

**Learning about Living**

**Book Three**

*David Horsburgh*

## Introduction

*Learning about Living* is a book of Environmental Studies dealing with the child's life in all its aspects. As its name implies, Environmental Studies sets out to deal with every aspect of the child in its environment, and eventually in the environment of the whole world. The approach in *Learning about Living* may be summarized as follows:

- a) In the early books it draws only on the child's own experience.
- b) It tries to help the child to collect information—about himself, his friends and his neighbourhood—and to present this information in an orderly way.
- c) It gives the child an opportunity to learn and to practise some important and useful skills : drawing, copying, observing and recording, collecting, measuring and mapping.
- d) It seeks to increase the child's sensitivity to the beauty and wonders of the world around him, before satisfying his natural curiosity about the great world which lies outside his immediate experience.
- e) It tries to promote activity in a variety of ways: every page requires the child to do something, either in the classroom or outside it. This activity may be writing or drawing in the textbook, or it may be carrying out a project outside the classroom, in the playground or at home.
- f) It attempts to make the acquisition of information and the practice of skills an enjoyable, co-operative and non-competitive venture on the part of the child, his friends and the teacher.
- g) As the series is likely to be used both in urban and rural schools, it tries to tell the city child something about village problems, and the village child something about urban problems.
- h) It tries to produce in the child who uses it a questioning attitude with regard to everything about his surroundings. The emphasis is not on giving information, but on getting the child to find out for himself, and when he has done this, to analyse the results of his discoveries and to put them to some practical use.
- i) The course does not lend itself to testing or to competitive work in any way. Group work and peer-teaching are likely to produce better results than the examination and marks approach.
- j) It makes no provision for learning by heart.

David Horsburgh

# The Heavens

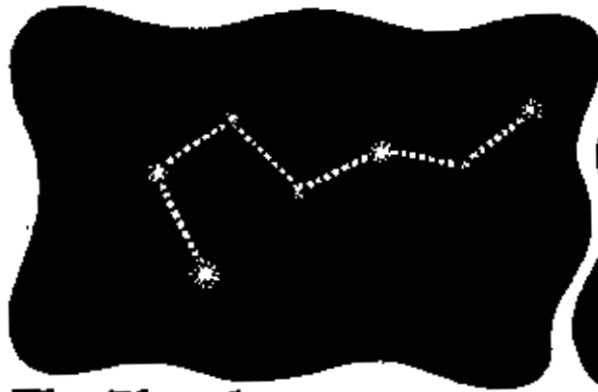
What can you see if you look up in the sky? Make a list of the things you can see. Divide the list into two sections: things you can see during the day and things you can see during the night.

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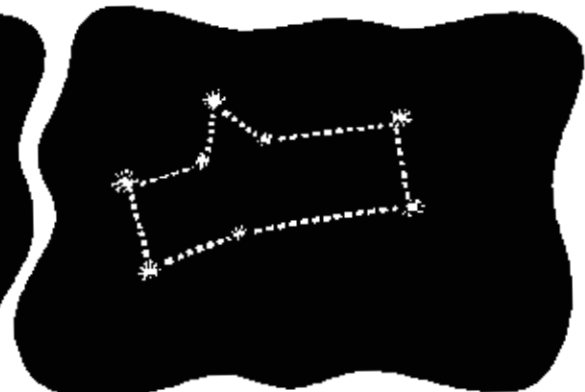
How many stars can you see at night?

There are millions: you cannot count them.

Some of the bright stars form groups. These groups have names; here are two:



**The Plough**



**Gemini**

See if you can see them in the sky tonight.

---

Does the moon shine every night? When it shines, is it always the same shape? Try to look at the moon every night and make a moon chart, like this:

	1	2	3	4	5	6
Sept						

to end of  
month

## Distances

Do you remember what you read in Book 2 ?

Fill in the blanks below. Use your ruler and string to measure with.

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The class room is . . . . . metres wide.

The class room is . . . . . metres long.

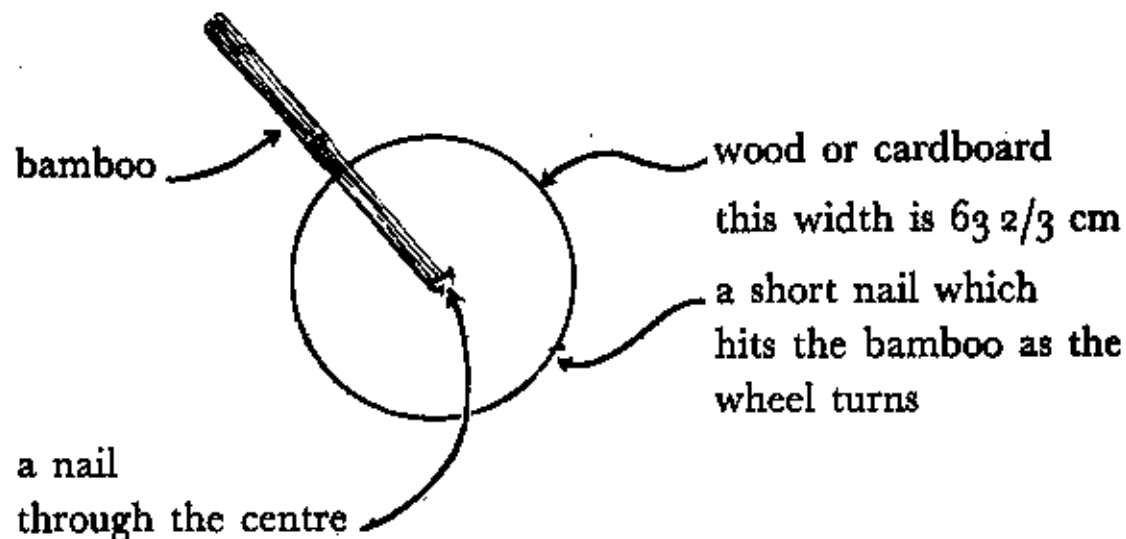
The playground is . . . . . metres long and . . . . . metres wide.

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Remember ! One kilometre is a thousand metres.

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Now make a measuring wheel, like this :



Put it on the ground, hold the bamboo, and wheel it along. Each time the nail hits the bamboo you will have gone two metres.

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**Now measure the following with your wheel :**

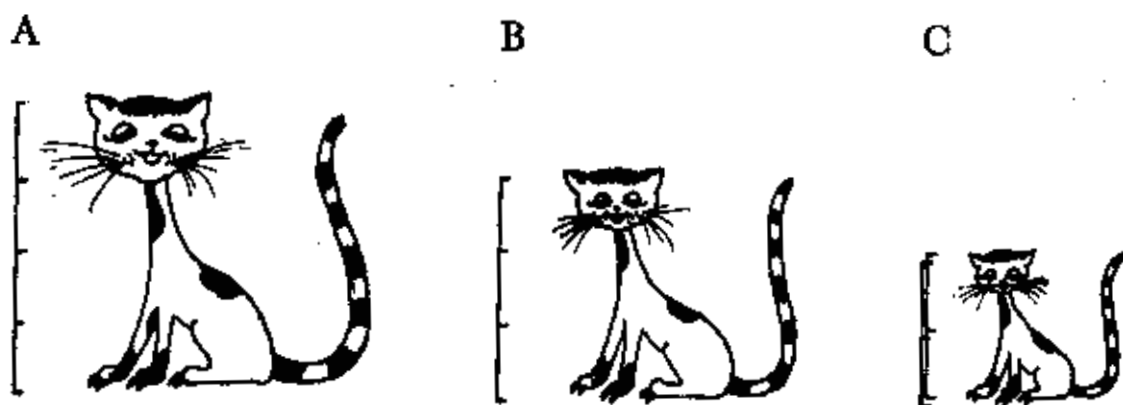
All the way home : round the playground : across the playground from corner to corner.

Check your answers with a friend : write them in your book.

# Scales

How tall is a cat when it sits down ?

About 50 cm . Here are three pictures :



**SCALE** 4 cm = 50 cm    3 cm = 50 cm    2 cm = 50 cm

We write scales like this :

A 4 : 50    B 3 : 50    C 2 : 50

---

When we draw a map we must draw it to scale. We can make the scale whatever we like. We can let 1 cm on the map be 1 km, or 5 km , or 100 km .

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A dog is 100 cm high if he sits down.

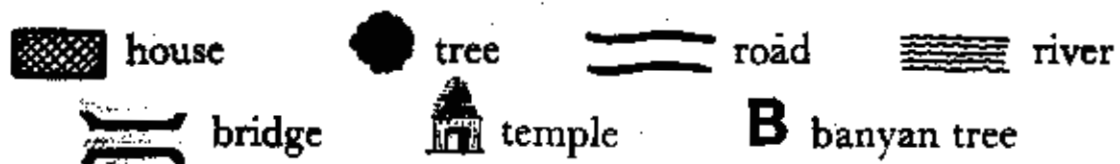
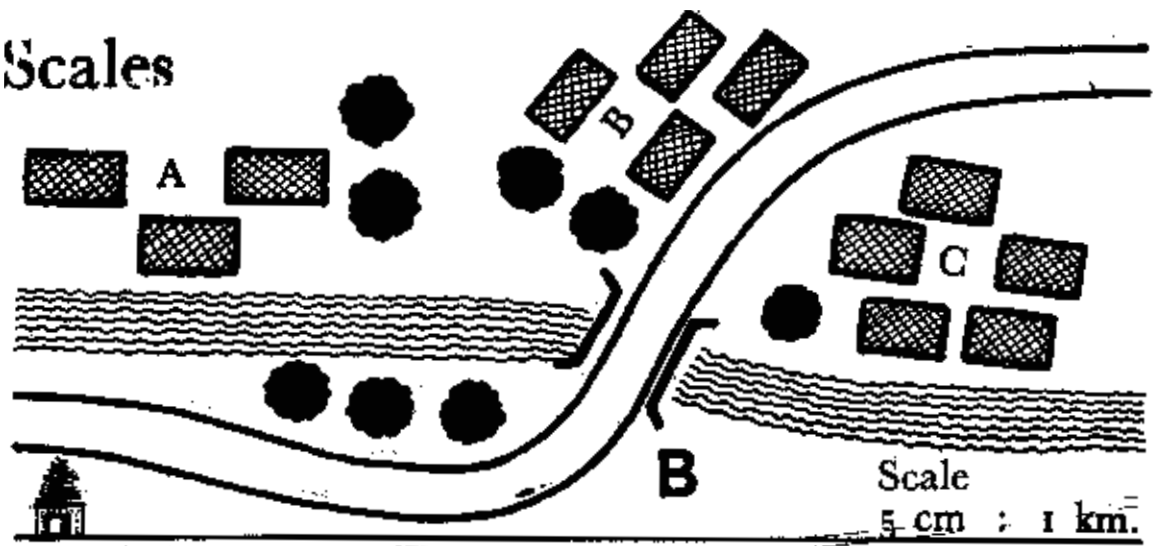
Draw three dogs to the following scales :

Dog A 6 cm = 100 cm [ 6 : 100 ]

Dog B 3 cm = 100 cm [ 3 : 100 ]

Dog C 1 cm = 100 cm [ 1 : 100 ]

## Scales



This map is drawn to scale. 5 centimetres on the map stands for 1 kilometre. To find distances measure the number of centimetres : every 5 cm means one km.

Fill in the following :

The temple is . . . . km from the banyan tree.

The banyan tree is . . . . km from village A.

The banyan tree is . . . . km from village B.

Village B is . . . . km from village A.

The bridge is . . . . km from the temple.

The village with five houses is . . . . km from the smallest village on the map.

Draw the map in your exercise books. Write 5 more questions of your own.

Make the scale 10 cm = 1 km.

# The Sunrise



One day Sandra woke up very early. She ran to Usha's house and woke up Usha and her big brother. It was still dark as they walked along the road. In about ten minutes they came to Jagdish lake. Behind the lake there was a low hill, covered with trees.

They watched the sun rise over the lake. The colours of the sky were reflected in the water of the lake. They could hear nothing but the sound of the birds.

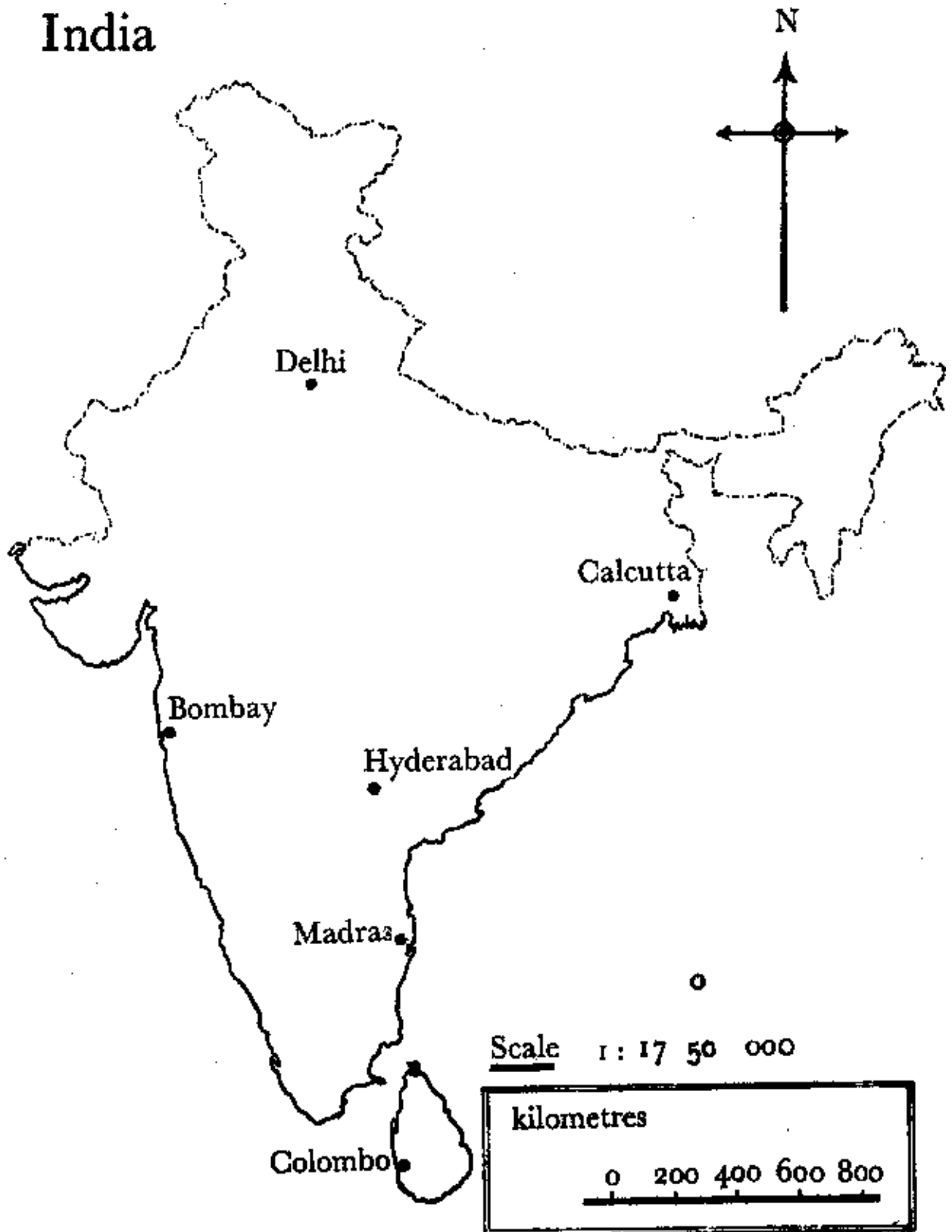
Have you ever watched the sunrise? Or the sunset? Write a list of the most beautiful things you have ever seen.

List them in your exercise books. Use these headings :

- |                         |                    |
|-------------------------|--------------------|
| 1. Growing things       | 5. Moving things   |
| 2. Sounds               | 6. Smells          |
| 3. Tastes               | 7. Things to touch |
| 4. Things which are old |                    |

Help : trees      wind in leaves      mountain peaks      clouds  
flowers      rain      berries      running water      the sea

# India





# India

Look at the map on page 10 opposite. Look at the scale.

On this map 11 millimetres : 200 kilometres. Use your ruler, and fill in the blanks below :

Madras is.....km from Calcutta by plane.

Madras is.....km from Bombay by sea.

Delhi is.....km from Colombo by plane.

Hyderabad is.....km from Delhi by plane.

Calcutta is.....km from Bombay by sea.

Delhi is.....km from Calcutta by plane.

---

How would you go from Delhi to Colombo without using a plane? Can you go from Delhi to Calcutta by boat? How long would a train take from Madras to Delhi if it travelled 200 km in 5 hours? How long would it take to go from Calcutta to Madras by boat, if the boat went 16 km in one hour? If a car goes at 60 km an hour, how long will it take to go from Bombay to Calcutta, passing through Delhi?

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Make up more questions like this about the map and get your friends to answer them.

# Time



Can you tell the time ?

What do these clocks say ?

Get your teacher to help you fill in the following :

There are . . . . . hours in the day.

The sun rises at . . . . . o'clock.

The sun sets at . . . . . o'clock.

There are . . . . . minutes in an hour.

How do we tell the time ? By clocks or watches.

Here are some ways of telling the time used in olden days.



Hour glass

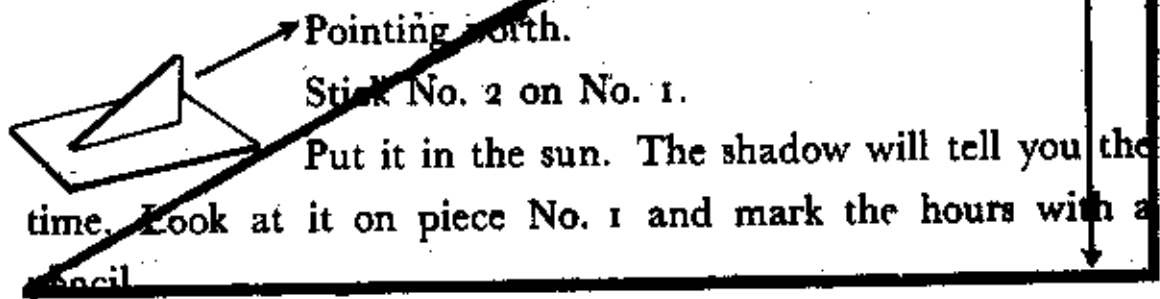
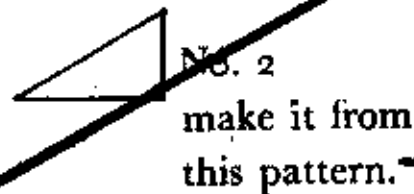
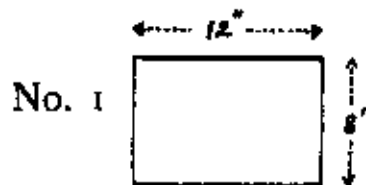


Oil lamp clock



Sundial

You need two pieces of wood.



# Ages

How old are you ? I am ..... years old.

How old is your brother/sister ? .....

How old is your father/mother ? .....

How old is your grandfather ? .....

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## Find out :

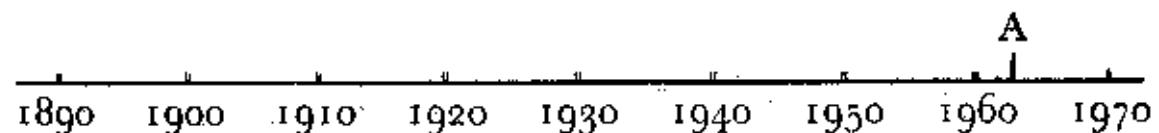
Who is the oldest man in your street ?

Which is the oldest building in your town or village ?

Which is the oldest tree ? The oldest temple ?

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Make a chart like this



Put letters on the line above by the correct year of birth of the people and things below :

A Me

B My sister

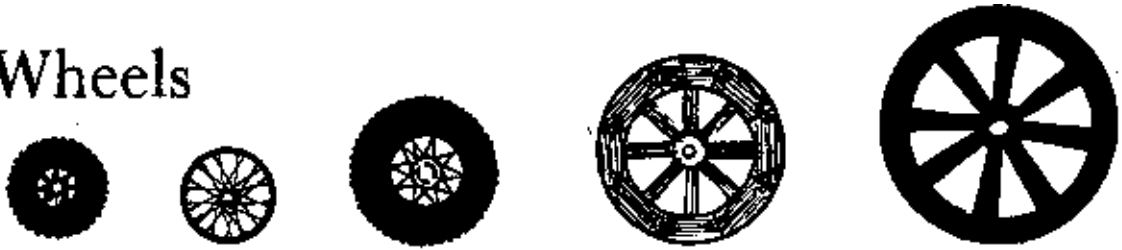
C My father

D My mother

E The oldest tree in my village  
and so on with other letters.

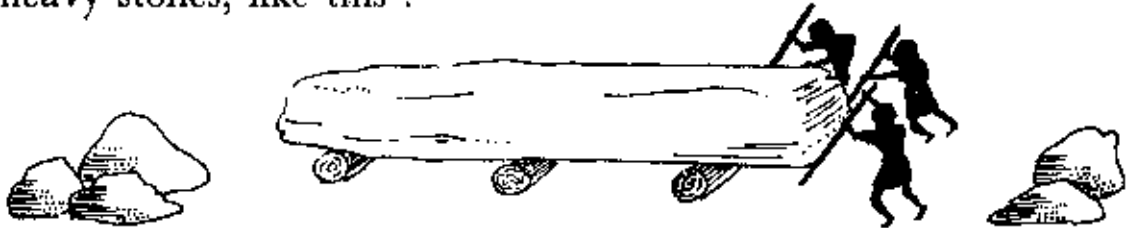
How many things can you  
put on your chart ?

# Wheels

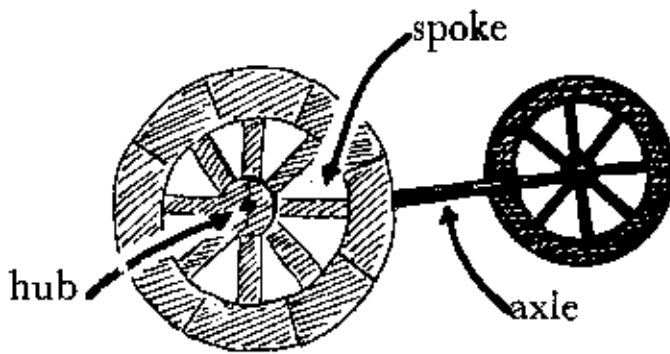


These are all wheels. Where can you see each wheel? Who made the first wheel? We do not know.

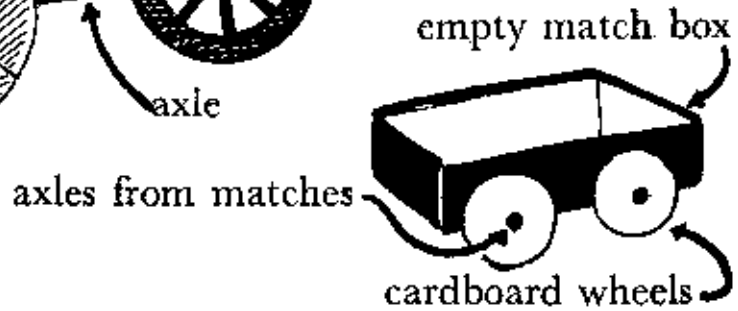
Perhaps the wheel started when men used rollers to move heavy stones, like this :



Then came the axle, and then the wheel and its bearings.



You can make a small cart :

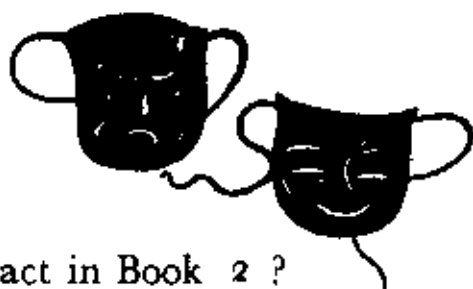


Make two lists of things which use wheels :

A Things which move from place to place. e.g. buses, jeeps

B Things which do not move from place to place. e.g. clocks, pulleys

# Acting



Do you remember the play for you to act in Book 2 ?


The Old Man and the Goat

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Here are some more plays for you to do in class.


You can act them in English, or in any language you like. Ask your teacher to call you to the front of the class and to act in groups.

---

1.  A man and his wife. The wife talks to her friends. The man comes home and finds his dinner is not ready. What happens ?

2. Two boys in a forest find a golden egg. When they rub it an old man appears and says they can have three wishes. What happens ?



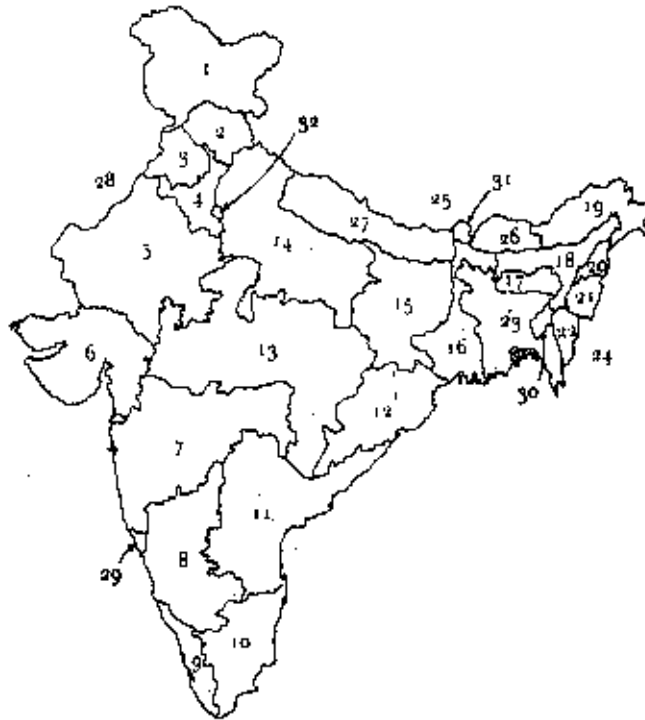
3.  Three girls go for a walk. It begins to rain very hard. They go to a small hut and open the door. Inside there is a tiger. What happens ?

4. A man wants to go to the city but the bus is full. His wife is ill. He asks the conductor for two seats, but the conductor says no. A quarrel starts. What happens ?

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These plays are **NOT ONLY FOR READING,**  
they are **FOR ACTING.**

# A Map of India



Look at the map above. Most of the states and union territories of India, and the countries which are close to India, have been given a number. Put the right number against each of the names below :

Andhra Pradesh ...	Gujarat ...	Nagaland ...
Arunachal Pradesh ...	Haryana ...	Nepal ...
Assam ...	Himachal Pradesh ...	Orissa ...
Bangladesh ...	Jammu and Kashmir ...	Pakistan ...
Bhutan ...	Karnataka ...	Punjab ...
Bihar ...	Kerala ...	Rajasthan ...
Burma ...	Madhya Pradesh ...	Sikkim ...
China ...	Maharashtra ...	Tamil Nadu ...
Delhi ...	Manipur ...	Tripura ...
Goa, Daman & Diu ...	Meghalaya ...	Uttar Pradesh ...
	Mizoram ...	West Bengal ...

Copy the map into your exercise books, and write on the map the names of the states and the countries.

# Living and Dying

Do you remember the chapter on living in Book 2 ?

Write a list of : ten things which are alive

: ten things which are not alive.

~~Put a line under the words in this list which are not living :~~

salt trees boys rocks plants water butterflies buffaloes  
ploughs buckets sweets ink beans glass jeeps postmen  
trousers teachers keys uncles raindrops wind pens

~~Some things die after many years, some things die after a few days, or hours, or months.~~

Some things do not die because they are not alive.

Write two sentences about each of the pictures below, like this:

A man lives for about 80 years. Then he dies.

A tree lives for hundreds of years. Then it dies.



a boy



a flower



a tortoise



a pencil

a rock

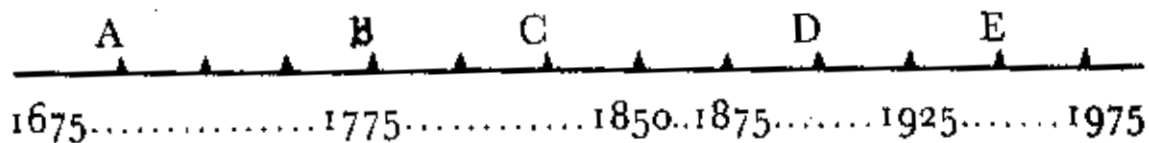
grass

# Ages



Turn to page 13 and read it again.

Here is another chart. It takes us back 300 years. No man can live for 300 years.



Fill in the missing dates on the dotted lines above. Now fill in blanks below.

A was born in.....He lived for 75 years. He died in.....

B lived for 50 years. He was born in.....He died in.....

C was born in.....He died in 1875. He lived for.....years.

D was born in.....He is still alive. He has lived for.....years.

E was born in.....He is still alive. He has lived for.....years.

---

Be careful! What year are we in now?



# Occupations

What work do the following do :

a policeman, a teacher, a bullock, a dog, a king, a postman,  
a nurse, a driver, a mother, a cow, a weaver, a cobbler,  
a tailor, a sailor, a pilot a doctor, a shopkeeper, a minister ?

Write a sentence about each.

Look at this picture. Write two sentences about each picture,  
like this :

A is a teacher. She teaches in a school.



Make a list of other jobs people do which are not mentioned  
in the list or shown in the pictures.

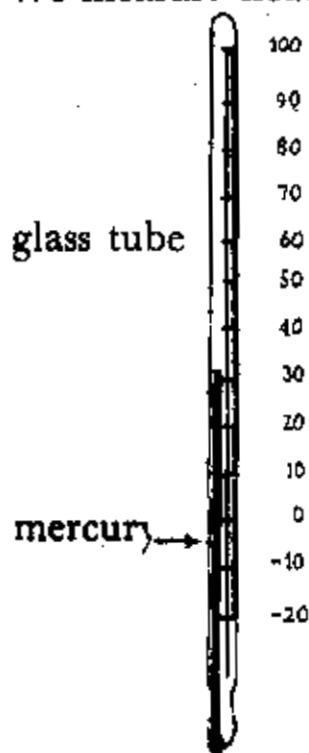
# Temperature

Write out the things mentioned below in your exercise books. Put them in order : the hottest things at the top and the coldest at the bottom .

Snow, a rock in the sun for 8 hours, the water for your bath, ice, the moon, ink, a coin in the sun for 8 hours, the sun, water in a waterfall, your hand in the sunshine, hot coffee, rain, boiling water, wind.

We measure heat with a thermometer.

---



Degrees are marked on the glass tube.

Degrees are written like this : °

100° (a hundred degrees) is boiling, very hot.

0° (nought degrees) is freezing, very cold.

Ask your teacher to show you a thermometer.

Fill in the blanks :

---

The temperature on a hot day in your school is.....

The temperature on a cold day in your school is.....

The temperature on a cold night in your house is.....

# Trees



1.



2.



3

What trees do these leaves come from? Collect 10 more leaves, draw them in your exercise books, and say which tree each leaf comes from.



What trees are these ?

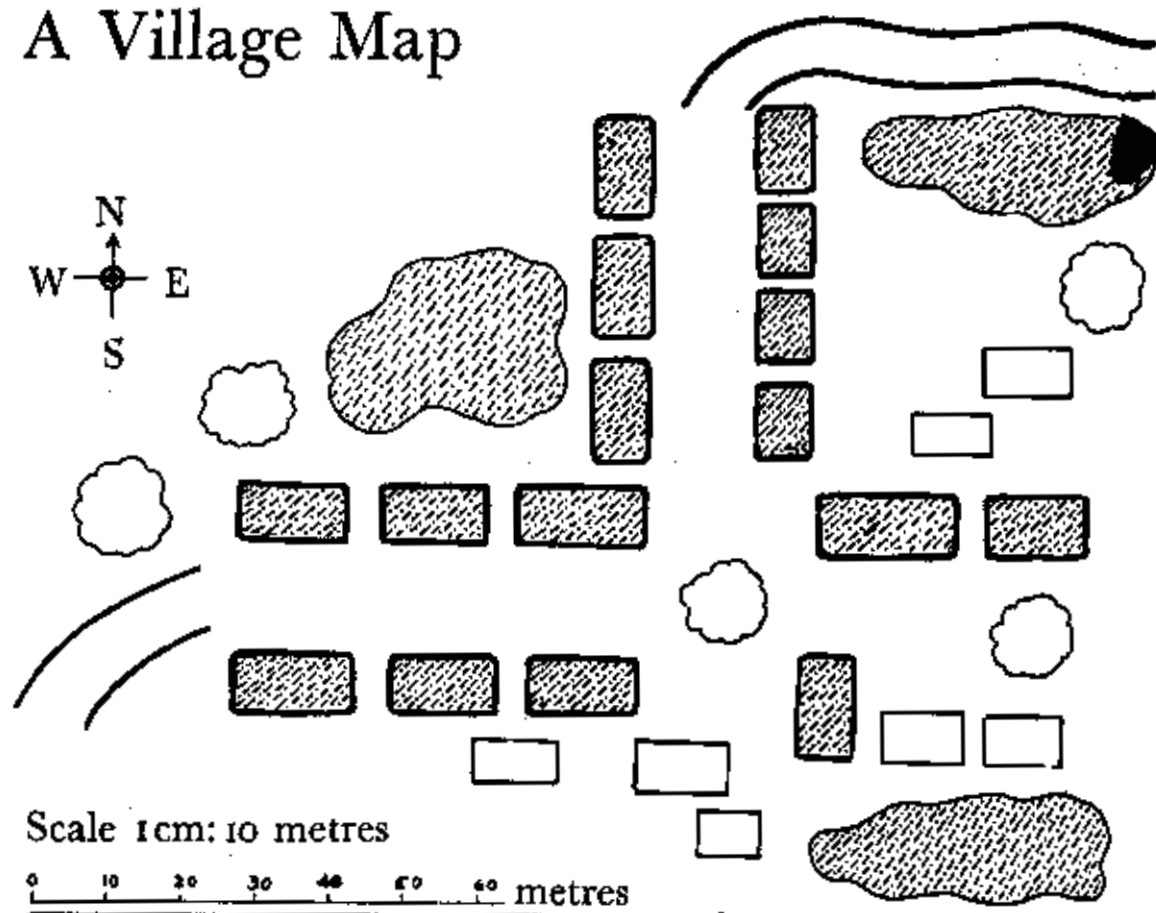
Do you know their names in your own language ?

See if the following trees grow in your district. They are all found in India.

Try to collect a leaf from each and make a drawing of the tree and the leaf.

Banyan, Gulmohar, Shisham, Cassia, Pipal, Sal, Flame of the Forest, Tamarind, Mango, Beech, Casuarina, Bamboo, Rain tree, Fir tree, Deodar, Mohwa, Jack fruit, Jasmine, Coconut, Jacaranda

# A Village Map



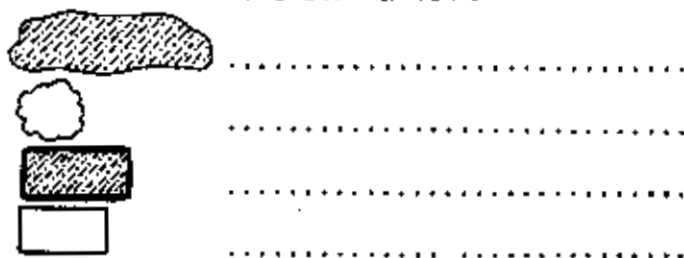
Look at the map carefully, then read these sentences :

There are three ponds, or tanks, in the village.

There are more big trees than tanks.

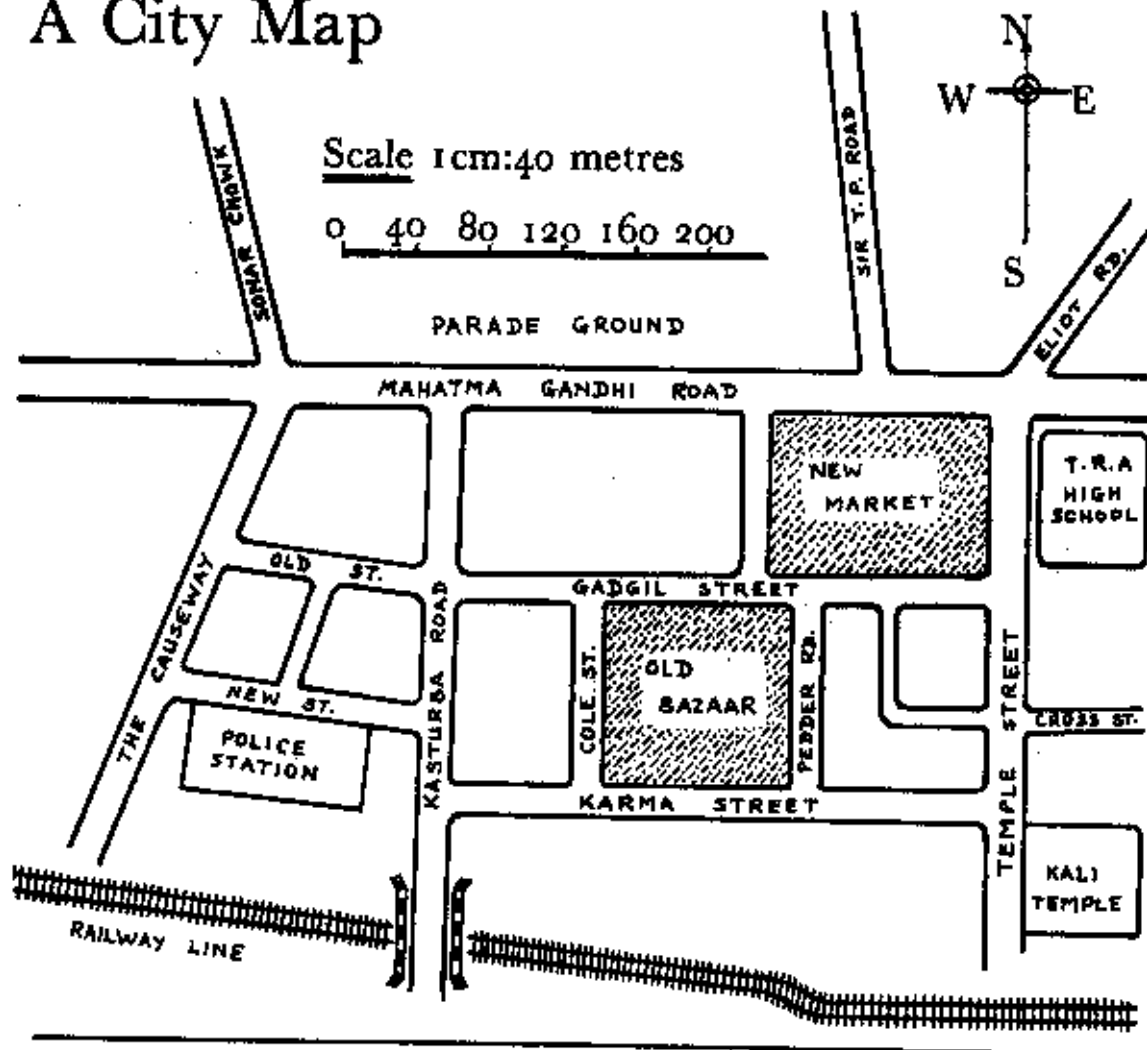
There are more houses than cattle sheds.

Now write what these stand for :



Write 6 questions about the map as you did about the map on page 11 . Get your friends to answer them.

# A City Map



Look at the map above and answer the following questions :

If you walk from the police station to the T. R. A. High School, how far is it ?

How do you get from the Kali Temple to Sonar Chowk ?

How far is New Market from the railway bridge on Kasturba Road ?

Write 10 more questions of your own about the map and get your friends to answer them.

# Engines

How many different kinds of engine can you think of ?

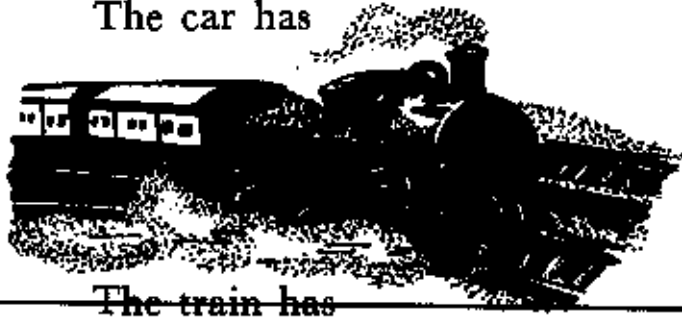
Here are some :



The car has



a petrol engine.



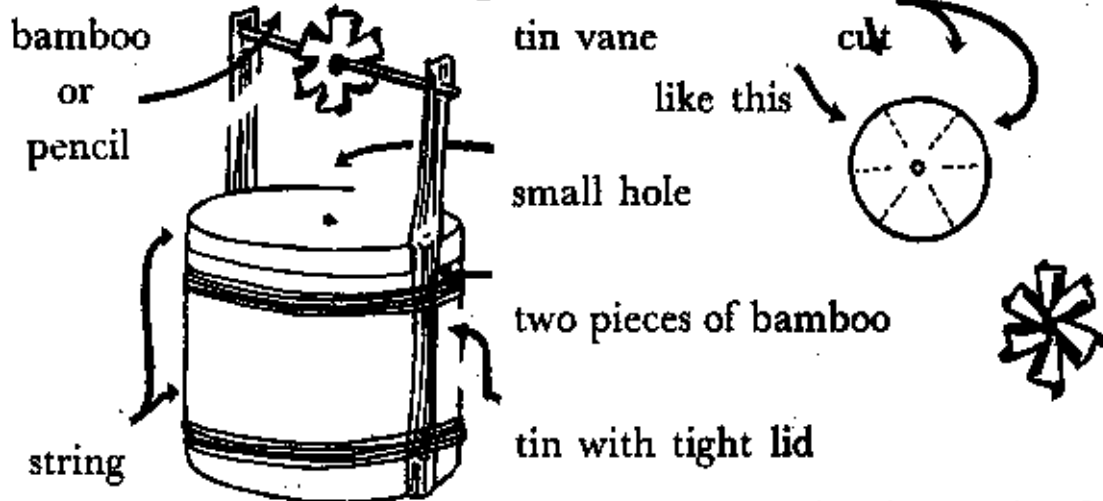
The train has



a steam engine.

Make a list of the engines you know about. Use these headings:  
~~steam, petrol, oil, electricity.~~

Make a model steam engine.



Put a cupful of water in the tin and put the tin on the fire.  
 The wheel will turn.

# Engines need Power

This mill in Holland, 10000 kilometres away from India, works by wind.



This mill in England works by water.

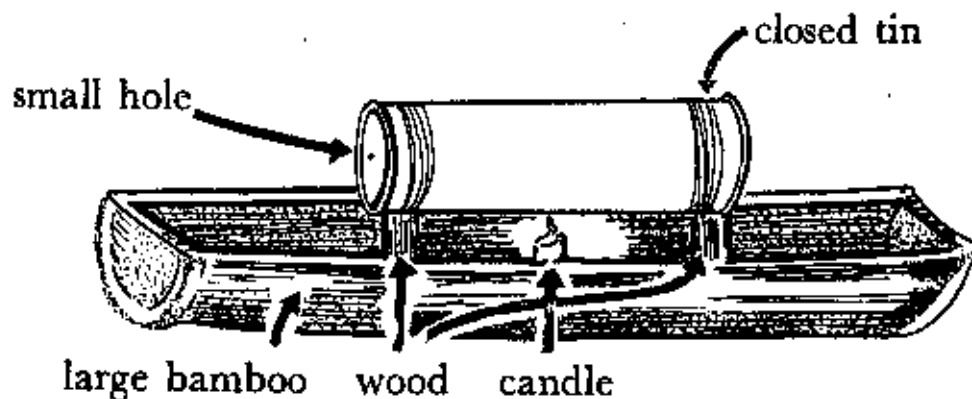


This pump works by electricity.

Other sources of power are : steam, petrol, kerosene, diesel oil, atomic energy, gas. Make a list of all the engines you have seen. What power does each use ?

Try to make a windmill out of bamboo and paper.

Make a steam boat like this :



Put very hot water into the tin and light the candle. The steam will come out of the hole in a jet and drive the boat.

# Ravi and the Rock

One day Ravi was going to school. He left his house at eight o'clock and, after about twenty minutes he found a huge rock in the middle of the road.



'The rock has slipped down from the side of the hill, he thought. 'The bus from Rajghat comes along at half-past eight. I must move the rock.'



He pushed the rock, but it was too big. It would not move. Then he got a small stone and a long piece of wood. He put the stone near the rock, and used the wood as a lever. CRASH! at last the huge rock rolled out of the road and rolled down the other side of the hill into

the river. At that moment the bus came along. Ravi waved at the bus and went on along the road to school.



Why did Ravi move the rock? How did he move it? Were the people in the bus pleased? Did they give Ravi any money? Was Ravi happy?



# The Sea

Many people in India live near the sea, but most people in India have never seen the sea.

If you have never seen the sea, you will have to imagine a very, very wide river; you cannot see across it. The sea is thousands of kilometres wide, much bigger than India.



Ask your teacher to show you a picture of the sea. The water in the sea is salty. Very big fish swim in it. Boats sail on it. There are big waves and sometimes storms make it very rough.



a fishing boat



a cargo boat



a liner



an oil boat



a whale

# Transport

Transport means carrying things from place to place. We can carry things on our backs, on our heads, in bags ; in jeeps, buses and lorries ; in trains, boats and aeroplanes. In some countries they carry things on sledges.



The sledge has no wheels. It runs over the snow.

---

Make lists of all the different kinds of transport you can think of. Put them under these headings :


Flat land	Sandy land	Mountains		
Rivers	Sea	Air	Road	Rail

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## A toy train



Make a toy train out of empty matchboxes.

Use the tray for the part shaded like this 

Use the cover  to make 4 wheels.

Use matchsticks for the axles.

# Speeds

How do we measure speeds? A man can walk about 6 kilometres in one hour. We say his speed is 6 km per hour.

Fill in the following. Put your guess first, and then ask your teacher the right answer.

**Guess**                      **Correct**

An aeroplane goes at.....[.....] an hour.

A bullock cart goes at.....[.....] an hour.

A bird flies at.....[.....] an hour.

A fishing boat goes at.....[.....] an hour.

A train goes at.....[.....] an hour.

A big car goes at.....[.....] an hour.

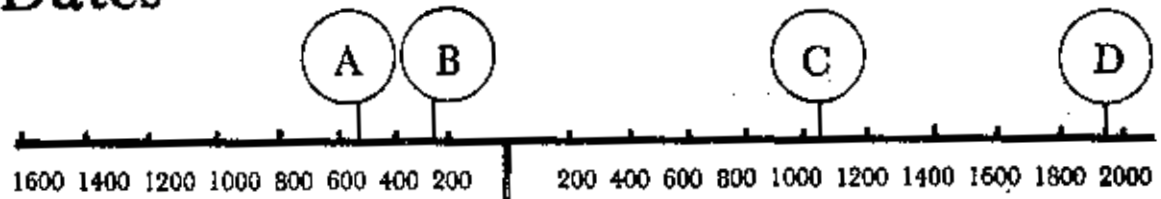
A bus goes at.....[.....] an hour.

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Write more sentences about these :



# Dates



The birth of Christ.

Christ was born about 1975 years ago. Nowadays we use the Christian calendar. when we say 1975 we mean 1975 years after the birth of Christ. Years after Christ are sometimes written 1975 A.D. [A.D. means Anno Domini, which is Latin for The year of our Lord]. Dates before Christ are called B.C. [B.C. means Before Christ]

In the date line above you will find A B C and D.

Put the correct letter by the side of each of the following :

A boy called Suresh has lived for 7 years.....

A king called Ashoka died about 2,200 years ago.....

A king called William died about 900 years ago.....

The Buddha was born about 2,500 years ago.....

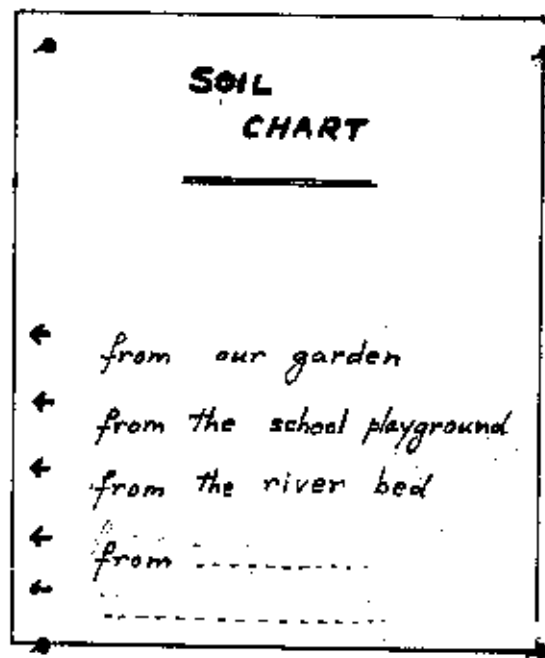
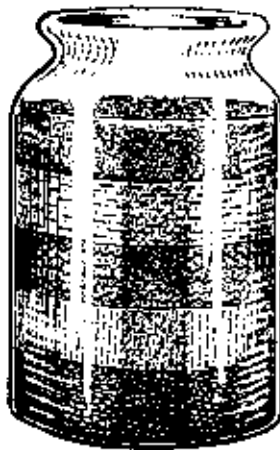
Ask your teacher to correct your answers.

# Soil

Have you noticed that there are different kinds of soil near your house? Some is yellow, some black, some brown: some is like clay, some is sandy: some has lots of stones in it, some has none.

## A soil collection

Collect as many kinds of soil and sand as you can. Put them in layers in a bottle, as shown below. Make a chart by the side of your bottle. It will show where each kind of soil came from.



See how many different kinds of soil you can collect.

# Other Lands

This is the shape of India .



Here are the shapes of some more countries in the world. They are not all drawn to the same scale. Try to guess which countries they are; then find them in an atlas or get your teacher to help you.



Guess.....

Correct.....



Guess.....

Correct.....



Guess.....

Correct.....



Guess.....

Correct.....

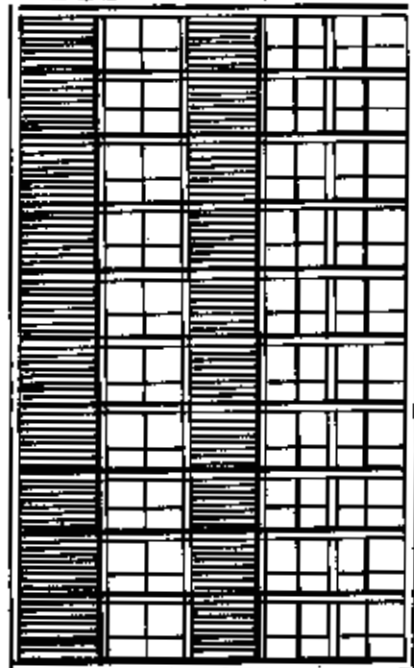
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All the correct answers are here : Australia, Bangladesh, Sri Lanka, England, Africa, S. America, N. America, Nepal.

# Villages, Towns and Cities

**Villages** are very small. There are usually only a few houses in a village, and not many people live in them.

**Towns** Some towns are big, some not very big. They may have a lot of shops, offices, a hospital, a police station, and a market. Write the names of six towns in your state.



**Cities** are very big towns. Some cities have eight million people living in them. Here are some of the things you find in cities:

very big buildings, very wide roads, thousands of shops, stations, buses, theatres, cinemas, libraries, parks, museums. Get your teacher to tell you about all these things. Then write a sentence about each.

---






Here are some cities. Which countries are they in?

Calcutta London New York Tokyo Moscow Sydney

# Houses

People build houses which suit their climate.

People build houses out of materials which they can easily get.

- Cold climate :**  An igloo.  
Built of blocks of snow.
- Hot climate :**  Built of bamboo with a  
roof of straw.
- Cold & wet :**  Chimney for smoke.  
Built of bricks & cement.  
Tiled roof.
- Very wet :**  Built on legs.  
[floods] Water cannot get in.
- Cities :**  Stone, brick, cement.  
Very tall to save space.

---

What kind of houses could you build with these materials?

Write a sentence about each :

mud stone tiles slates wood glass bamboo bricks  
cement grass blocks of ice

---

Draw your own house. What is it made of? Draw a plan of it.

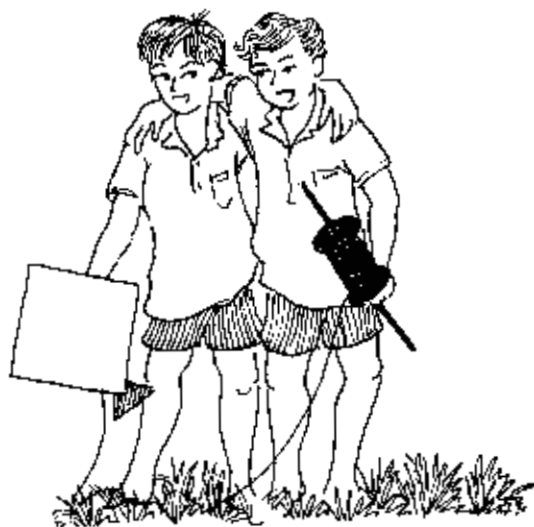
Make a list of the materials used in building it.



# Friends

Ask your teacher to explain the following words to you :

kind, selfish, angry, generous, trustworthy, brave, dishonest, loving, helpful, honest, greedy, polite, cooperative, rude, thoughtful, proud.



Which of the qualities listed above are good ? Which of the qualities listed above do your friends have ?

Make a list of your friends and put the qualities they have by the side of each name.

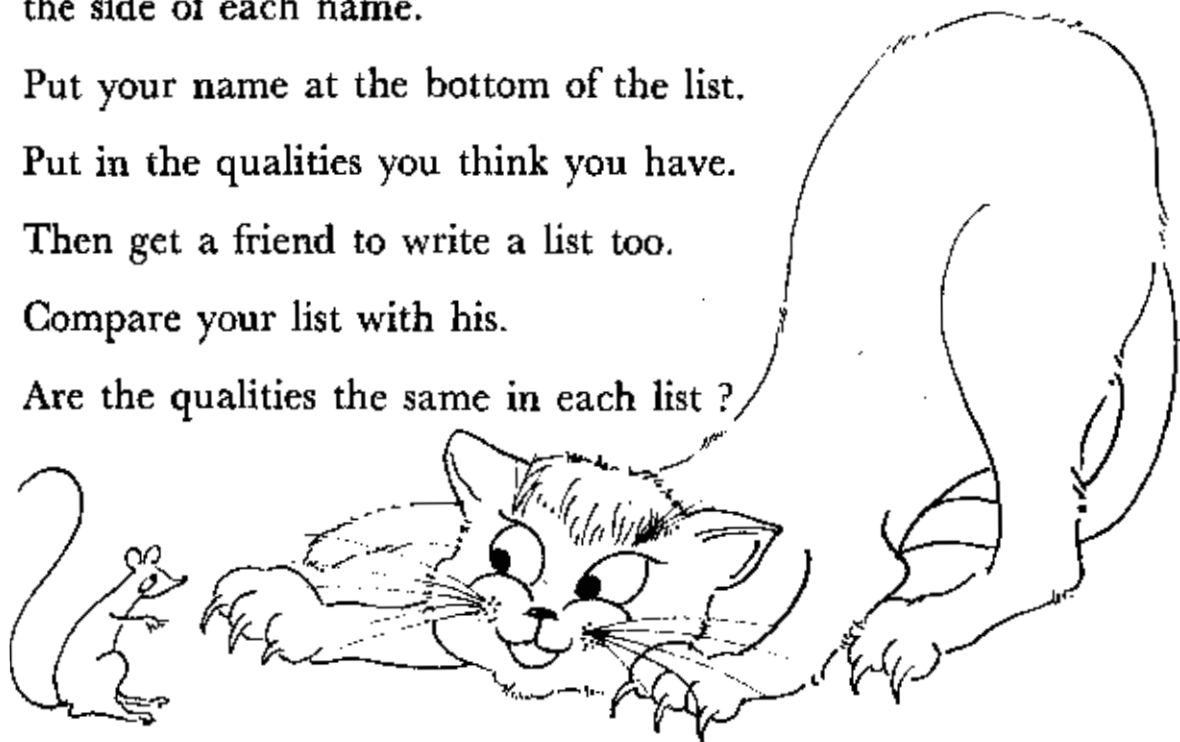
Put your name at the bottom of the list.

Put in the qualities you think you have.

Then get a friend to write a list too.

Compare your list with his.

Are the qualities the same in each list ?



# People



Look carefully at the people in the picture. Write the correct letters in the spaces below. Each space will have more than one letter. The first line has been done for you.

I'm sure about these

I don't know about these

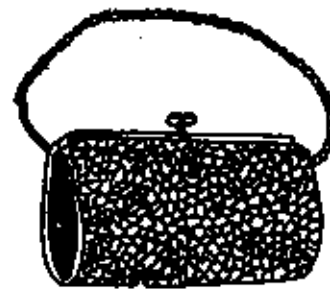
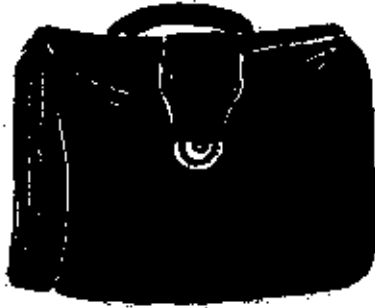
<b>A, C, D, F, G, J</b> .....are men	<b>E</b> .....
.....are women	.....
.....are old	.....
.....are young	.....
.....are from N. India	.....
.....are from S. India	.....
.....are poor	.....
.....are rich	.....
.....are Hindus	.....
.....are Muslims	.....
.....are Christians	.....
.....are not Hindus or Muslims or Christians.	.....

Discuss your answers, and the reasons for your answers, with your friends and your teacher.

What do you mean by 'old'? Put a line under the age below:  
20 yrs old, 30    40    60    80    or 100.

# Description

What are these ?



They are bags.

Try to write an accurate \* description of one of them, like this :

It is ..... cm long.

It is ..... cm wide.

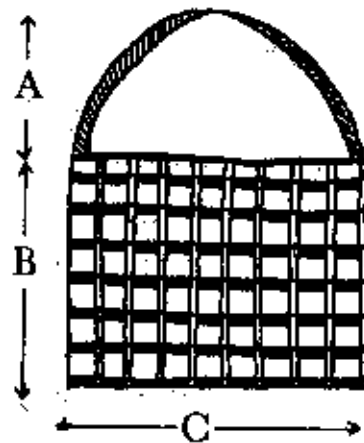
It has two sides

It has a handle.

It is used for carrying things.

It is made of cloth.

It costs ..... rupees.



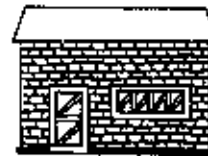
**Plan**

A ..... cm

B ..... cm

C ..... cm

Make a plan, with measurements, of the following, and write an accurate description of each :



\* Ask your teacher what this means.

# Acting

Do you remember acting the stories on page 14 of this book ? This time you will have to make up the story for yourself. Some help for each story is given below. Divide into groups. Practise your play, and then put it on for the whole class.

**Story 1.** An old man. Daughter and husband. Sack with a hole in it. A mouse.



**Story 2.** Car . Angry driver. Old lady. Sick daughter. Daughter's husband. Puncture.



**Story 3.** Broken bridge. Teacher. Four boys. Old man. Old man's house. River.



**Story 4.** Lion. Frightened animals. Clever mouse. Well. Lion's reflection in water.



**Story 5.** Clever dog. Old lady. Shopkeeper. Lost bag.



# Crime

Crime means breaking the law. What laws do we have in India? Below is a list of possible laws for children. Discuss them with your teacher and say which you think are good laws and which are bad laws.

Write out the good ones in your exercise books.



---

## Good or bad ?

Do not steal. Do not lend money. Always fight your neighbours. Always speak politely. Always tell lies. Help people who are poor. Borrow money but do not lend it. Always help other people. Try not to speak the truth. Always ask questions. Obey your teachers. Go to bed late. Study hard. Twenty minutes work a day is enough.

---

Words to discuss with your teacher :

Murder. Theft. Burglary. Cheating. Fraud. Forgery. Violence. Suicide. Rash driving. Fines. Prison. Punishment. Mercy.

---

Which of the crimes above is the worst? Give your reasons.

# Occupations

Make a list of all the occupations in your village, or, if you live in a town, of some of the occupations of people who live near you. Write down what each person does. Divide the occupations into two classes, like this :



Manual

[working with your hands]

e.g. Farmer  
Carpenter  
Factory Worker



Non-manual

[working mainly with your head]

e.g. Teacher  
Clerk  
Doctor

---

Words to discuss :	Profession	Office	Factory
	Wages	Salary	Pension

---

Try to find out how much each of the following earns :

A bus driver	A farm worker	A doctor
A small shopkeeper	A teacher	A mechanic
A clerk	A peon	A politician

Do they do the same amount of work ? Is there any difference in their work ? Which of them helps the most people ?

# Fruit

Why do we eat fruit ? What fruits grow in your neighbourhood ? How many apples are there in one kilo of apples ? How many oranges are there in ten kilos of oranges ?

---

All the fruits in the picture grow in India. Write the correct names in the spaces provided.



- 
- |              |                  |
|--------------|------------------|
| Tulnaw.....  | Gonam.....       |
| Tropica..... | Genora.....      |
| Pealp.....   | Hacep.....       |
| Avagu.....   | Annaba.....      |
| Sifg.....    | Emil.....        |
| Arpe.....    | Adebruitrf.....  |
| Melon.....   | Pappenile.....   |
| Ayappa.....  | Groametapen..... |

# Dances of India

Can you dance? Do you dance?  
India is famous for its dancers.



Kathak



Kathakali



Bharathanatyam



Manipuri



Folk dances

---

What dances have you seen?

Do people in your town or village dance?

Try to draw some dancers you have seen.

Try to write a description of the dance and the music.

How many dances can you name?

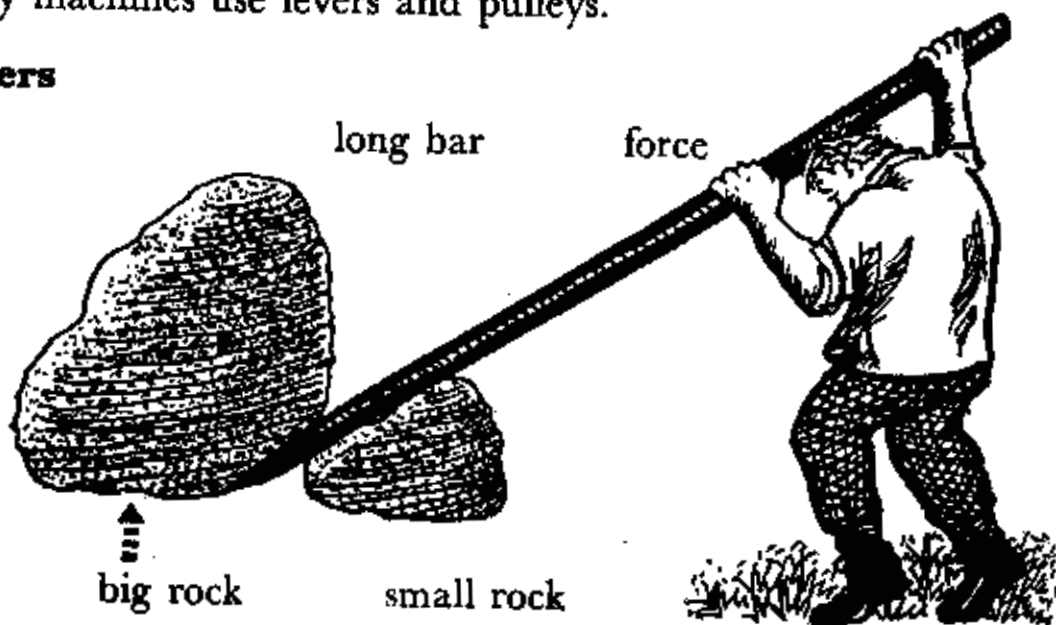


# Machines

Machines are things which help us with our work.

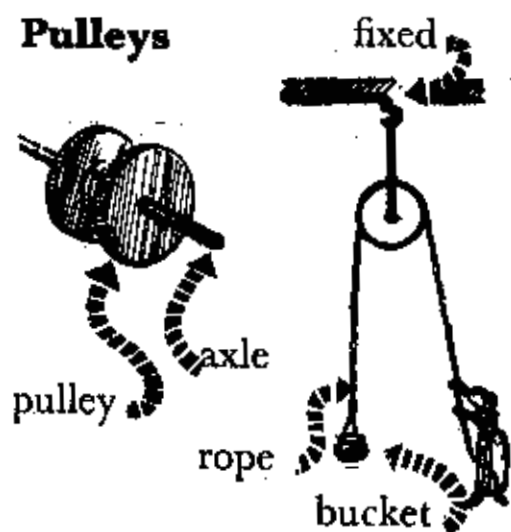
Many machines use levers and pulleys.

## Levers



Can you think of any other way in which levers can be used ?

## Pulleys



Why does the woman use a pulley to pull up the pot ?

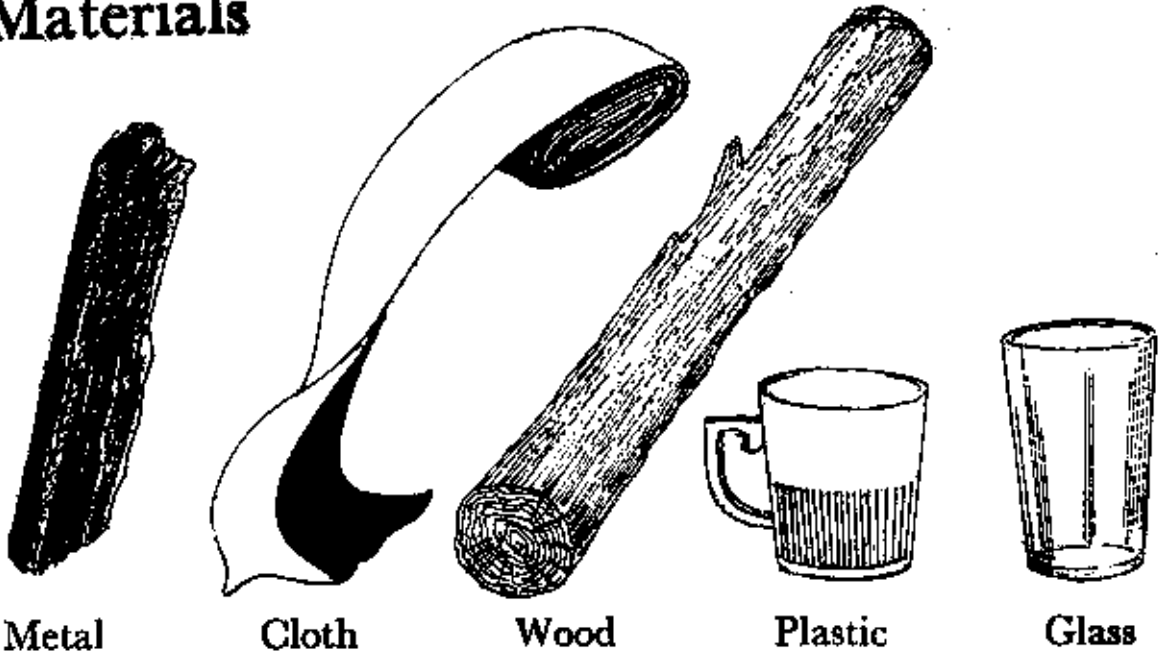
Because it is easier to pull down than to pull up. The woman can use her whole weight to pull .

---

Can you think of any machines you have seen ?

Try to describe one. Ideas : for lifting a car , for fanning a fire, for cutting wood.

# Materials



Write out all the things you know which are made of one of the five materials above.

How many different kinds of materials do you know ?

Make new lists like this :

Metal	Cloth	Wood	Glass	Plastic	Two or more materials	I don't know

Put the following in their correct places in the list :

a pair of glasses : a cooking pot : a plough : a pen : a clock :  
 a table : a lorry : an arrow : a pencil : a book : a radio :  
 a bottle : a knife : a pair of trousers : a loom : a window :  
 a sari : a pair of scissors.

\* e.g. a saw : a mixture of metal and wood.

# Heights

Fill in the blanks. [Guesses first, then correct answers from measuring or from your teacher.]

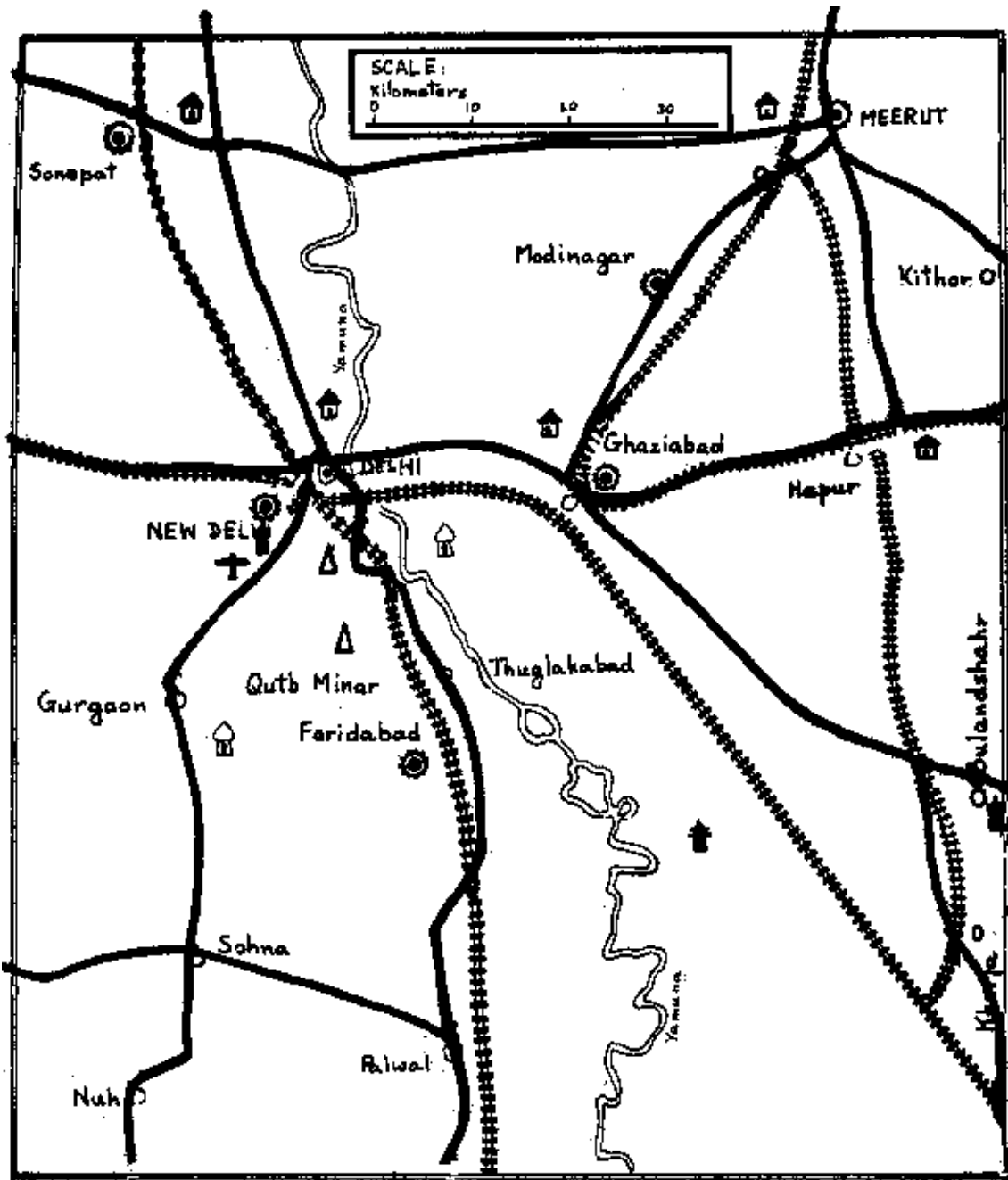
	<b>Guess</b>	<b>Correct Answer</b>
How tall are you ? .....		.....
How tall is the classroom door ? .....		.....
How tall is the school ? .....		.....
How tall is your father ? .....		.....
How tall is the tallest tree in the school garden ? .....		.....
How tall is Mount Everest ? .....		.....










## Measuring trees and buildings

You can measure the height of a tree in this way. Walk away from the tree until, by standing with your back to the tree,



you can see the top of the tree by looking through your legs. The distance you are from the tree will roughly equal the height of the tree.



- |   |       |   |                         |   |            |
|---|-------|---|-------------------------|---|------------|
|  | river |  | major industrial centre |  | airfield   |
|  | rail  |  | temple                  |  | tomb       |
|  | road  |  | monument                |  | rest house |

# Maps

Look carefully at the map on page 46. Look carefully at the scale, too.

Then write ten sentences of your own about the map. e.g.

1. There is a major industrial centre at Modinagar.
  2. Modinagar is.....
  3. At Bulandshahr.....
  4. The railway from.....
  5. The Qutb Minar.....
- etc.
- 

Try to answer these questions :

How far is Sonapat from Delhi ?

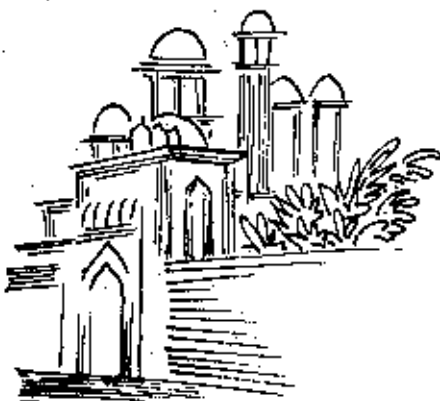
How far is Meerut from Khurja by road ?

How far is Hapur from Tughlakabad by rail ?

How many ways are there of going from Sohna to Kithor ?

---

Write 10 more questions about the map and ask one of your friends to answer them.



# The People of India

Here is a list of the states of India :

Andhra Pradesh Arunachal Assam Bihar Delhi  
Gujarat Haryana Himachal Pradesh Jammu and  
Kashmir Karnataka Kerala Madya Pradesh  
Maharashtra Manipur Meghalaya Nagaland  
Orissa Punjab Rajasthan Tamil Nadu Tripura  
Uttar Pradesh West Bengal

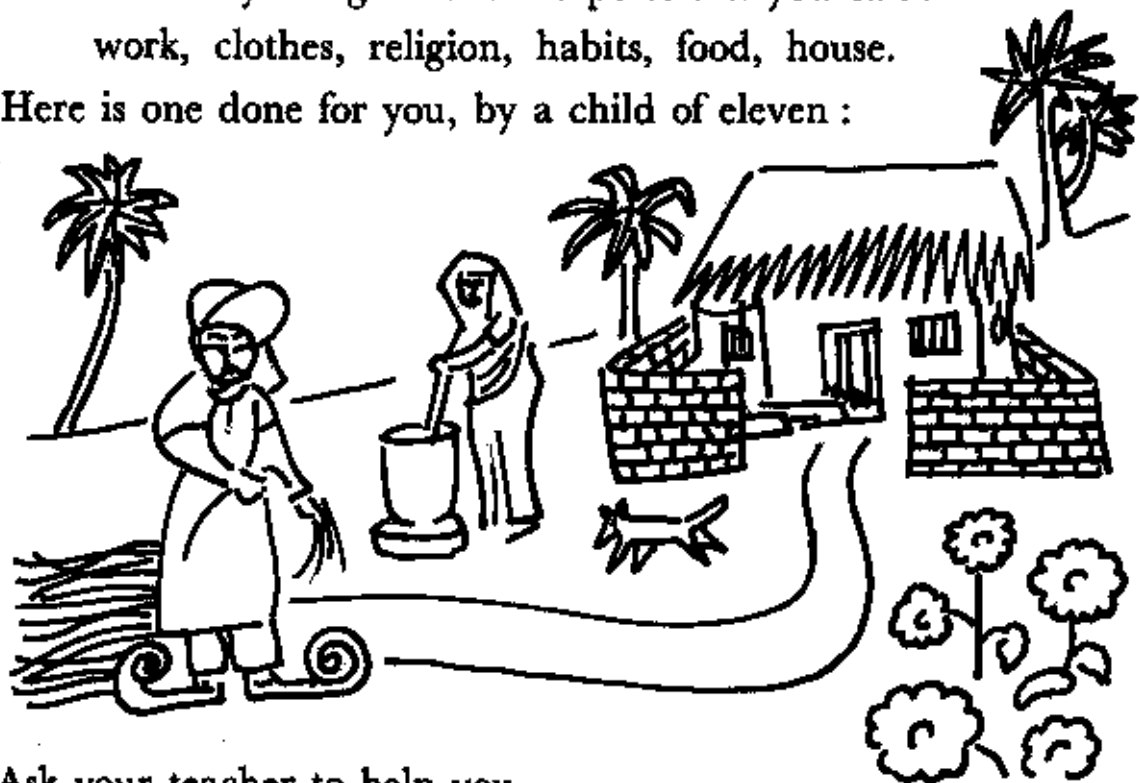
Imagine a man or a woman from each state.

Draw an imaginary picture of that person. Give an imaginary name.

Write as many things about the person as you can :

work, clothes, religion, habits, food, house.

Here is one done for you, by a child of eleven :



Ask your teacher to help you.

# Mapping the Hills

How do we make a map of a hill? Here is an island, with a hill in the middle of it.



Here is a MAP of the island :



SCALE  
0 5 10 15 Km

If we could cut the island with a big knife at A — B we could see the shape of the hills, like this :



**Make** an island of your own out of mud :



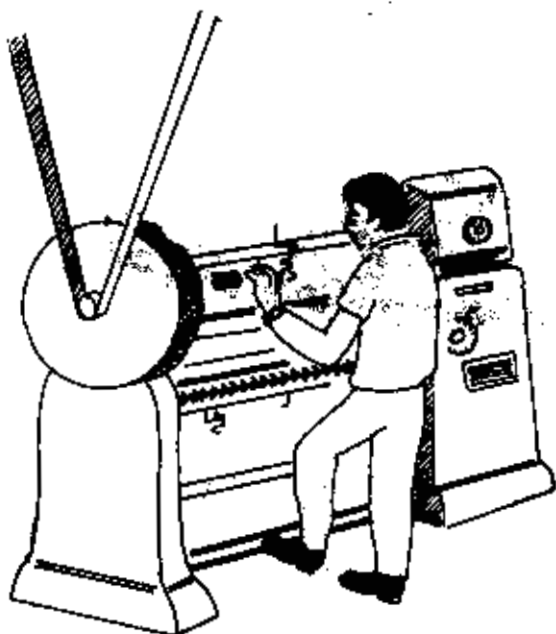
SCALE  
0 5 10 15 20 MAP

Make it 20 cm long.

Cut it with a knife.

Draw the shape of the hills.

## Machine and Hand



These two men are both making things out of metal. One is making things by hand and one is using a machine.

---

Which of the following are made by hand and which are made by machine :

paper cloth tables axes wooden bowls carts a pair of trousers  
a lamp a glass a cup a jeep a pencil a painting a poem a book  
a hat ?

---

Some of the things above can be made by hand or by machine.  
Which are they ?

---

Some factories are big (with 10,000 workers) some are small (with 10 workers). Ask your teacher to show you some pictures of factories.

Are there any factories near you ?



# Import and Export



train



aeroplane



lorry



boat

---

Import means bringing in. Export means sending out.

Goods are brought to big cities by boat, train, lorry and aeroplane. Which things in the list below come from foreign countries :

trains, watches, pens, medicines, chapatis, machinery, ink, milk, cloth, razor-blades, tools, doctors, tea, flowers, fruit, petrol, oil, matches, coal, wood, coffee, paints, cars, grass, leather, clothes, shoes, pins.

---

India produces (that is, makes) all the things in the list above. Write out all the things above which India sends to other countries (that is, exports).

What other things does India import ?

What other things does India export ?

# Compost



Both these bean plants were sown at the same time.

One is big, strong and dark green : it has a lot of beans.

One is weak, small and pale green : it has only one bean.

**Why ?** The weak plant does not have enough food. Plants need food, just like boys and girls.

The best plant food is compost.

You can make compost in your garden or at school.

Use these things :

Put them in a pit like this :

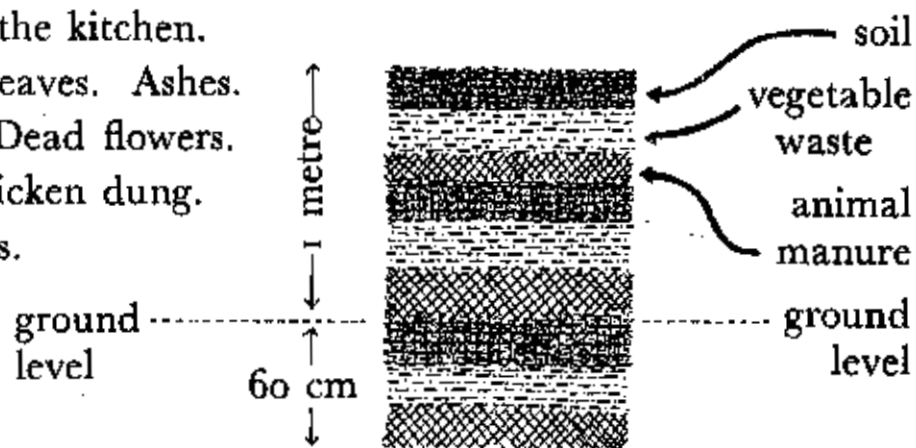
Waste from the kitchen.

Vegetable leaves. Ashes.

Cowdung. Dead flowers.

Leaves. Chicken dung.

Straw. Grass.



Put a layer on every week, and then cover with soil. When the pile is complete cover it with soil and use it after 6 months.

Your plants will grow very well.

# Vegetables

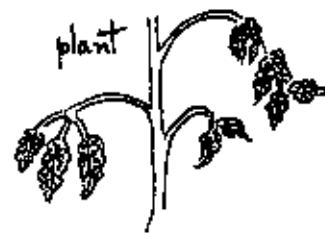
Vegetables are good food for human beings. Do you know the names of all these vegetables ?



Write a sentence or two about each vegetable plant. Describe it accurately and make a drawing of it, like this :

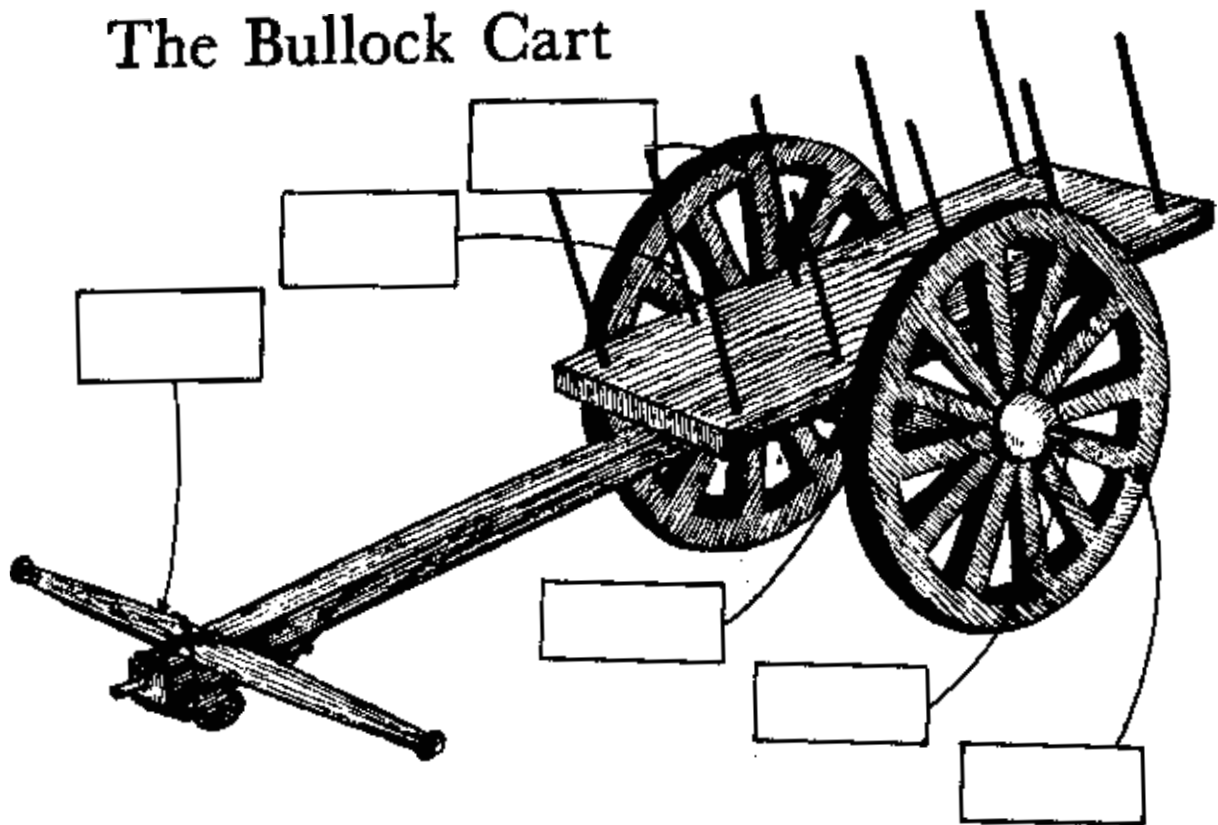
## Tomato

The plant grows to a height of 1 metre. It can give fifty tomatoes. The tomatoes are first green and small, and later become red and large.



fruit

## The Bullock Cart



The picture shows a bullock cart from Andhra Pradesh. Look carefully at the design and the measurements. On your way home look carefully at any bullock cart you can see on the road. Make a drawing of it when you next come to class and note any differences in measurements or design. Ask the man driving the cart the names (in your own language) of the parts of the cart. Fill them in the rectangles in the drawing above. The English names are :

**axle spoke felloe tyre yoke hub**

There are Rs 3000 crores invested in bullock carts in India. The money invested (put in) in the Railways in India is only Rs 4000 crores.

## The Potter



The potter works in every part of India, in the villages and in the towns. He mixes the clay and then puts it on the wheel, which spins round at high speed.

Is there a potter near you? Go and find one if you can, and watch him at work. Ask him to let you try to make a pot.

Go to a shop which sells mud pots and make drawings of the different designs. By the side of each drawing put in the measurements. Why is the pot made in a particular way? What is each pot used for?



# Country Crafts



Look at the people in the pictures above. They are making things by hand. There are many more crafts practised in villages. Can you name some ?

Make a list of all the **village** craftsmen you can think of. Try to write a few sentences about each, e.g.

What he makes : material used : use : cost to him in materials and labour : cost to the customer : profit.

Here are six : think of others :

carpenter

blacksmith

wheelwright

tailor

jeweller

potter

# Town and City Crafts



Look at the pictures above. All these people live in towns, and all of them are making things by hand. Many more crafts are practised in towns. Can you name some ?

Make a list of as many **town** craftsmen as you can. Try to write a few sentences about each, e.g.

what he makes : materials used : cost to him in materials  
and labour : cost to the customer : profit.

Here are four : think of others

jeweller

watch-maker

tin-smith

wood-turner

## Riches from the earth



coal



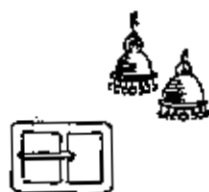
iron



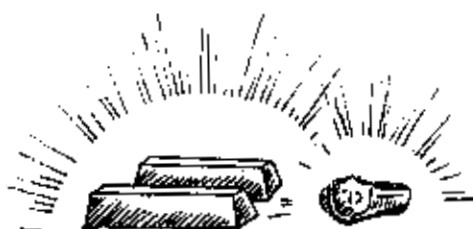
and other metals



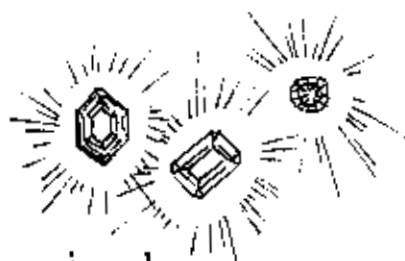
copper



silver



gold



jewels

---

All these precious things come from below the earth's surface. The places where they are dug from are called mines. Ask your teacher to show you a picture of a mine. Are there any in India?

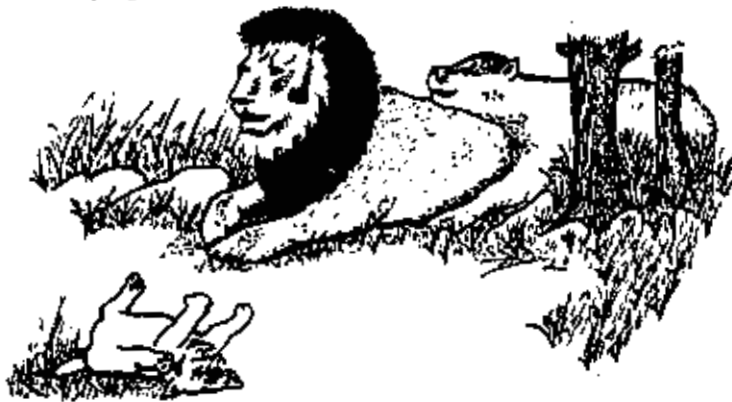
Other precious things come out of the earth too, such as oil, building stones and chemicals of various kinds.

Have you ever seen any of the things in the pictures above? Write a few sentences about each of these things. Say what they are used for and say whether you have seen things made of them.



# The Family

Many people and animals live in families.



A family usually means:

Father

Mother

Children

A house

Sometimes people live in big families, where there are a number of fathers and mothers. Sometimes families are small.

---

Parents give their children:

Food

Shelter

Clothing

Education

Love

How do the following carry out their duties as parents:

human beings : birds : deer : tigers : cats :

elephants : cows ?

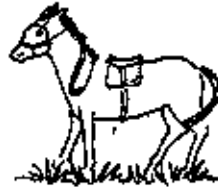
---

How do animals educate their young ?

Write a few sentences about a cat teaching its kittens to catch mice.



# Animals that Help Men



~~All the animals above help us in some way or other. List their names and write a few sentences about each showing how they help us.~~

## **How men help animals**

Animals help us, and we help them. How do we help animals? Write one or two sentences showing in what ways you could help the animals above by giving them

Food

Shelter

Medicine

Love

Animals need everything that human beings require except clothing.

Do you keep a pet dog? Write down some important things about keeping pets.

# Vanamahotsava



Do you know the word **Vanamahotsava**?

Vana means forest.

Maha means great.

Utsava means festival.



On Vanamahotsava people plant trees. Have you ever planted a tree ?

Try to plant at least one tree every year, in your garden, or in someone else's garden, or near the school.

Many people plant trees on Vanamahotsava, but the trees die because they are not looked after. Trees need looking after just like babies.

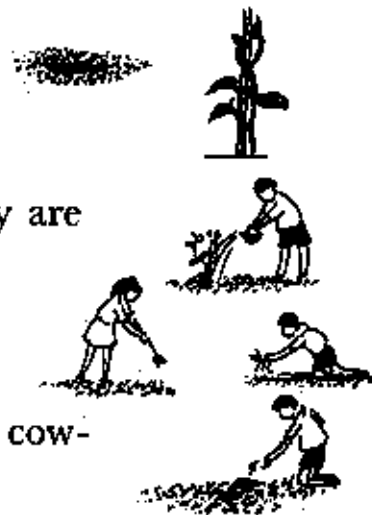
They need : a good deep pit to live in

a stake to hold them up

regular watering when they are young

weeding

some food : old (not fresh) cow-dung, or compost.



## Music in India



Classical music in India has two main divisions :

North Indian, or Hindusthani music, and South Indian, or Karnatak music.

In each of these two divisions there are two more divisions: instrumental music and vocal (singing) music.

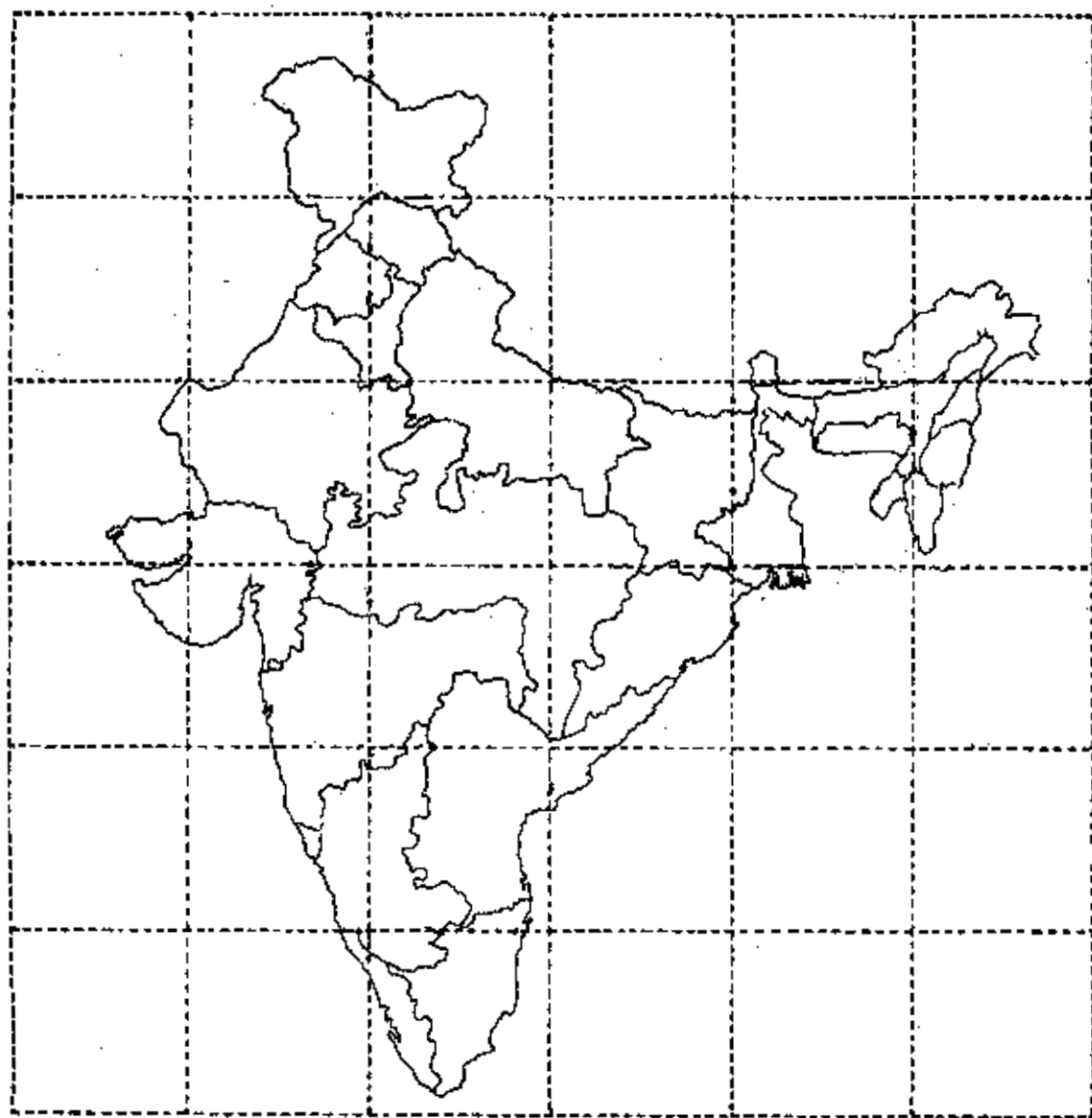
There is also a great deal of music which is not classical: folk music, film music and light songs.

Which kinds of music have you heard ?

Which kinds of music do you like ?

Make a list of the different kinds of music there are in India, and mark on the list those kinds of music you have heard.

## A Jigsaw Puzzle



Colour each state. Make sure that no neighbouring states have the same colour. Colour the sea blue. Then cut out the page along the dotted line and stick it on to thin cardboard. Cut along the dotted lines and then mix up the pieces. See if your friends can put the map together.



# Sickness and Hygiene



Illness

Sickness

Disease

Write out a list of all the illnesses you have had. Here are some words to help you :

cough 'flu fever cuts burns boils broken bones  
dysentery malaria toothache headache' stomach-ache  
cold

Discuss these words with your teacher.

---

Hygiene means 'rules for living a healthy life.' Animals and insects carry dirt to our food. If we eat dirty food we get ill.

These creatures bring sickness : rats flies mosquitoes  
cockroaches.



Ask your teacher how they bring diseases to us.

---

Cleanliness is the most important thing in good health.

Clean hands when you eat your food.

Clean food. Clean water. Clean clothes.

Clean house and garden.

Don't leave rubbish and waste in the garden.

Flies will breed. Don't leave pools of dirty water. Mosquitoes live in it.

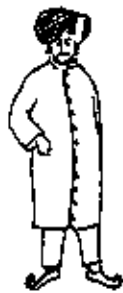


# Clothing

Why do we wear clothes? Which of the answers below do you think are true?

To look beautiful. To protect us from the cold. To protect us from the rain. To make people think we are rich. To cover our bodies. To tell people who we are.

Discuss these answers with your teacher.



safar  
achkan  
trousers  
shoes



shirt  
veshti  
no shoes



hat  
cloak  
trousers

N. India

S. India

Kashmir



hat  
coat  
trousers  
shoes



no shirt  
sarong  
no shoes



fur cap  
fur coat  
thick trousers  
fur boots

Western Countries

Malaya

Greenland

---

Why do men wear different clothes from women?

What do people wear in your part of the country?

Does India have a national dress?

How much does it cost to clothe a man for one year?



# Rain

Can you tell when it is going to rain ? Write down some of the signs which tell you when rain is coming.

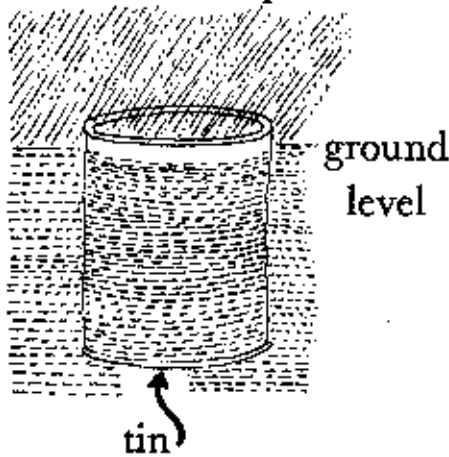
How much rain falls in a year in your part of India ?

Guess.    20 cm        100 cm        50 cm        200 cm        500 cm

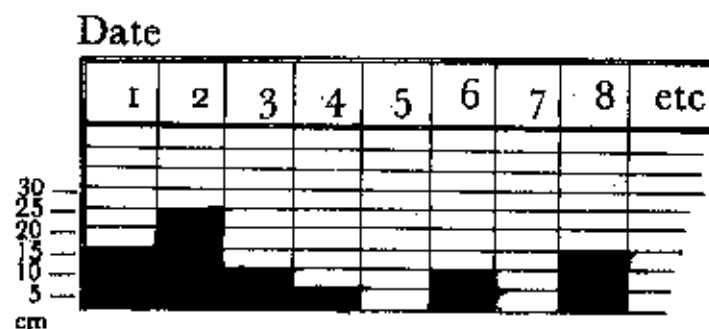
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You can measure the rainfall every day with a rain gauge.

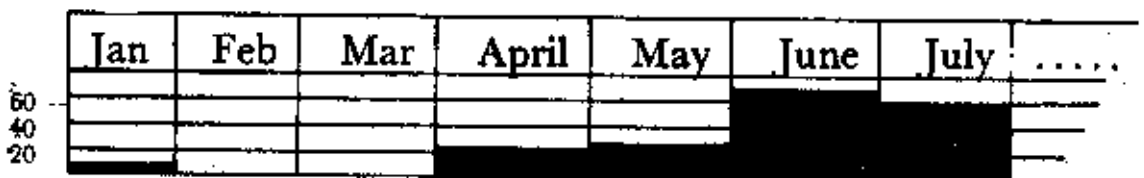
Put a tin in the ground and measure the rain that falls into it every day. If the tin has an edge at the top the drops of rain will not splash out.



Make a rain chart for the month and put in the number of cms of rain every day.



Then add the total for the month and put it in a yearly chart, like this :



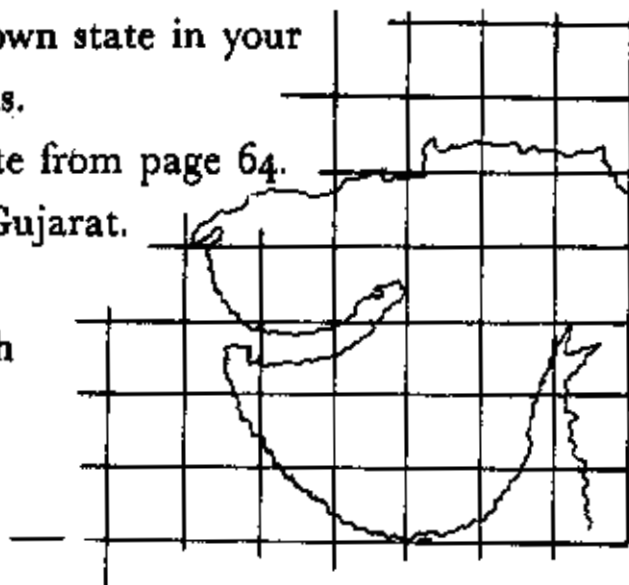
## Your State

Draw a large map of your own state in your exercise book. Do it like this.

Trace the shape of your state from page 64.

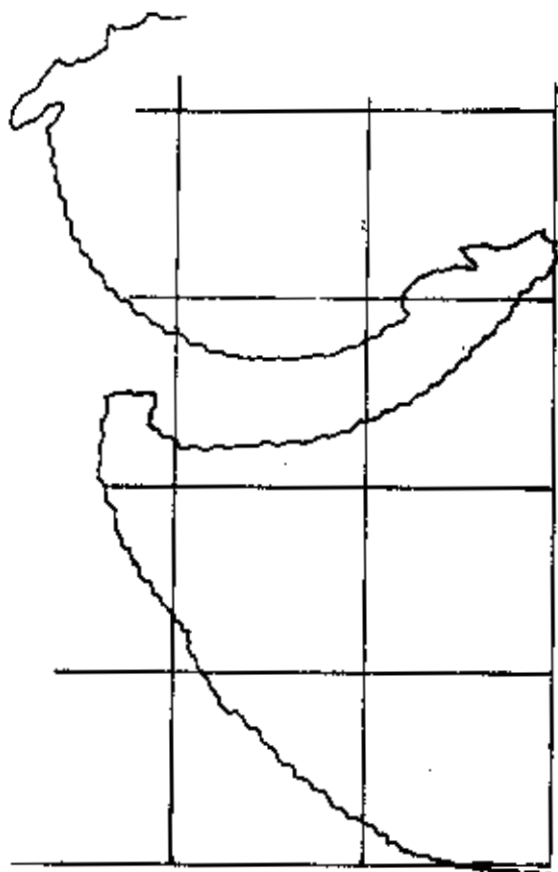
Let's suppose your state is Gujarat.

Now cover your tracing with 1 cm squares like this :



Now cover a whole sheet in your exercise books with 1" squares.

Now look at each square carefully and copy the outline of the state square by square, like this :



Put your school on the map.

Put in any big towns or cities, roads and rivers too, if you can.

# Yourself

Have you ever looked in a mirror ?

Write a short description of yourself. Remember to put in details about the following :

Height. Weight. Shape of nose. Colour of eyes. Strong or not. Good teeth ? Clothes. Shoes. Glasses ?



---

The mirror will only tell you what you look like.

What are you like inside ?

Look at the list of qualities on page 35. Have you changed since you did the work on that page ?

Write some sentences about yourself. Use some of these ideas :

How do I speak to my parents ? What do I want to be when I grow up ? Do I want to be rich ?

How hard do I work at school ?

Do I stay away from school when I am not ill ?

Do I play games ? When shall I leave school ?

Do I want to leave school ?

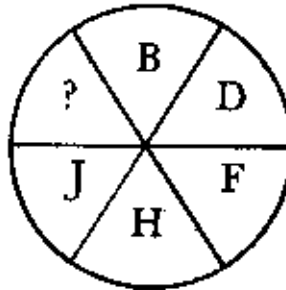
Think of some more questions of your own.

# Thinking

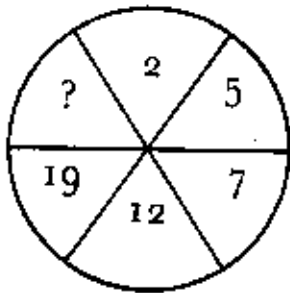
See if you can answer the following :

1. Find the odd word : eronga der nam lube

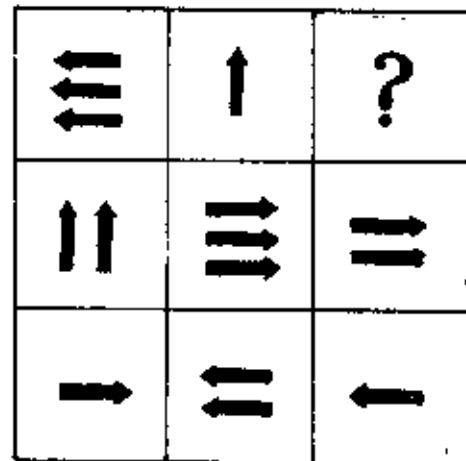
2. Add the missing letter :



3. Find the missing number :



4. Find the missing figure :

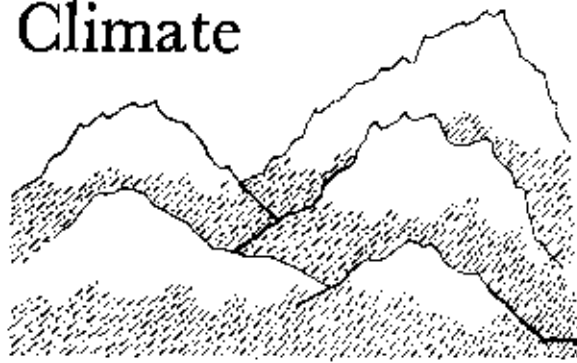


5. Find the odd word :

cloklub ageel tac god

They are quite easy puzzles when you have learned the trick. Make up more puzzles like these and try them on your friends.

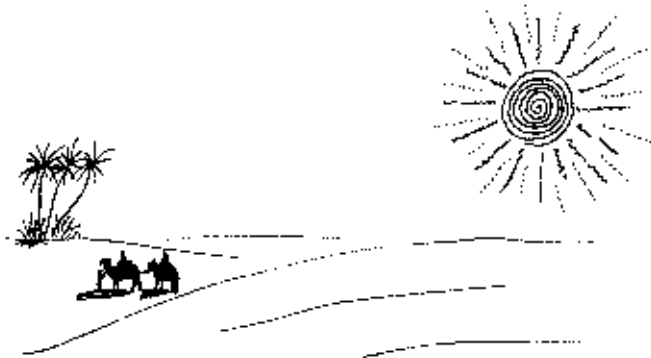
# Climate



snowy peaks



hot and wet



desert



cold and wet

Some parts of the world are snowy, some hot and wet, some dry and sandy, some cold and wet. Men live **different** lives in different places. Their food is different, their clothes and houses are different. Their farming is different.

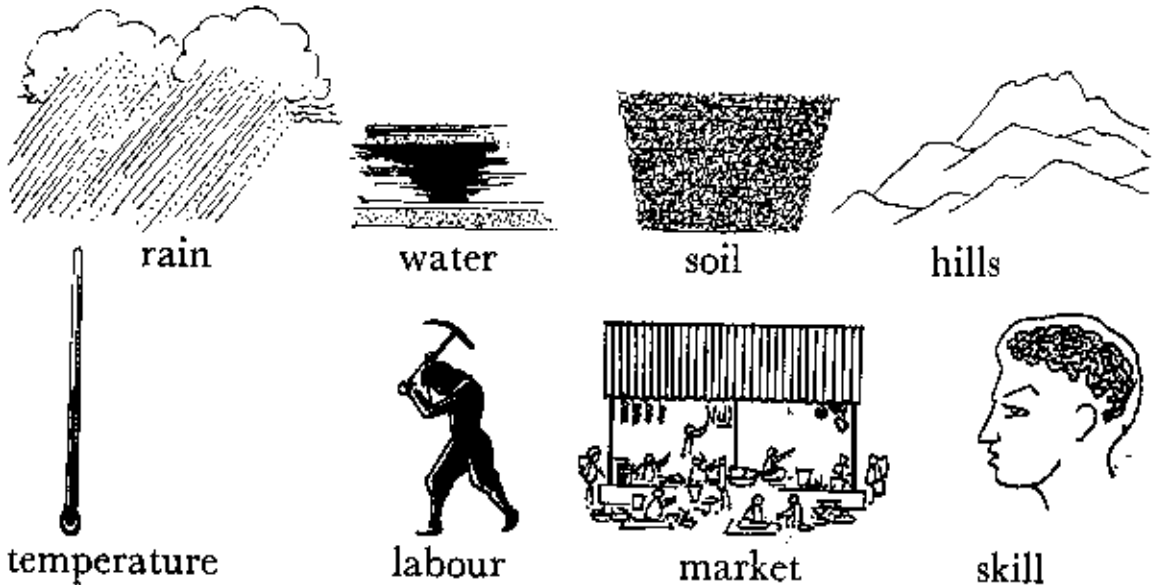
Try to describe life in the parts of the world mentioned below. Use the headings given. Get your teacher to help you.

	<b>Houses</b>	<b>Food</b>	<b>Clothing</b>	<b>Farming</b>
Desert				
Hot and wet	[ Do not write here, there			
Cold and wet	is not enough space.			
Ice and snow	Write in your exercise books.]			

# Farming

How do we get good crops in our farms ?

By good farming. But there are a number of important things necessary in order to have a good farm. Here are some of them:



Try to write a few sentences about each of the things pictured above. Here are some ideas to help you :

Rain      Enough ? At the right time ? Too much ?

Water     Enough ? A river or stream ? Too much ?

Soil      Good ? Sandy ? Full of compost ?

Hills     Too steep ? Rain runs down too fast ?

Temperature    Too hot ? Too cold ?

Labour     Not enough people to do the work ? Too expensive ?

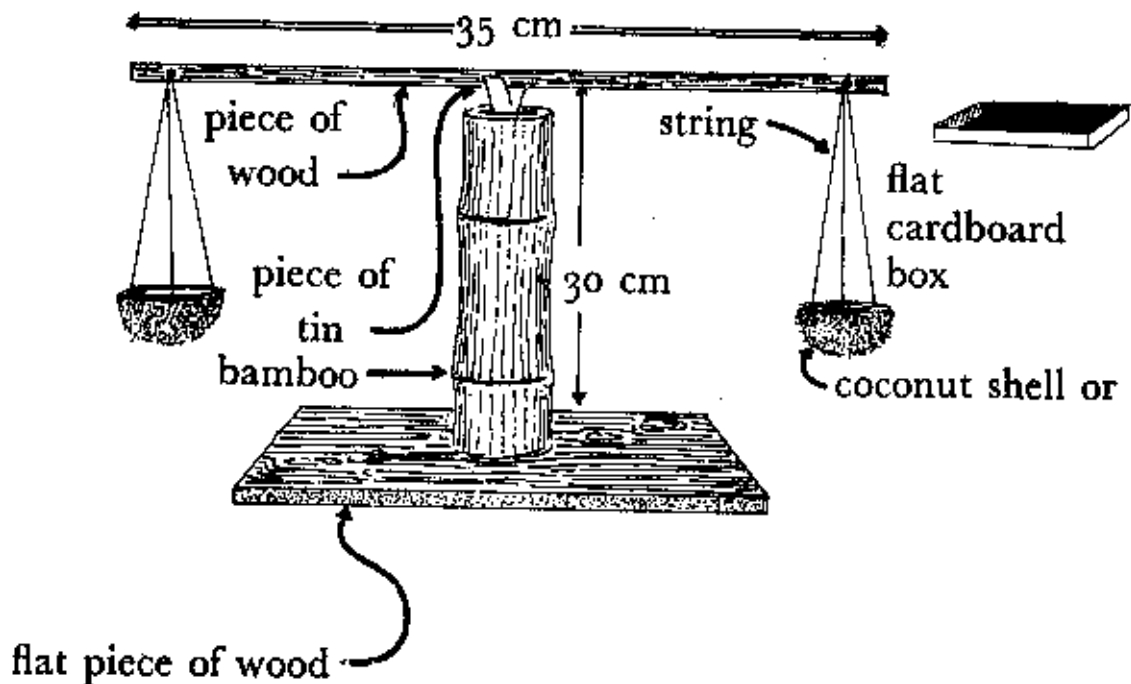
Market    No market near ? Market too big/small ?

Skill      Brains. Reading books. Hard work. Knowledge ?

# Weight

We measure weight with a **Weighing Machine**.

Let's make one, like this :



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If the two sides do not balance put a little mud on one end of the cross-beam (35 cm long) until they do. Ask your teacher or the postmaster to lend you weights of 50 gm and 10 gm. Then make your own weights out of mud balls.

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Use your weighing machine and weigh the following :

Your pencil.      10 coins.      A box.      A bottle of ink.

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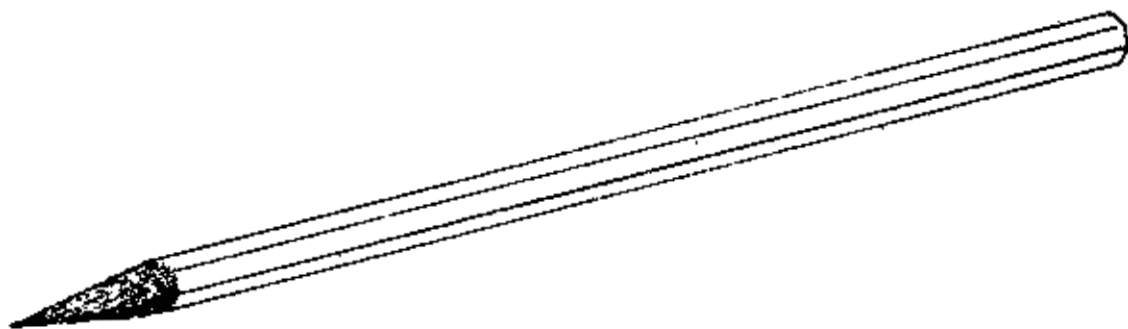
1000 grammes = 1 kilogramme. Guess the weight of the following : A man. A boy 6 years old. A cow.

Ask your teacher to tell you the correct answers.

## Exact Description

Do you remember what you read on page 37. Please read it again. It is very important to be able to describe things exactly or accurately.

### Object



### Description

This is a pencil. It is  $15\frac{1}{2}$  cm long, and 7 mm wide. It has 6 sides. It is made of wood. Down the middle there is a rod of lead. The rod is 2 mm in diameter. One end of the rod is pointed. The wood has been cut with a knife.

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### Things left out

Some things have been left out of the description above. Write some more sentences making the description even more exact. Some ideas :

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Weight	Use	Cost	Printing	Colour
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Make an exact description of the following :

Your desk      Your pen      Your Mathematics Book





Thus says Piyadasi,  
dear to the gods:  
On the roads also banyan  
trees were planted, to give  
shade to cattle and to men.

*from The Edicts of Ashoka*