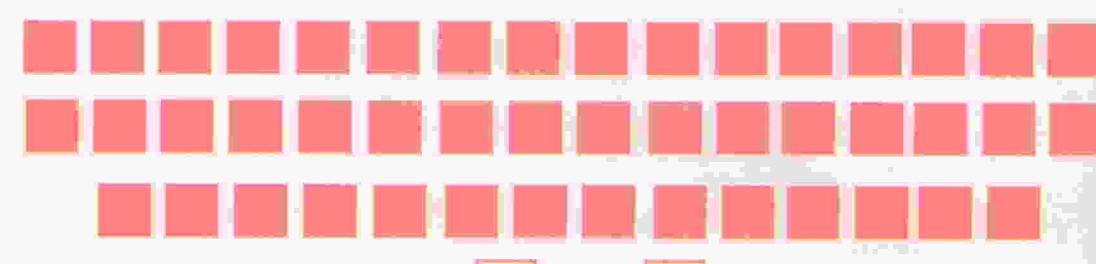
2.



3.



4.



## Number sequence

### Examples:

1. Arrange from lowest to highest.  
32; 29; 50; 45; 49  
**Answer:** 29; 32; 45; 49; 50
2. Arrange from highest to lowest.  
46; 49; 33; 37; 21; 29  
**Answer:** 49; 46; 37; 33; 29; 21

### Practice Exercise 2

Arrange from lowest to highest.

1. 21; 16; 18; 13; 49; 43
2. 19; 27; 10; 7; 39; 46

Arrange from highest to lowest.

3. 50; 0; 12; 28; 4; 23
4. 19; 26; 13; 44; 31; 33

## Comparing numbers

Say which is greater 29 and 49.

**Answer:** 49

We say  $49 > 29$

Say which is smaller 45 and 35

**Answer:** 35

We say  $35 < 45$

Put  $>$ ,  $<$  or  $=$  to make the statement true.

36  49      **Answer:**  $36 < 49$

25  25      **Answer:**  $25 = 25$

50  45      **Answer:**  $50 > 45$

### Practice Exercise 3

Say which one is greater.

1. 45 and 26      2. 18 and 19      3. 0 and 50

Say which one is smaller.

4. 48 and 38      5. 26 and 36      6. 0 and 1

Put > < or = to make the statement true.

7. 17  21      8. 24  24      9. 29  39

10. 46  26

### Practice Exercise 4

Use the number line.

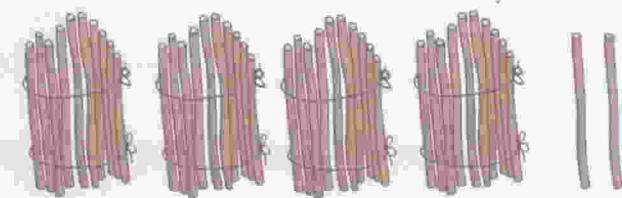


Round off to the nearest 10

1. 49      2. 24      3. 37      4. 8      5. 35  
6. 44      7. 46      8. 34

## Assessment test

1. Count the following.



2.

●	●	●	●	●	●	●	●	●	●
---	---	---	---	---	---	---	---	---	---

●	●	●	●	●	●	●	●	●	●
---	---	---	---	---	---	---	---	---	---

●	●	●	●	●	●	●	●	●	●
---	---	---	---	---	---	---	---	---	---

●	●	●	●	●	●	●	●	●	●
---	---	---	---	---	---	---	---	---	---

Put > or < to make the statement true.

3.

$48 \square 28$

4.

$39 \square 49$

5.

Round off to the nearest 10.

(a)  $41 = \square$

(b)  $49 = \square$

(c)  $19 = \square$

6.

Arrange from smallest to biggest.

49 38 45 43 41

7.

Arrange from biggest to smallest.

50 10 20 31 4 9 45

8.

$31 = \square$  tens  $\square$  units

9.

$47 = \square$  tens  $\square$  units

10.

$50 = \square$  tens  $\square$  units

**UNIT  
38**

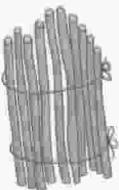
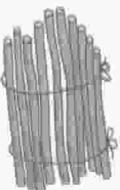
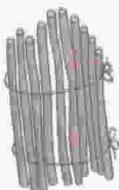
# Addition and Subtraction to 50

## Flashback

Count from 0 to 50.

### Key words

sum count on add to altogether difference subtract  
minus count back



3 Tens and 1 Unit  
We write    T U  
                  3 1

## Addition

(a)      T U  
        2 5  
+ 2 4  
\_\_\_\_\_

(b)      T U  
        2 6  
+ 1 3  
\_\_\_\_\_

### Practice Exercise 1

Do the following:

1. T U  
    3 2  
+ 1 5  
\_\_\_\_\_

2. T U  
    4 0  
+ 5  
\_\_\_\_\_

3. T U  
    2 7  
+ 1 1  
\_\_\_\_\_

4. T U  
    3 3  
+ 6  
\_\_\_\_\_

5. T U  
    1 2  
+ 2 5  
\_\_\_\_\_

## Addition stories

A jug holds  
A pot holds  
Altogether they hold

$$\begin{array}{r} \text{T U} \\ 23 \text{ cups} \\ + 4 \text{ cups} \\ \hline 37 \text{ cupfuls} \end{array}$$

### Practice Exercise 2

1. Thulani paid 40 cents for sweets.  
He paid 10 cents for bananas.  
Altogether he paid  cents.
2. Simukai had 14 pigeons. He bought 15 pigeons?  
How many pigeons did he then have?
3. 13 girls and 15 boys went to a party. How many children  
went to the party?
4. Makawana bought 23 toys and Lawrence  
bought 22 toys. How many toys did they  
buy altogether?
5. A farmer had 27 cows and 12 calves.  
Altogether he had  cattle.

## Subtraction

Masimba has 46 cents. He buys a toy for 33 cents. How much  
is he left with?

**Answer:**

$$\begin{array}{r} \text{T U} \\ 46 \text{ cents} \\ - 33 \text{ cents} \\ \hline 13 \text{ cents} \end{array}$$

### Practice Exercise 3

1. 46 children went to a Sunday school. 26 were girls. How many boys were there?
2. Takunda had 48 sheep. He sold 32 of them. How many had he left?
3. There were 48 eggs in a basket. Tendai sold 12 of them. How many eggs were left in the basket?
4. I take 23 biscuits out of a tin holding 47 biscuits. How many will be left in the tin?
5. A child had 48ARV tablets and used 20 of them. How many ARV-tablets were left?

### Practice Exercise 4

Use a calculator line to solve the questions below.

1. There are 18 people at the front of a bus and there are 22 people at the back.  
How many people are on the bus?
2. In a class there are 26 boys and 18 girls.  
How many children are in the class?
3. There are 26 goats in one field and 24 in another. How many goats is this altogether?
4. Tarisai had 21 marbles. Simba gave him 29 more. How many had he then?
5. From 50 count back 10.
6. 49 count back 19.
7. Find the difference between 49 and 35.
8. 45 take away 23

### Practice Exercise 5

Use a calculator to do the following.

1.  $45 + 4 =$

2.  $40 + 10 =$

3.  $42 + 7 =$

4.  $29 + 10 =$

5.  $49 - 29 =$

6.  $39 - 15 =$

7.  $41 - 20 =$

8. Susan has 35 cents. Tariro gives her another 8 cents.  
Now she has \_\_\_ cents.

9. How many are left when 13 nuts are taken from 48?

10. I have read 32 pages in my book. I still need to read  
18 pages. What is total pages of my book?

### Practice Exercise 6

Use a calculator

1. TU  
25  
+13

2. TU  
38  
+11

3. TU  
43  
+5

4. TU  
49  
-17

5. TU  
46  
-14

6. A bucket holds 20 litres  
A dish holds 15 litres  
Altogether they hold \_\_\_ litres.
7. Masimba has 46 cents. He buys a toy for 33 cents. How  
much does Masimba still have?
8. A girl had 24 crayons. 9 were stolen. How many crayons  
were left?

### Assessment test

1. T U  
21  
+ 18  

---

---

2. T U  
37  
+ 22  

---

---

3. T U  
31  
+ 16  

---

---

4. A poacher killed 26 elephants on Saturday and 13 lions on Sunday. How many animals were killed altogether?
5. 16 children were sent home to collect fees on Monday and 12 more were sent on Tuesday. How many children were sent home altogether?
6. Using a calculator find the answer to the following:  
Kundai spent 16 cents on Monday, 18 cents on Tuesday and 22 cents on Wednesday. How many cents was this altogether?
7. T U                  8. T U                  9. T U  
43                      49                      25  
- 21                    - 37                    - 13  

---

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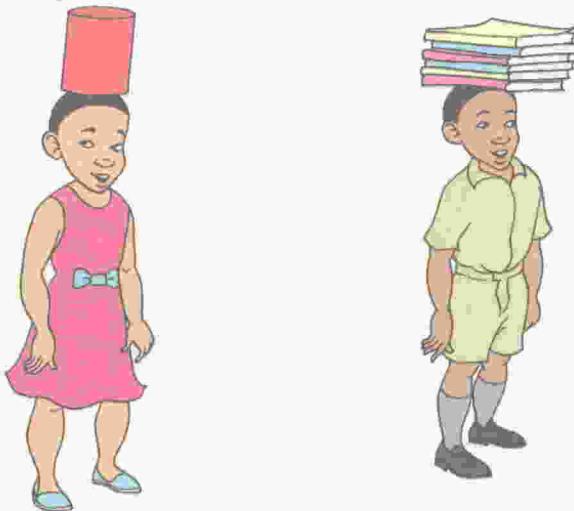
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10. There are 36 oranges in a pocket. Ratidzo took out 32 of them. How many oranges were left?

**Flashback**

Tools can be used to balance objects.

**Key words**

lever

**We can balance on body parts**

Look at the pictures.

Which body parts are used to balance objects? We can balance objects using body parts.

But body parts balance few objects.

**Activity 1**

1. Balance objects using different parts of the body.
2. Balance a container on your head.
3. Try to balance 2 containers on your head. What happened?

## Addition stories

A jug holds  
A pot holds  
Altogether they hold

$$\begin{array}{r} \text{T U} \\ 23 \text{ cups} \\ + 4 \text{ cups} \\ \hline 37 \text{ cupfuls} \end{array}$$

### Practice Exercise 2

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Altogether he paid  cents.
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