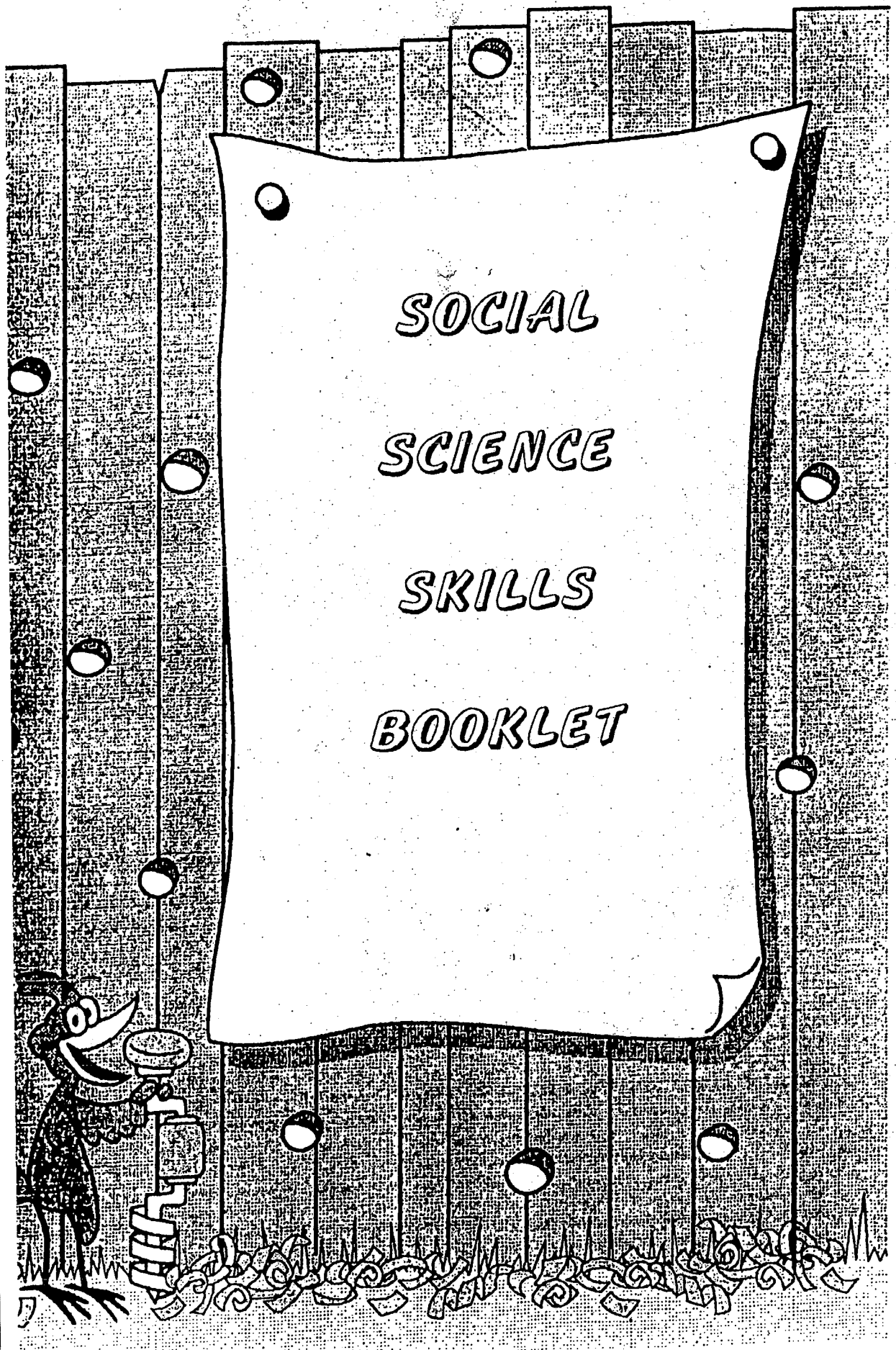

SOCIAL
SCIENCE
SKILLS
BOOKLET

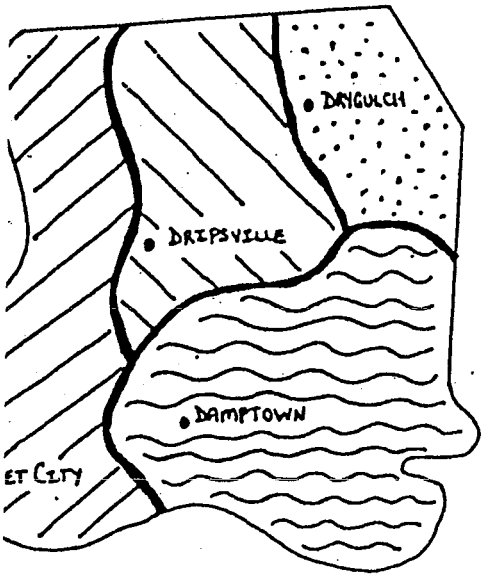
Complete the following exercises

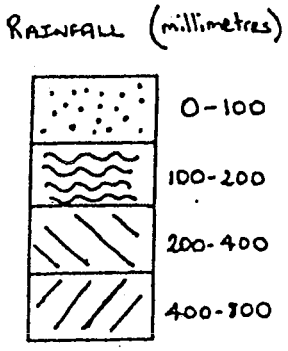
1) Wetville

a) What is the driest city ? _____

b) What is the wettest city ? _____

c) Which city has approximately - 20 mm of rain _____
- 790 mm of rain _____
- 134 mm of rain _____
- 221 mm of rain _____

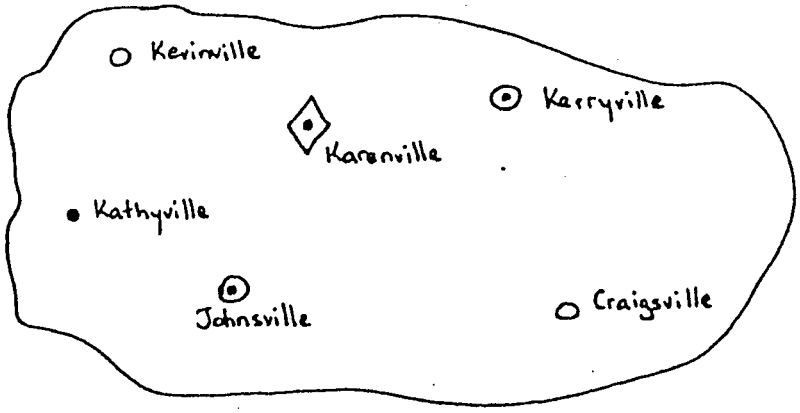




) Cityville

Which city or cities :

* has the largest population _____
* have less than 1000 people _____
* has 20 000 people and is near Kathyville _____
* have 10 000 to 50 000 people _____
* is the larger - Kevinville or Kerryville _____



KEY. Population

o Under 1000

• 1000 to 10000

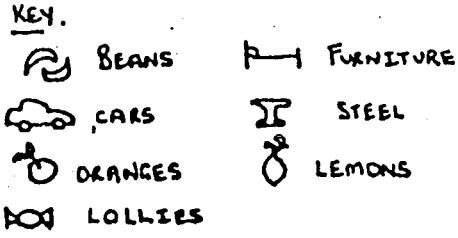
⊙ 10000 to 50000

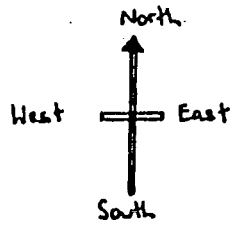
◈ Over 50000

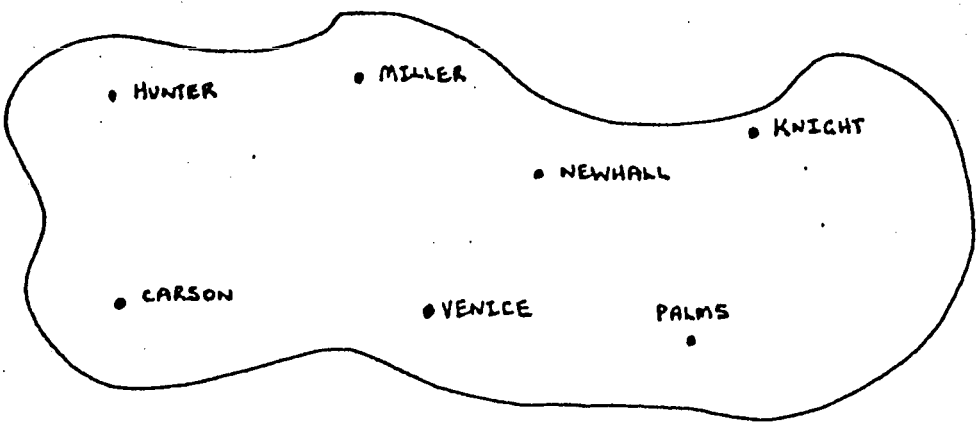
3) Symbolville

a) Draw the following map into your book and on it draw the symbols from the key in the correct position.

* A steel mill south of Newhall
* Lemon orchards north of Venice
* Orange orchards west of Carson
* A furniture factory east of Palms
* A car factory south of Knight
* A lolly factory south of Miller
* A bean farm west of Hunter

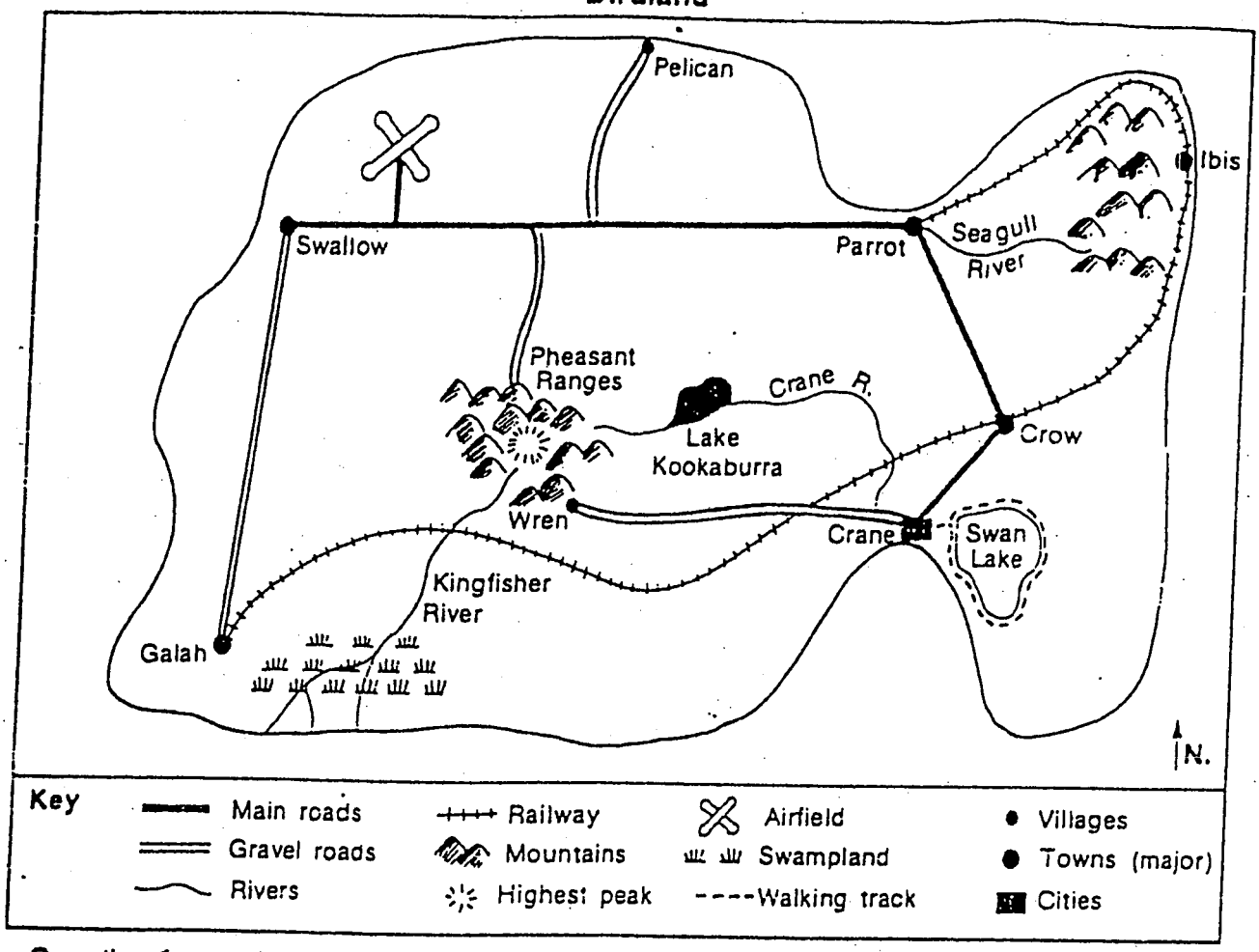






Interpreting Keys

Birdland



Question 1

(a) How many gravel roads are there? _____

(b) Which lake has a track around it? _____

(c) Where do you think the busiest road would be? _____

(d) Which river has a lake on it? _____

(e) Which river has a town at its mouth? _____

(f) Which river has 3 mouths? _____

(g) What place is the airfield near? _____

(h) Which town is built near swampland? _____

(i) In which mountain range is the highest peak? _____

(j) What are the two small villages on the map? _____

Question 2

(a) Which place could be a quiet holiday spot? _____

(b) Which town on the railway line could be a port? _____

(c) Going by train, between which two towns would you get the best view of the mountains? _____

(d) What kind of road goes between Swallow and Galah? _____

(e) Which two rivers does the railway cross? _____

(f) Which major town is closest to mountains? _____

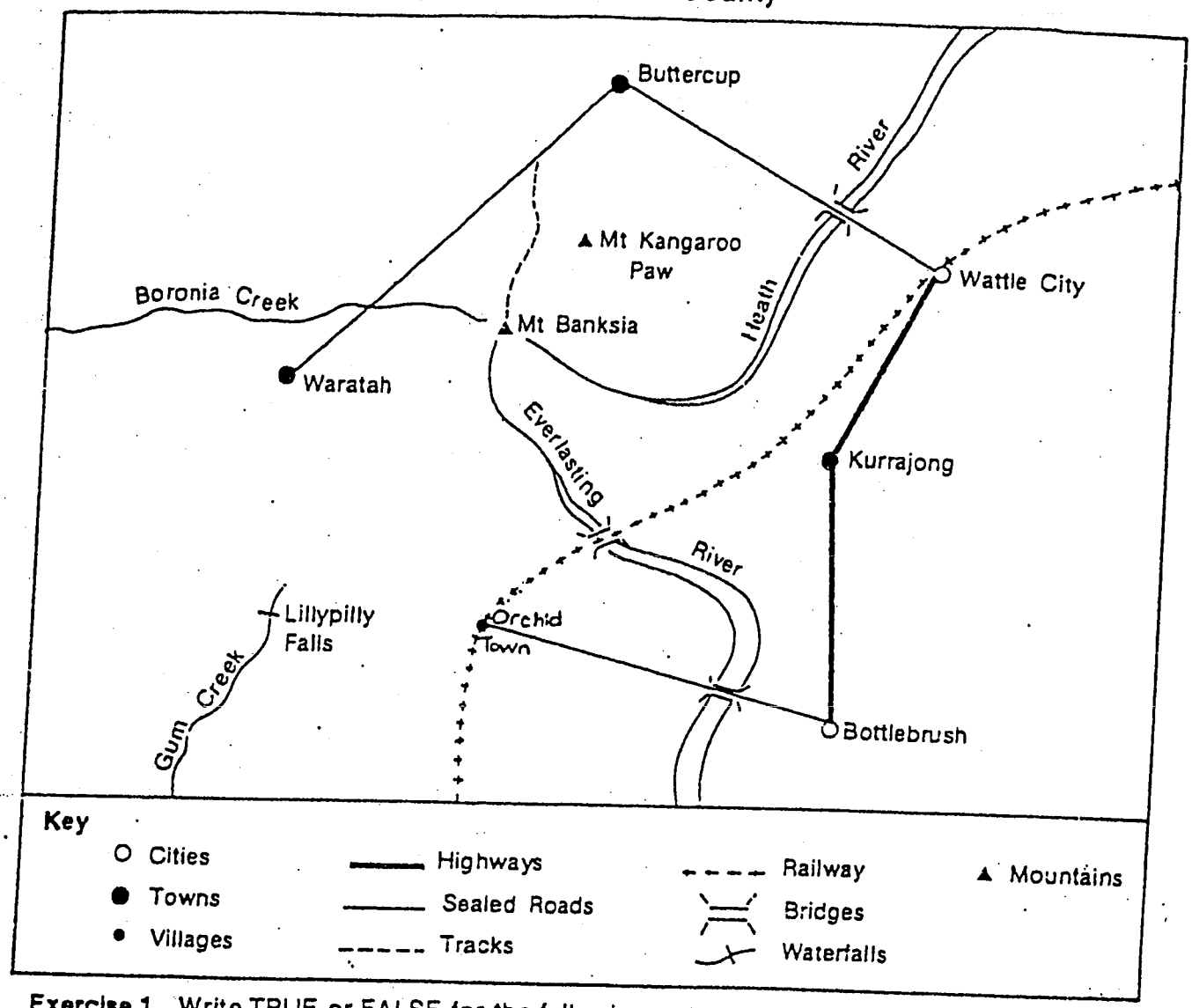
(g) Between which two towns would car drivers have to look out for trains? _____

(h) Where do you think the busiest railway station would be? _____

(i) Which town would be the hardest to drive to? _____

(j) Why is Ibis different to any other town on the map? _____

Interpreting Keys
Native Flower County



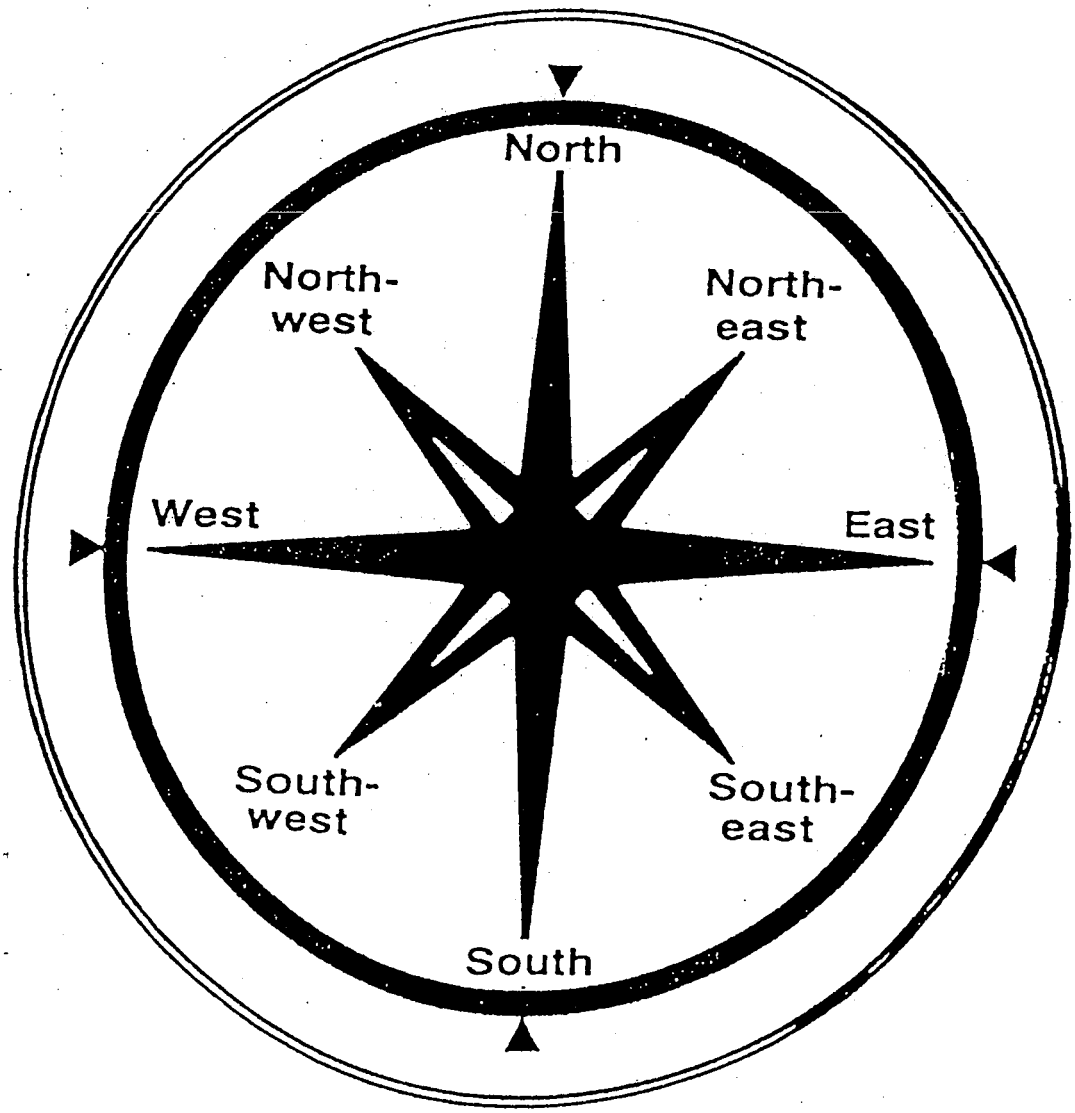
Exercise 1 Write TRUE or FALSE for the following statements.

Statements	True/False
(a) Bottlebrush is a village.	
(b) The Lillypilly Falls are on Boronia Creek.	
(c) There are two rivers on the map.	
(d) The railway runs through Wattle City.	
(e) There is a mountain called Banksia.	
(f) Kurrajong and Buttercup are both cities.	
(g) The road between Buttercup and Waratah is a hignway.	
(h) A sealed road goes to Mt Banksia.	
(i) There are 2 road bridges on the map.	
(j) The road between Wattle City and Kurrajong is a highway.	
(k) There are 2 railway bridges on the map.	
(l) Orchid Town is a village.	
(m) Going from Waratah to Buttercup by road, you would cross a bridge.	

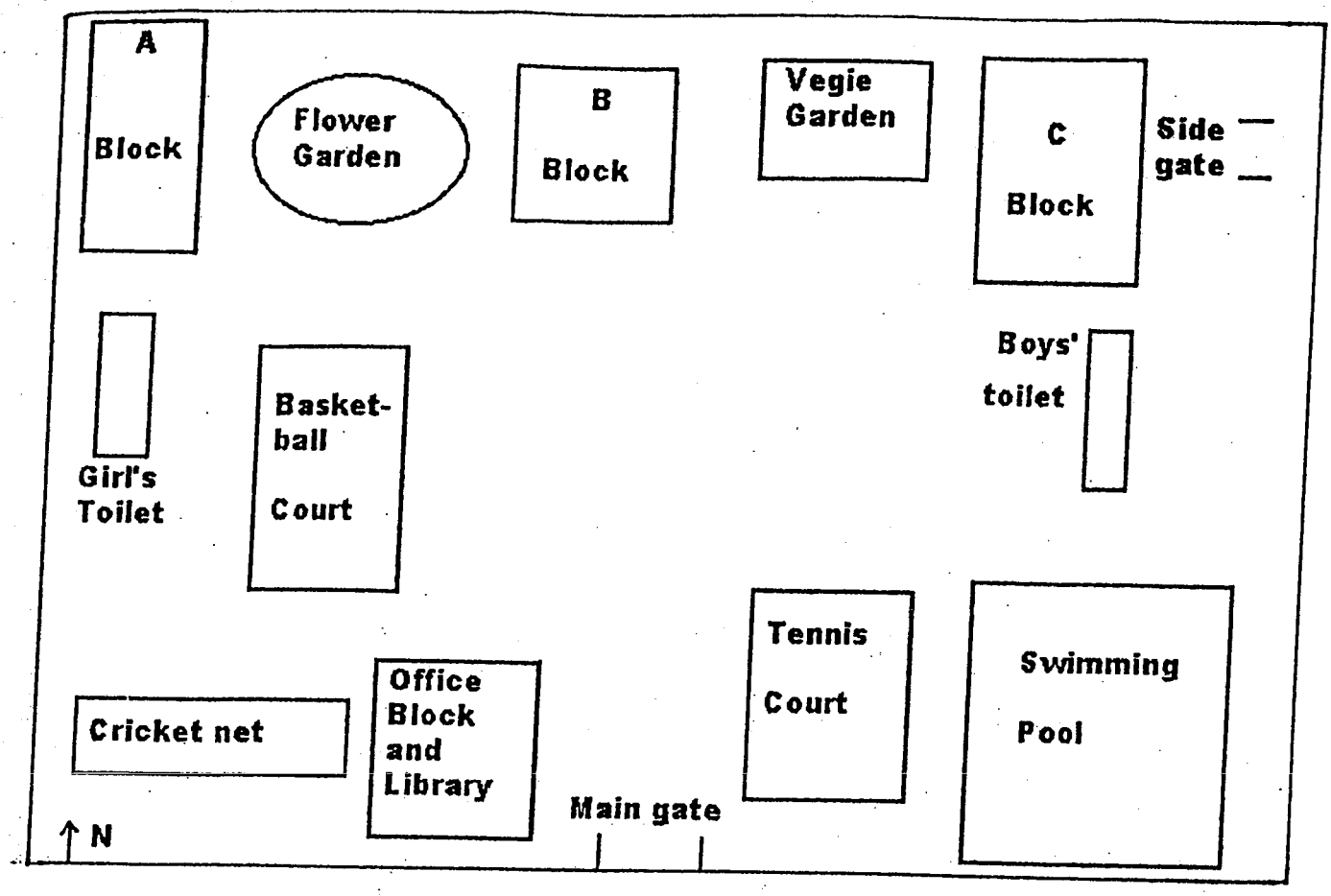
DIRECTION

'he easiest way of explaining the direction of 1 place 'om another, either on a map or on the ground, is to use ıe points of the compass shown below.

The points of the compass



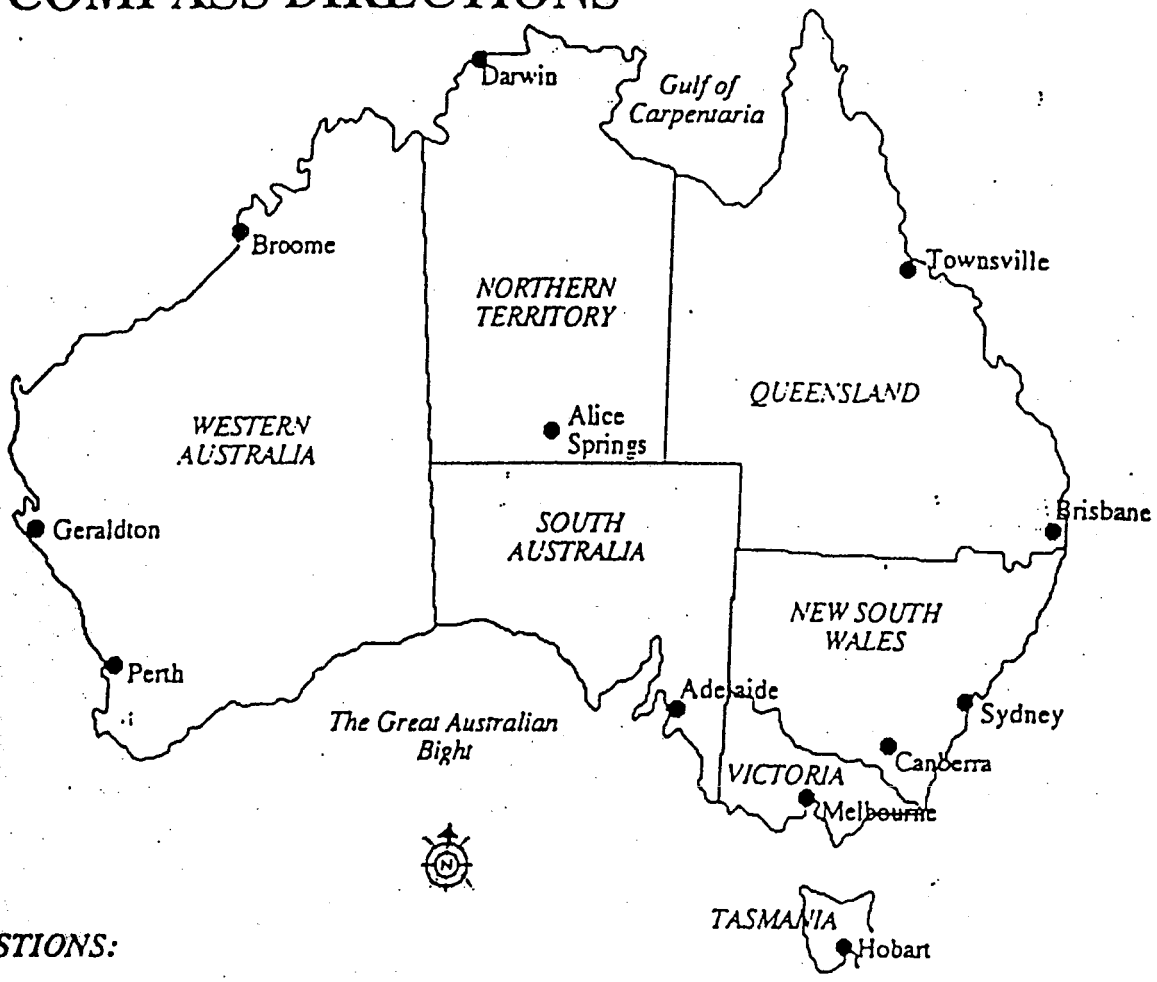
Daisyville Primary School



Exercise - What direction is it ?

FROM	TO	DIRECTION
Girls' toilet	cricket net	
office block	tennis court	
main gate	B block	
C block	A block	
flower garden	basketball court	
cricket net	A block	
side gate	vegie garden	
B block	C block	
office block	flower garden	
flower garden	side gate	
A block	vegie garden	
B block	main gate	
library	tennis court	
tennis court	C block	
A block	cricket net	

COMPASS DIRECTIONS



QUESTIONS:

1. In which direction is Sydney from Melbourne? _____
2. In which direction is Perth from Sydney? _____
3. In which direction is Darwin from Brisbane? _____
4. In which direction is the Gulf of Carpentaria from Adelaide? _____
5. In which direction is Brisbane from Geraldton? _____
6. In which direction is Canberra from Townsville? _____

Darwin is found in the _____ part of Australia.

Brisbane is found in the _____ part of Australia.

Perth is found in the _____ - _____ part of Australia.

Geraldton is found in the _____ part of Australia.

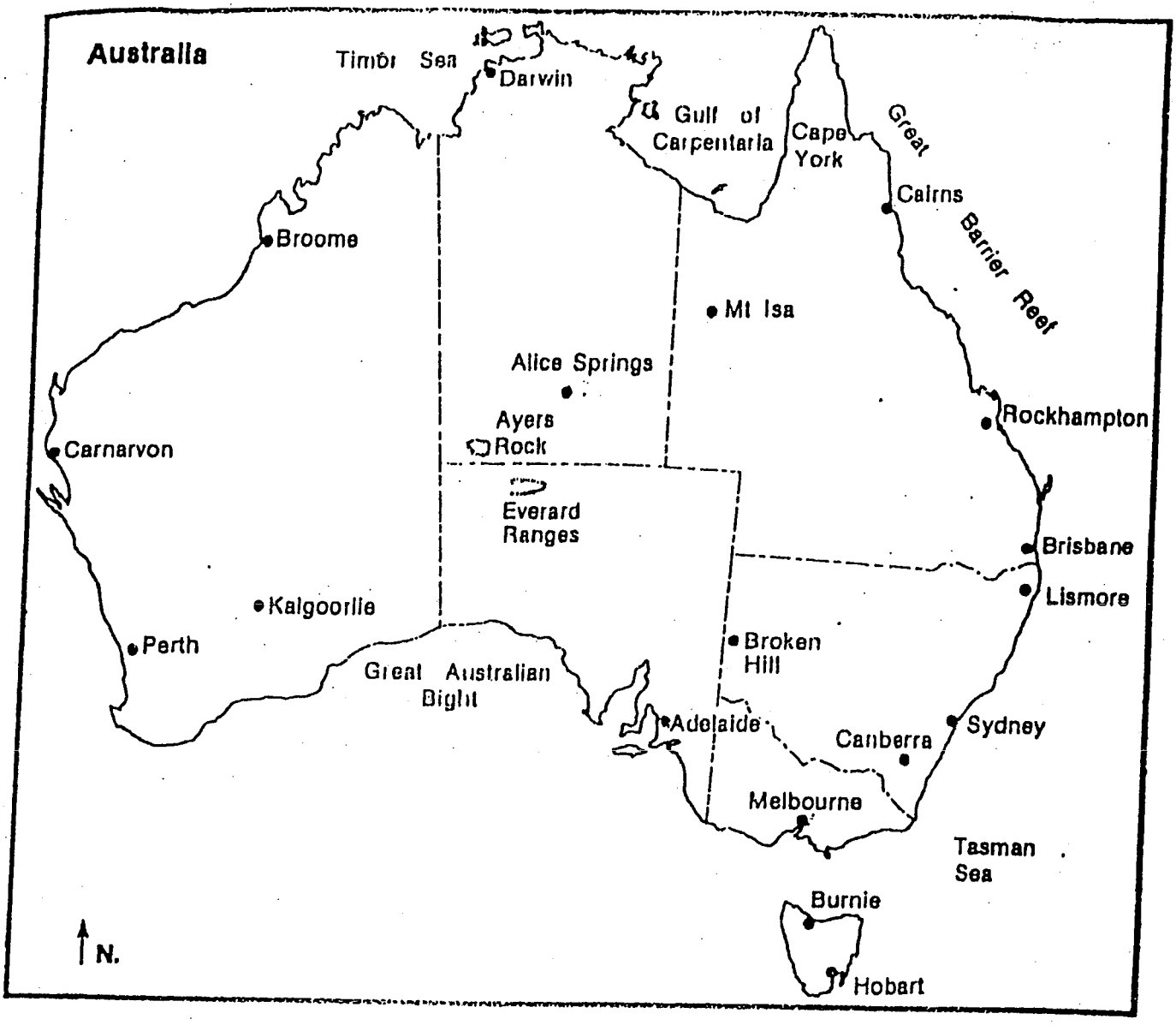
Adelaide is found in the _____ - _____ part of South Australia.

Broome is found in the _____ - _____ part of Western Australia.

Townsville is found in the _____ - _____ part of Queensland.

Alice Springs is found in the _____ part of Australia.

The southern-most state of Australia is: _____.



EXERCISE 1

What direction is :

a) Brisbane from Melbourne _____
b) Perth from Brisbane _____
c) Hobart from Carnarvon _____
d) Canberra from Darwin _____
e) The Great barrier Reef from Ayers Rock _____
f) The Everard Ranges from Mt Isa _____
g) Great Australian Bight from Broome _____
h) The Tasman Sea from Alice Springs _____
I) Adelaide from Hobart _____
j) Kalgoorlie from Rockhampton _____
k) Broken Hill from Burnie _____
l) Cairns from Mt Isa _____
m) Lismore from Darwin _____
n) Broome from Carnarvon _____
o) Tasmania from the Northern Territory _____
p) Canberra from Sydney _____
q) Broome from Brisbane _____
r) Brisbane from Gulf of Carpentaria _____
s) Perth from Cape York _____
t) The Great Australian Bight from The Great Barrier Reef _____

EXERCISE 2

A pilot took off from Lismore to fly around Australia. He flew the following route :
Lismore, Canberra, Melbourne, Burnie, Hobart, Adelaide, Kalgoorlie, Perth, Carnarvon, Broome, Darwin, Alice Springs, My Isa, Cairns, Rockhampton, Brisbane and back to Lismore.
List these places, leaving enough room between each to write down the direction in which the plane is flying. eg Lismore, (SW) Canberra, (SW) Melbourne .... and so on.

SCALE

ll maps are scale drawings. This means that measurements f the real places have been changed to make them fit onto a age or part of a page.

o measure distances on a map you must find the scale tatement first. Scale can be shown on a map in 3 different ays.

) WORD SCALE

1cm on the map measures 100 km on the ground.

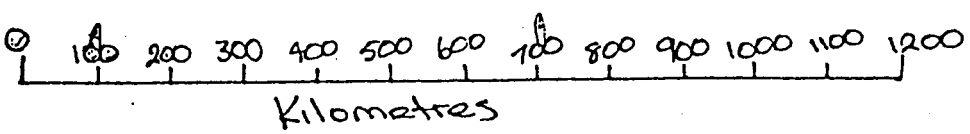
o use the word scale multiply the distance on the map by the econd number in the word statement
g If you measure 5cm on the map, the real distance would e 5 x 100 = 500 km

REPRESENTATIVE FRACTION

1 : 10 000 000

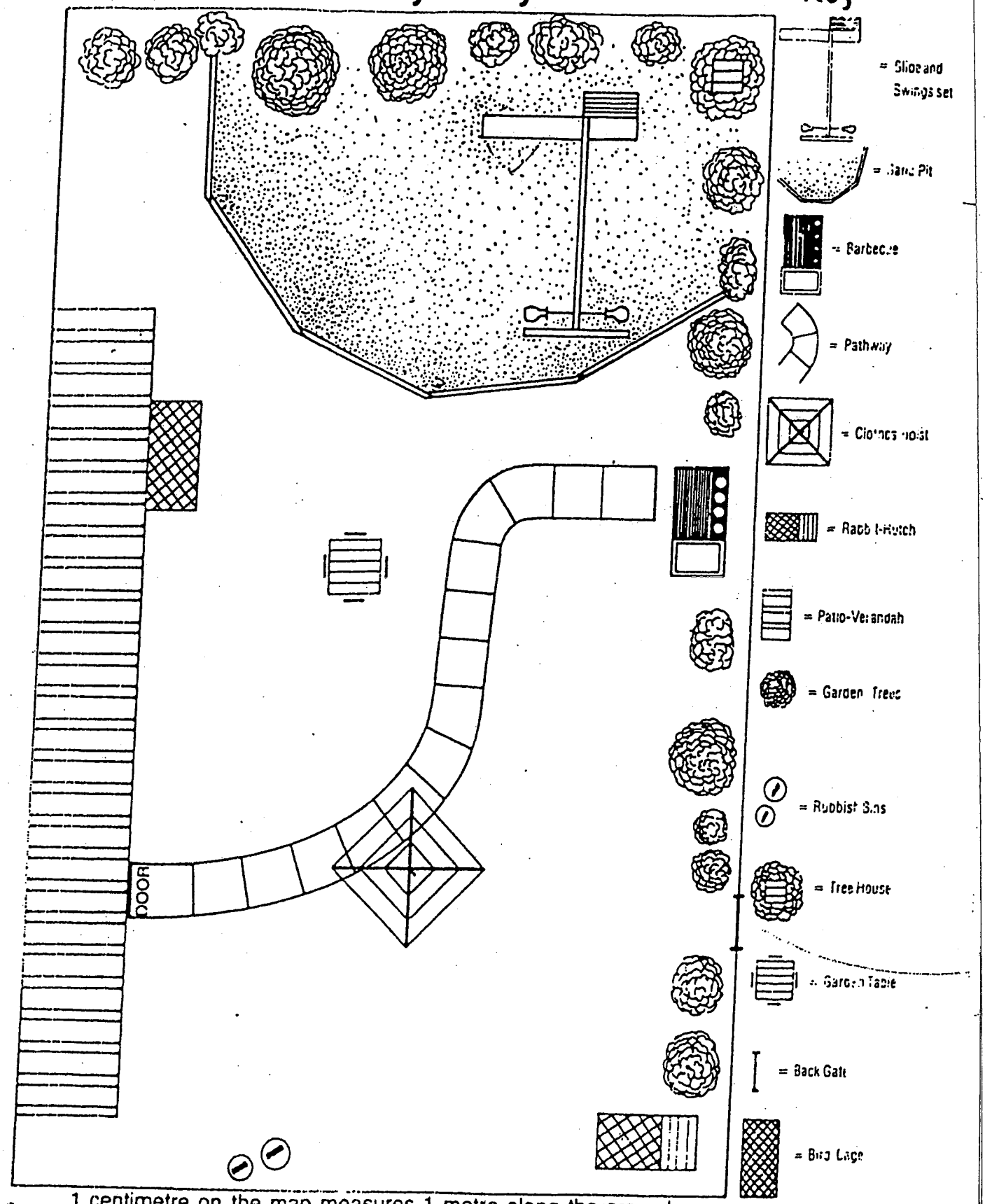
1cm on map 10 000 000cm along the ground (100kms)

LINE SCALE

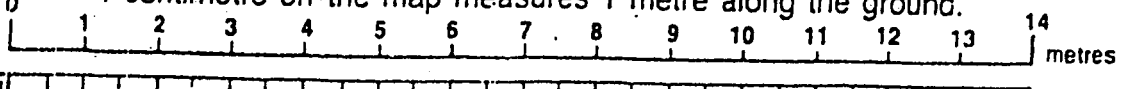


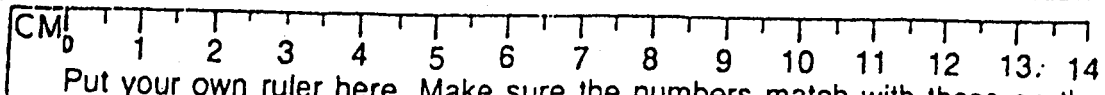
m on the map would be equal to 100kms along the ground.

My backyard



1 centimetre on the map measures 1 metre along the ground.





Put your own ruler here. Make sure the numbers match with those on the line scale.

Try these!

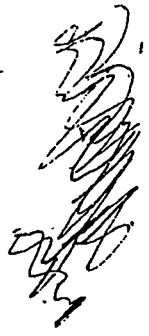
1 The first one is done for you. Use the line scale to work out how far it is from the verandah door to

	On the map	On the ground
the bird cage	7cm	7 metres
the clothes hoist		
the back gate		
the sand pit		
the tree house		

	On the map	On the ground
2 How wide is the path?		
3 How wide is the clothes hoist?		
4 How long is the rabbit hutch?		
5 How wide is the rabbit hutch?		
How wide is the back gate?		
How wide is the door?		
How long is the bird cage?		
How wide is the bird cage?		
How long is the barbecue?		
How wide is the back yard?		
How wide is the garden table?		

How far is it from the door of the verandah to the rubbish bins and then on to the rabbit hutch?

_____



Scaling the Heights

What does an echidna like on its pizza?

On a map 1 cm represents 3 km. Using this scale, convert the map distances below to actual distances, choosing your answers from the list at the bottom of the page.

When you have finished, use the letters next to the distances left over to find the puzzle's solution.

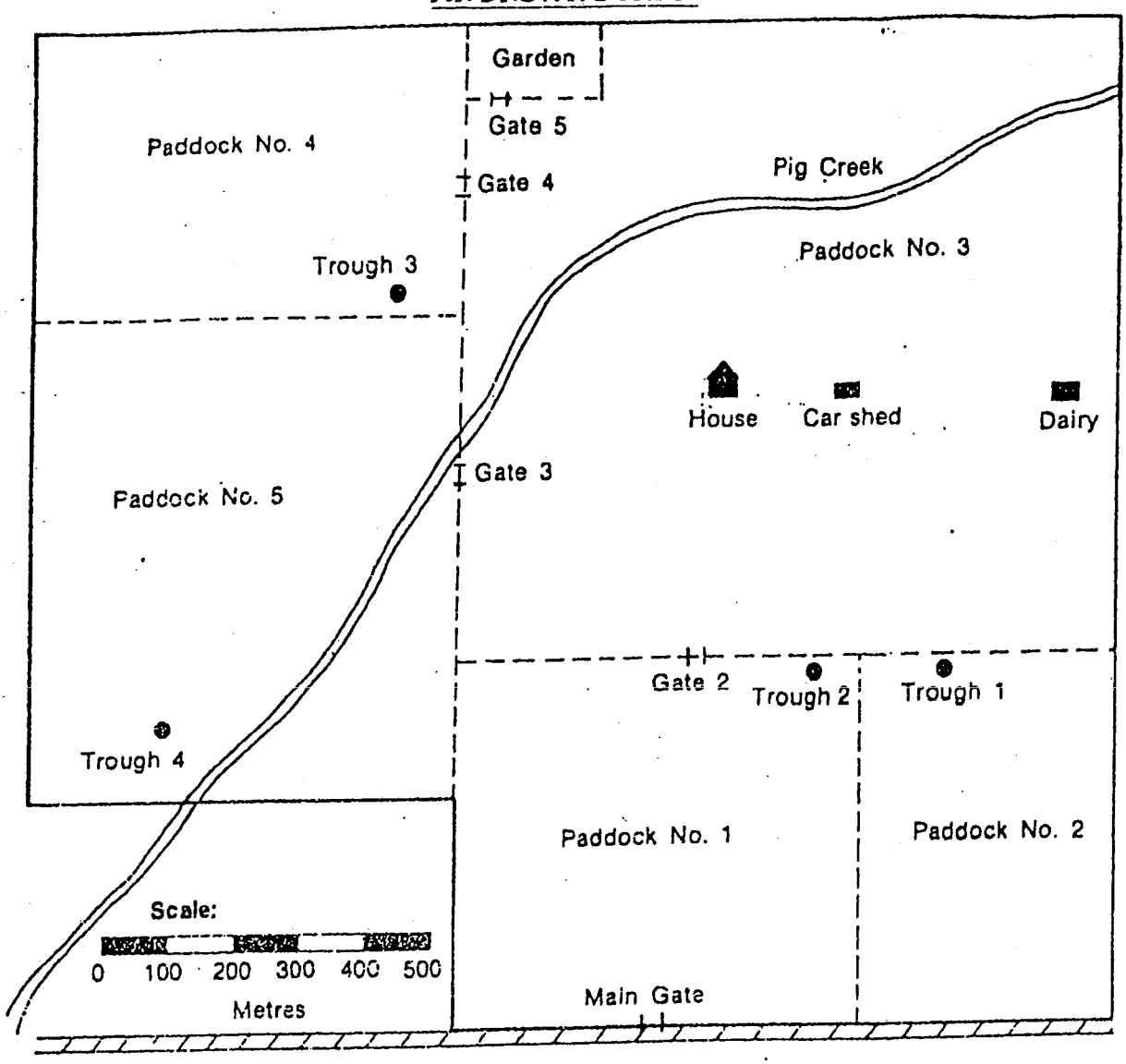
1	2 cm	_____	11	16 cm	_____
2	5 cm	_____	12	22 cm	_____
3	3 cm	_____	13	17 cm	_____
4	10 cm	_____	14	23 cm	_____
5	7 cm	_____	15	12 cm	_____
6	50 cm	_____	16	25 cm	_____
7	20 cm	_____	17	11 cm	_____
8	6 cm	_____	18	27 cm	_____
9	45 cm	_____	19	19 cm	_____
10	13 cm	_____	20	15 cm	_____

Actual distances

I	80 km	A	4 km	O	69 km
D	6 km	R	48 km	S	136 km
V	72 km	U	9 km	T	57 km
C	135 km	N	36 km	E	45 km
H	15 km	E	140 km	N	12 km
T	25 km	V	33 km	B	75 km
S	51 km	H	40 km	G	60 km
W	30 km	Y	39 km	O	63 km
T	66 km	K	21 km	F	150 km
J	18 km	C	50 km	E	81 km

quite impossible to draw plans of farms, houses or areas to their full size, so scales are very quite
n used. These scales are quite easy to use.

MR BROWN'S FARM



KERCISE 1 (when paddock x is used measure the distance to the actual number of the paddock)
ow far is the shortest route from :

Trough 3 to trough 1 ? _____

2) Trough 1 to trough 2 ?

Paddock No 5 to paddock No 2 ?

4) The main gate to the house ?

The garden to paddock No 1 ?

6) The house to the garden gate ?

The dairy to paddock No 5 ?

8) The house to trough 1 ?

Gate 4 to trough 1 ?

10) Trough 3 to trough 4 ?

ERCISE 2
at size is :

Paddock 3 ?

2) The garden ?

ERCISE 3
ese distances involve half a centimetre which is a real distance of 50 metres
2.5cm = 250 metres and 11.5cm - 1150 metres
at is the distance from :

Trough 4 to dairy ?

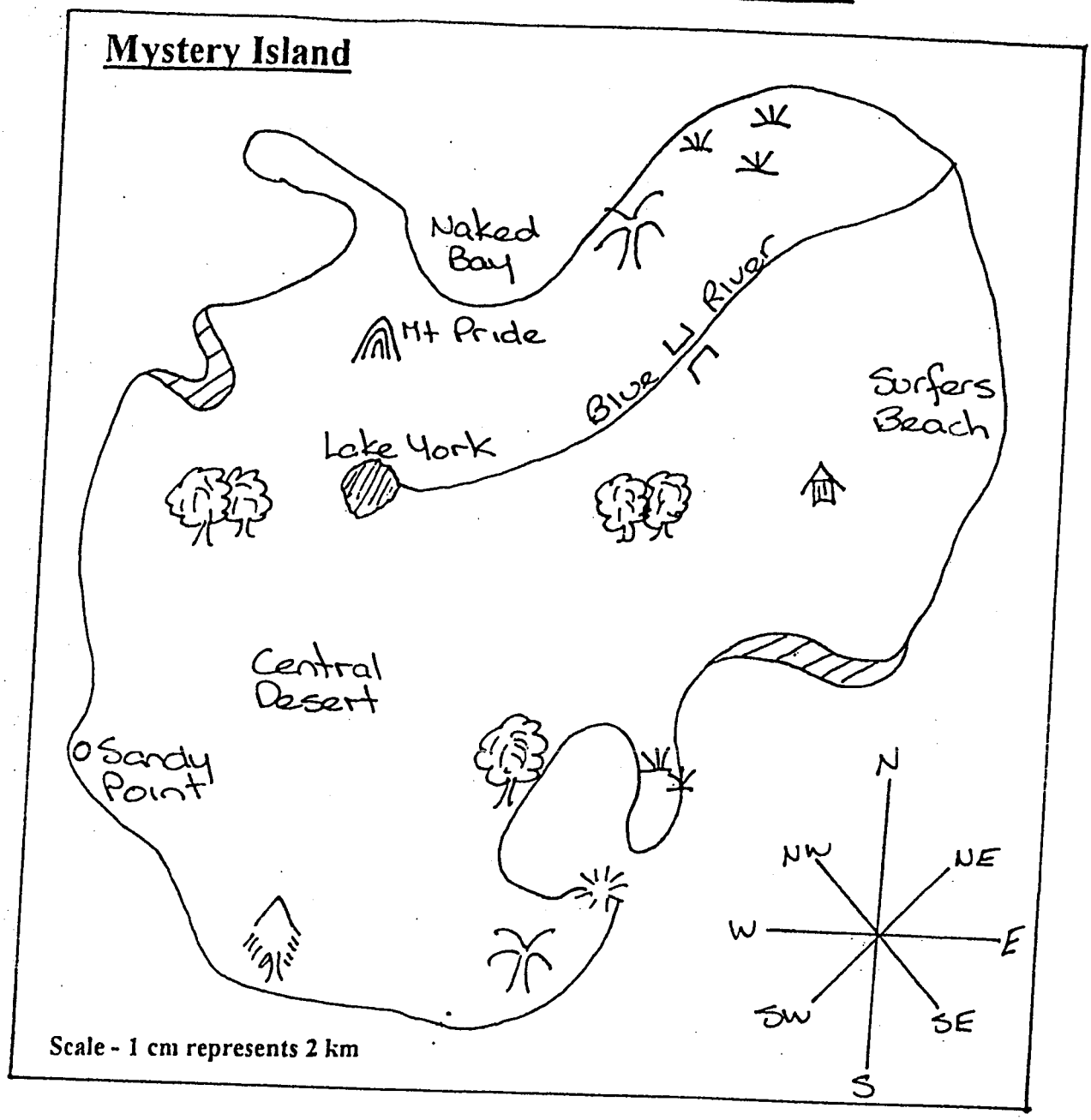
2) Gate 4 to gate 2 ?

Gate 5 to car shed ?

4) Trough 3 to trough 2 ?

main gate to trough 2 ?

Buried Treasure - can you find it ?



LEGEND

PIRATES CAVE

PALM TREE

BRIDGE

NATIVE VILLAGE

SWAMP

PINE TREE FOREST

JUNGLE

CLIFFS

1) START AT PIRATES CAVE, WALK 4KM SW TO REACH _____

2) WALK 8KM TO REACH _____

3) TRAVEL NW FOR 10KM TO _____

4) THEN WALK 12KM NE TO _____

5) TRAVEL SE 14KM TO _____

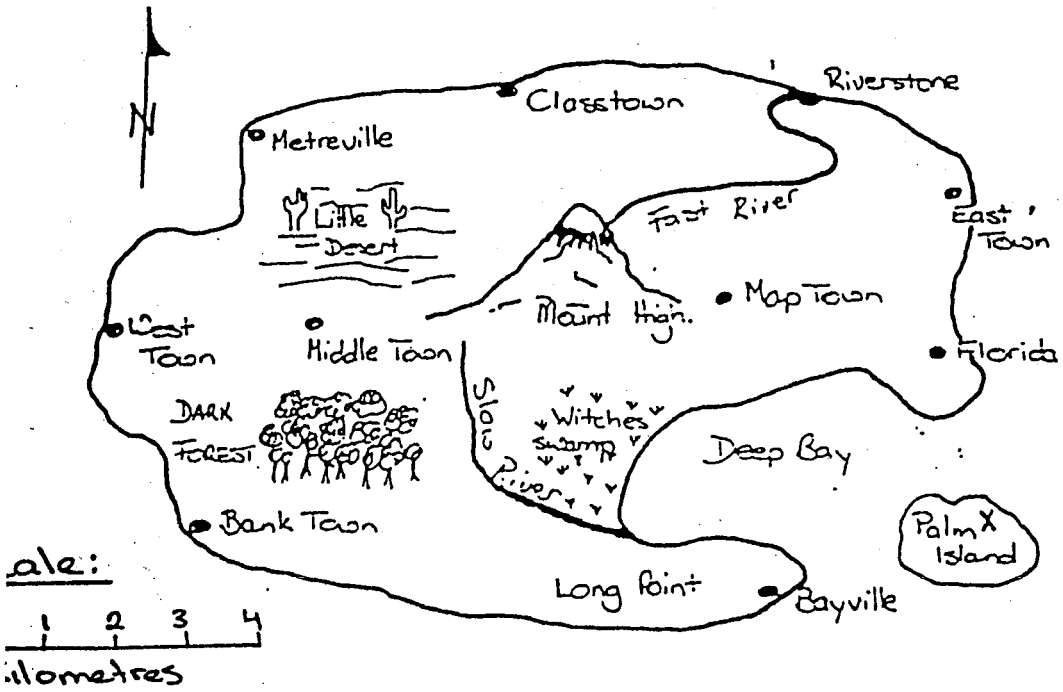
6) SWIM 6KM NE TO _____

7) WALK 4KM NORTH TO _____

8) GO NW 6KM TO _____

9) FINALLY TRAVEL 10KM EAST AND THE TREASURE IS FOUND AT _____

THE LAND OF BOBBIN



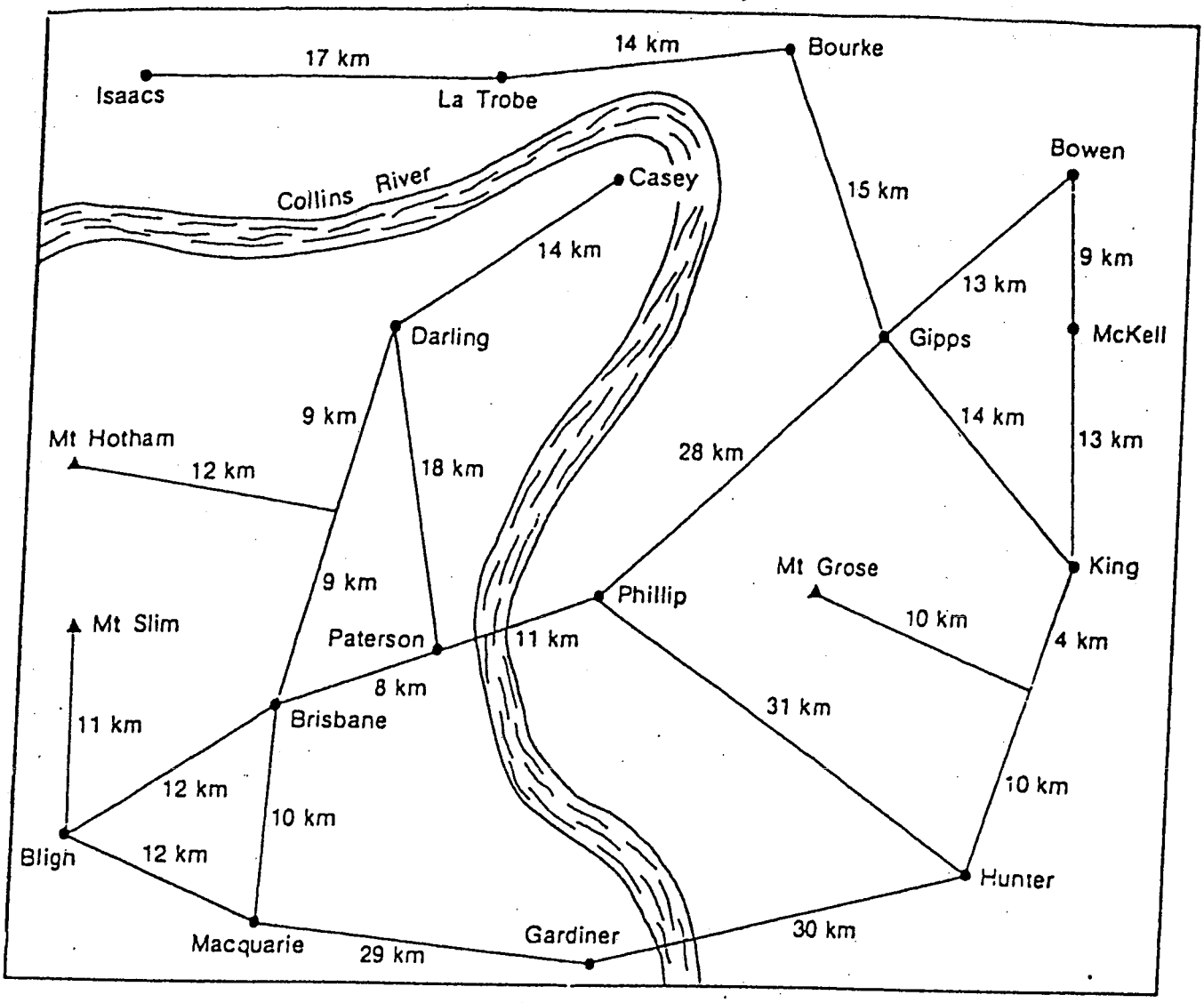
Here is a map of the mysterious land of Bobbin. It is very far away.

Answer the following questions....

1. What do we find in the centre of the Land of Bobbin ?
2. In which direction does Slow River flow ?
3. In which direction is Florida from Middle Town ?
4. In which direction is Mount High from Witches Swamp ?
5. How far is Bank Town from East Town ?
6. How far is Bayville from West Town ?
7. What symbol is used to show us what a swamp looks like ?
8. What is the name of the town at the mouth of fast river ?
9. In which direction is West town from Class Town ?
10. What symbol do we use to show a forest ?
11. How far is it from West Town to Middle Town ?
12. How far is it from Florida to the " X " on Palm Island ?
13. What symbols do we use to show deserts ?
14. In which direction does Fast River flow ?
15. In which direction do we find Palm Island from Bobbin ?
16. In which direction is Metreville from Florida ?

Distances Shown on Road Maps

Governor County



Exercise 1 What are the following distances?

(a) Macquarie to Hunter _____

(b) Bourke to King _____

(c) Bligh to Paterson _____

(d) Mt Hotham to Macquarie _____

(e) Isaacs to Bourke _____

(f) Bourke to Phillip _____

(g) Gardiner to Phillip _____

(h) Mt Grose to Bowen _____

(i) Hunter to Gipps via King _____

(j) Bowen to Isaacs _____

(k) Gardiner to Darling _____

(l) Casey to Paterson _____

(m) Mt Slim to Phillip _____

(n) Phillip to King via Hunter _____

(o) McKell to Bourke via King and Gipps _____

(p) Darling to Gipps via Paterson and Phillip _____

Exercise 2 How far do the following school buses travel each day?

(a) From Isaacs to Hunter via Gipps, Bowen and King. (Don't forget the return trip!) _____

(b) From Casey to Hunter via Darling, Brisbane, Macquarie and Gardiner. _____

(c) From Bligh to Hunter via Brisbane, Paterson and Phillip. _____

(d) How far would each of the above school buses travel in a week? _____

_____

AREA REFERENCES

ine black lines drawn on a map are known as grid lines.

he lines that run up and down the map are called eastings
nd the lines that run across the map are called northings.

ach easting and northing has a number or letter.

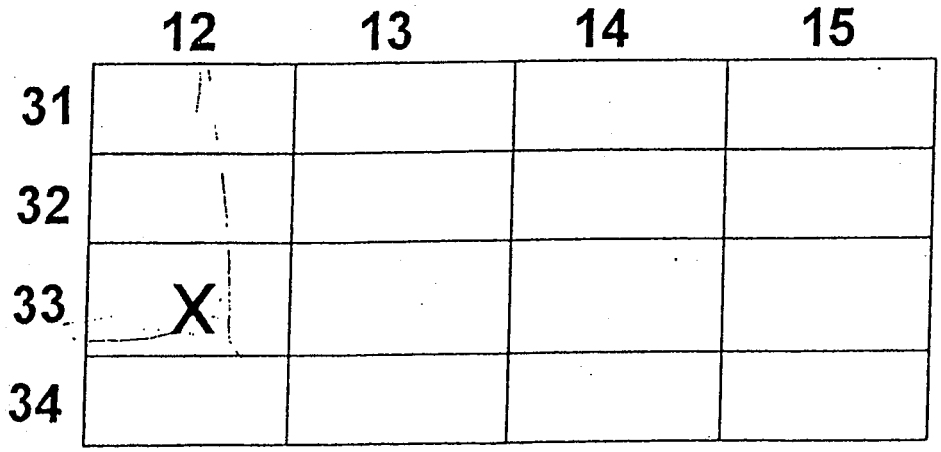
rid systems are easy to use if you follow these simple steps :

) Find the number of the easting (up and down lines)

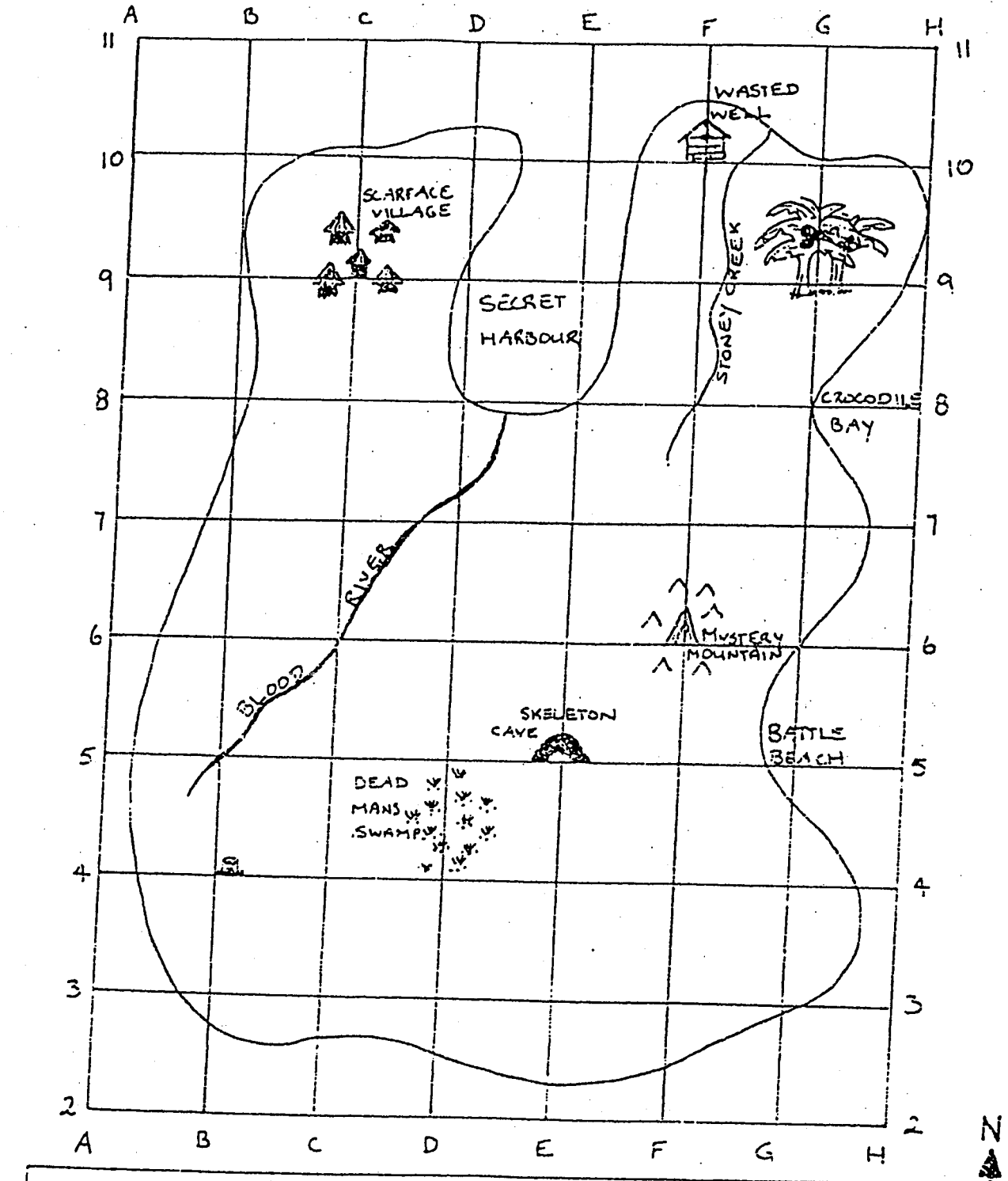
) Find the number of the northing (across)

) Write down the grid reference by writing the easting first
ıd then the northing second.

xample - look at the following grid



find the grid reference of the cross we first find the easting
lue (12) and then the northing value (33). Therefore the
d reference of the cross is **1233.**



KEY:

SCALE: 1cm represents 1km.

- Swamp.
- Village.
- Well
- Mountains.
- Cave.
- Tree Stump
- River.
- Creek.
- Palm Tree

TREASURE HUNT.

f you follow the directions given below, you will be able to
ind the buried treasure.

our starting point is on the shores of Secret Harbour at grid
eference D8 .
) Head north-west to grid reference C9 where you find an unfriendly
ative village. What is its name? _____
) Detour south to grid reference C6 where your way is blocked by
lood River.
) Continue south-west to grid reference B5 where you find a
ridge to cross the river.
) Cross the river and head south to grid reference B4 where
ou find an old tree stump.

nside the tree stump you find the instructions to buried treasure,
hat were hidden by Captain CutThroat before he died.
Follow these instructions to find the buried GOLD.

Go to grid reference D4 heading east,
When you find the gold, you can have a feast.

North through the swamp to reference D5,
Tread carefully, get through it alive.

Go to E5 to spend the night,
Skeleton Cave will keep you out of sight.

Continue east to Battle Beach,
The gold is closer within your reach.

Rest on the beach until high tide,
Go to F6, way up high.

Looking west from the mountain top,
E6 is the next place to stop.

Don't rest yet, you're nearly there,
North-east to G8, but please beware,

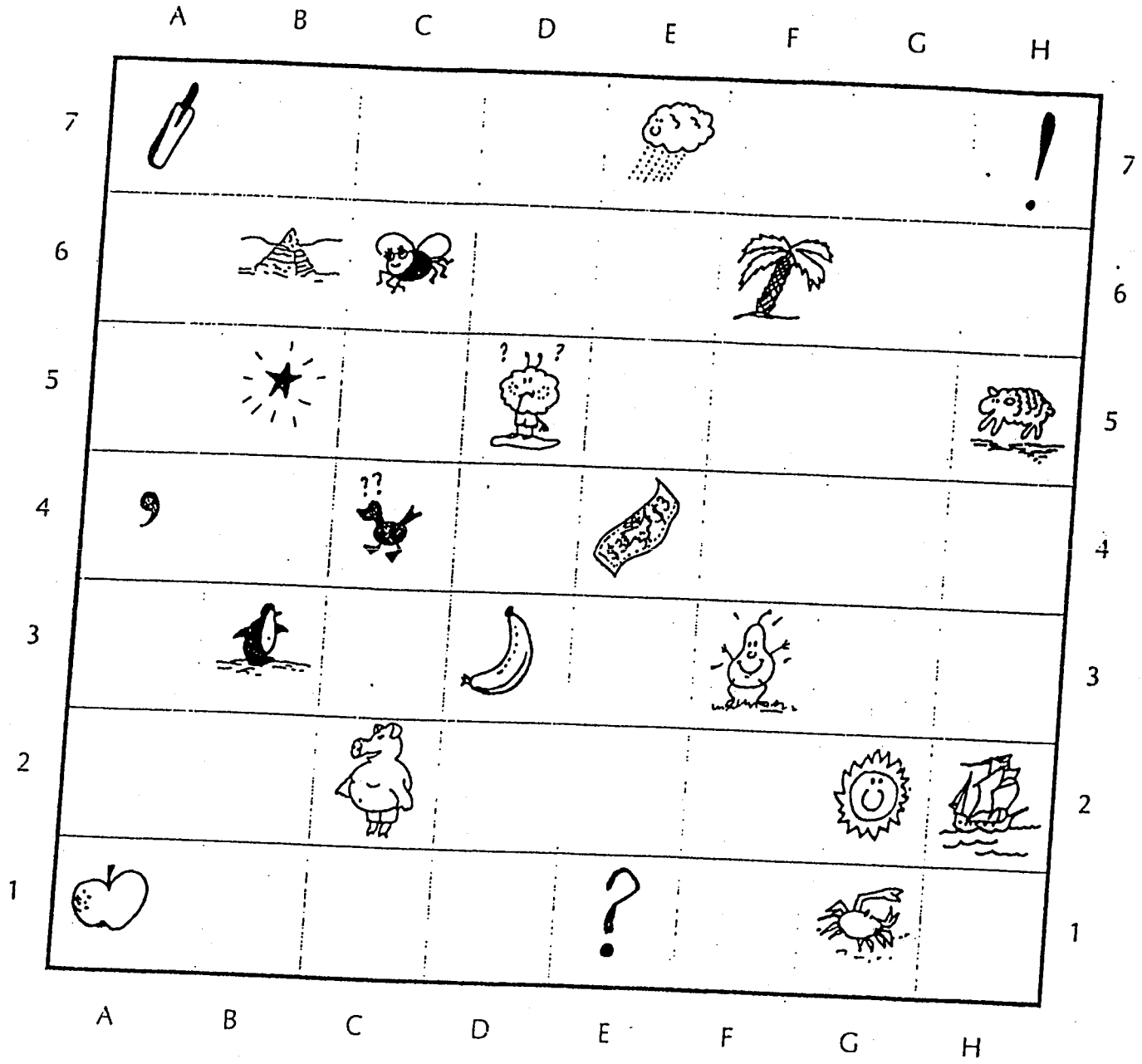
Hungry crocodiles have made this their home,
Quickly go east to the Creek of Stones.

To Secret Harbour you now must go,
To E8 where the ocean flows.

One more stop before the treasure,
Go to F10 for drinking pleasure.

The gold lies buried south-east of the well,
Under the palms, what reference, please tell?
c.9 .

A grid system is used to locate things on maps. List the position of the things on the grid in the spaces below. To do this correctly you must read across from the left to find the column reference then up or down to find the row reference.
Bruce is in position D5.



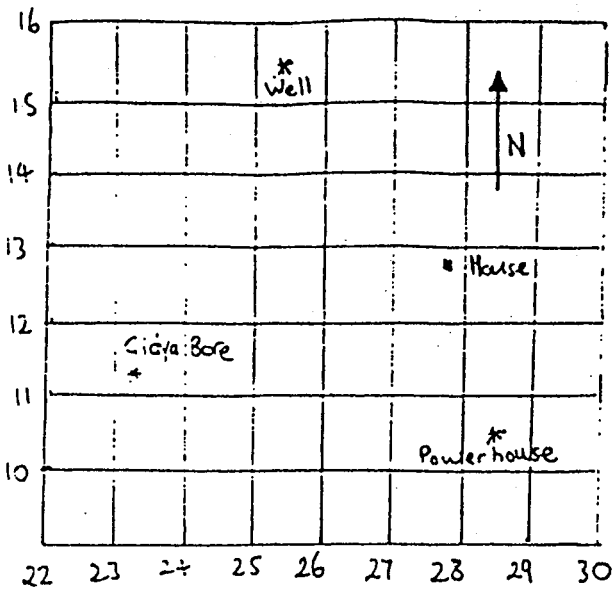
1. pyramid_____ 2. banana_____ 3. crab_____ 4. sheep_____ 5. ?_____
6. palm tree___ 7. $3 bill_____ 8. comma____ 9. apple_____ 10. !_____
11. cloud_____ 12. ship_____ 13. sun_____ 14. pig_____ 15. bat_____
16. star_____ 17. fly _____ 18. penguin____ 19. duck_____ 20. pear_____

Colour: A2 red, D4 blue, E6 yellow, G7 green, H1 purple.
Draw 4 objects on empty grid rectangles. Write their names and positions below.

HOW DO WE EASILY FIND THINGS ON A MAP ?

examining Figure 1 you will see lines
ning across the map and up and down
map. These lines are called grid lines.

: grid lines have numbers on them. The
s divide the map into squares called
l squares. These lines, numbers and
ares are very useful because it helps us
l exact positions quickly.



1) Look at the lines running up and down the map.
Q. In which direction do these numbers get larger ? _____
* LINES WHICH RUN NORTH TO SOUTH ON A MAP ARE CALLED EASTINGS.
Q. Between which 2 eastings is - Gidya Bore located _____
- the Powerhouse located _____

2) Look at the lines running across the map
Q. In which direction do the numbers get larger ? _____
* THESE LINES ARE CALLED NORTHINGS

Now we can say that Gidya Bore is located between northings 11 and 12
This now makes the bore easier to find.
Complete the table in your book :

	Easting	Northing
Gidya Bore		
Powerhouse		
Well		
House		

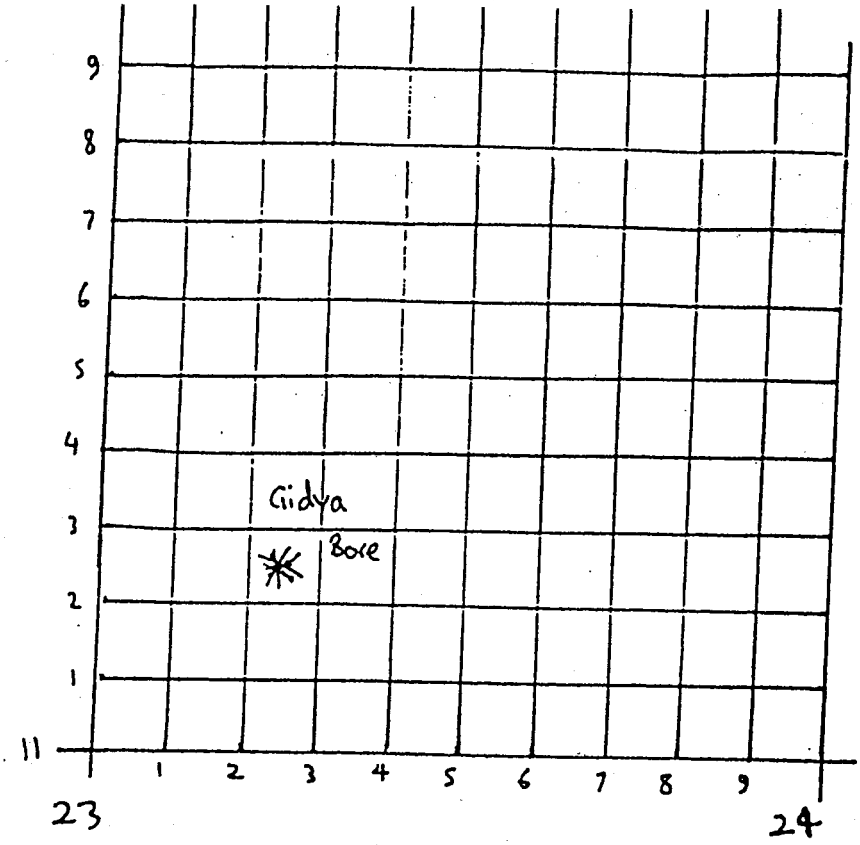
REMEMBER :

* the easting is always given first
* the lowest easting number of the lowest northing number is always used
* the easting and northing can be put together to form a *grid reference* or an *area reference*.
* Gidya Bore would have - an area reference 2311
- a grid reference 232112

up into 10 parts between easting 23 and 24. It is also broken up into 10 parts between northing 11 and 12.

Q. How many parts is the bore across from easting 23 ? _____

Q. How many parts is the bore up from northing 11 ? _____



Now we can write an exact grid reference for Gidya Bore as **232112**

Q. Write the grid reference for the following : the well _____
the house _____
the powerhouse _____

REMEMBER

Grid references : have 6 numbers and take you to a specific point on a map

Area references : have 4 numbers and take you to a grid square on a map.

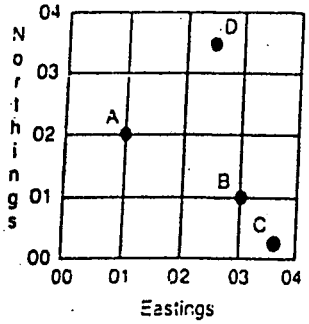
GRID REFERENCES

Previously we looked at area references which involve 4 figures. Grid references are very similar to this, however they involve 6 figures (eg 324817).

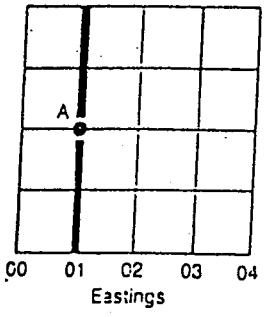
Remember - eastings are lines running from north to south
northings are lines running from east to west

Look at the following diagrams to help explain how a grid reference is made up.

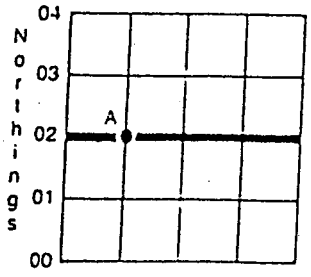
Example 1



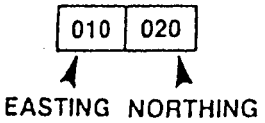
A is exactly on easting 01, so its easting reference is 010.



is exactly on northing 02, so its northing ference is 020.



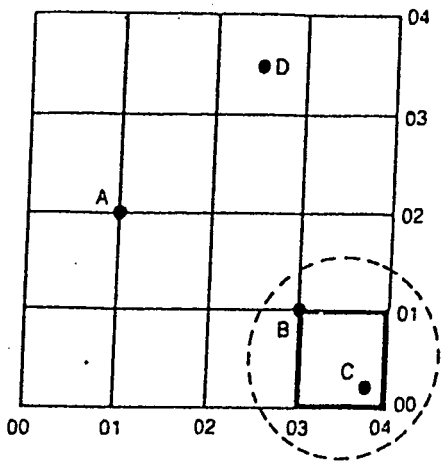
refore the grid reference is 010020.



Example 2
The grid reference for B in the grid above is 030010. This means that B is located exactly on easting 03, and exactly on northing 01.

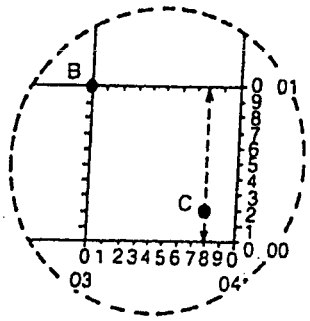
You may have noticed in these two examples that the reference for the easting is given *before* the reference for the northing. Grid references must *always* be given in this order to avoid confusion. To help you remember this, 'E' comes before 'N' in the alphabet, so eastings come before northings.

The point C in the grid below is not located exactly on the grid lines as A and B were.



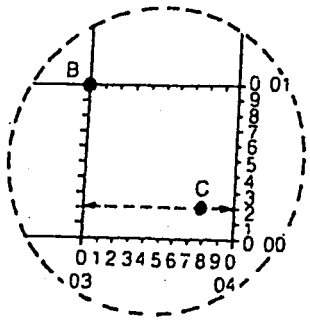
1 Imagine that the sides of the grid square that contains C are divided up into tenths. (See the diagrams of the square below which have been enlarged.)

2 Easting: Counting from west to east (from left to right) C lies eight tenths along from easting 03, so the easting reference is given as 038.



Easting

3 Northing: Counting from south to north (from bottom to top) C lies two tenths along from northing 00, so the northing reference is given as 002.

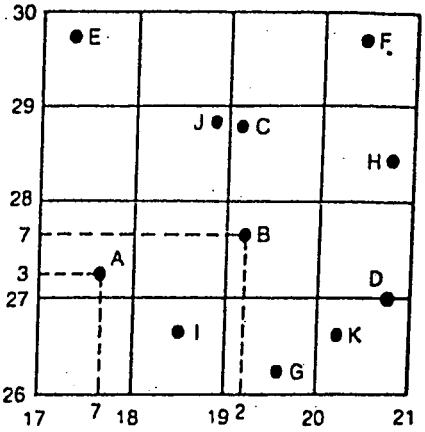


Northing

Therefore the full grid reference for C is 038002.

Example 4
The grid reference for D is 025035. This means that the point is 5/10ths along from easting 02, and 5/10ths along from northing 03.

15.2 Write down the grid references for the points lettered C to H on the grid below. A and B have been done for you.
A = 177273
B = 192277



15.3 Which of the following grid references for the points I, J and K on the grid above is incorrect?
I = 185267
J = 188288
K = 267202
Explain what the error is.

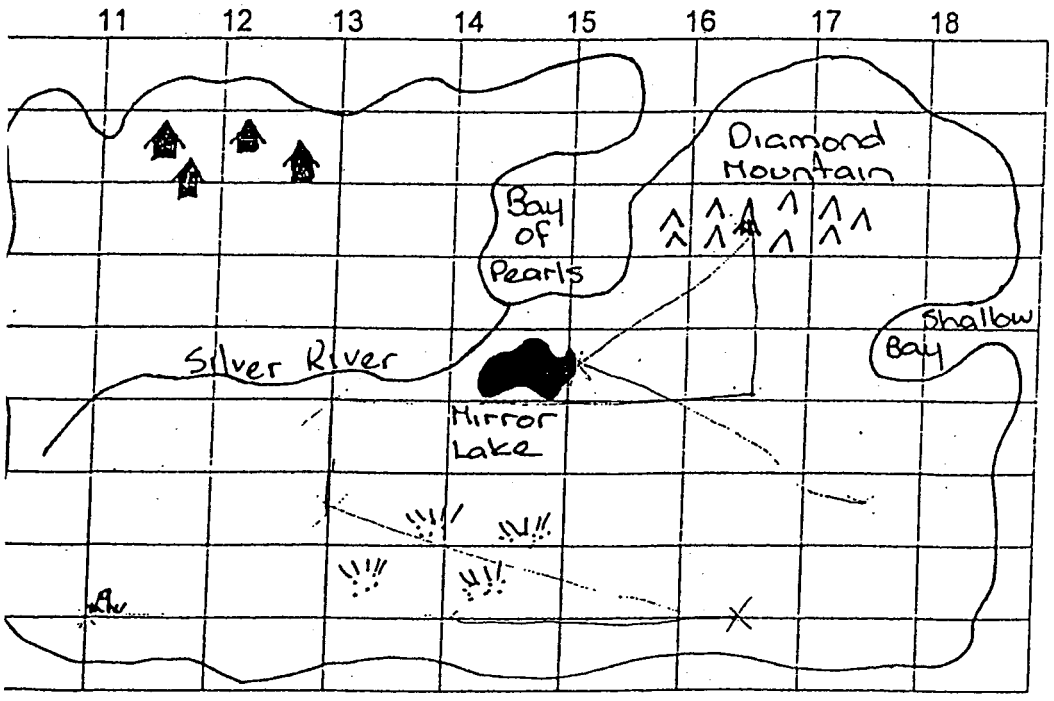
TREASURE HUNT

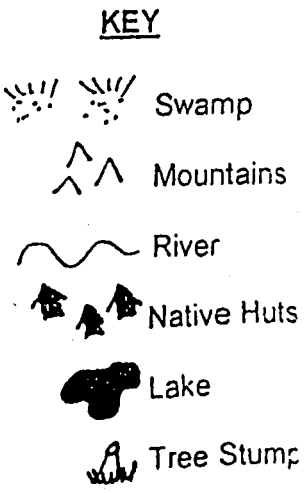
If you follow the directions given below you will be able to find the buried treasure.

Your starting point is in the Bay of Pearls at grid reference 140270

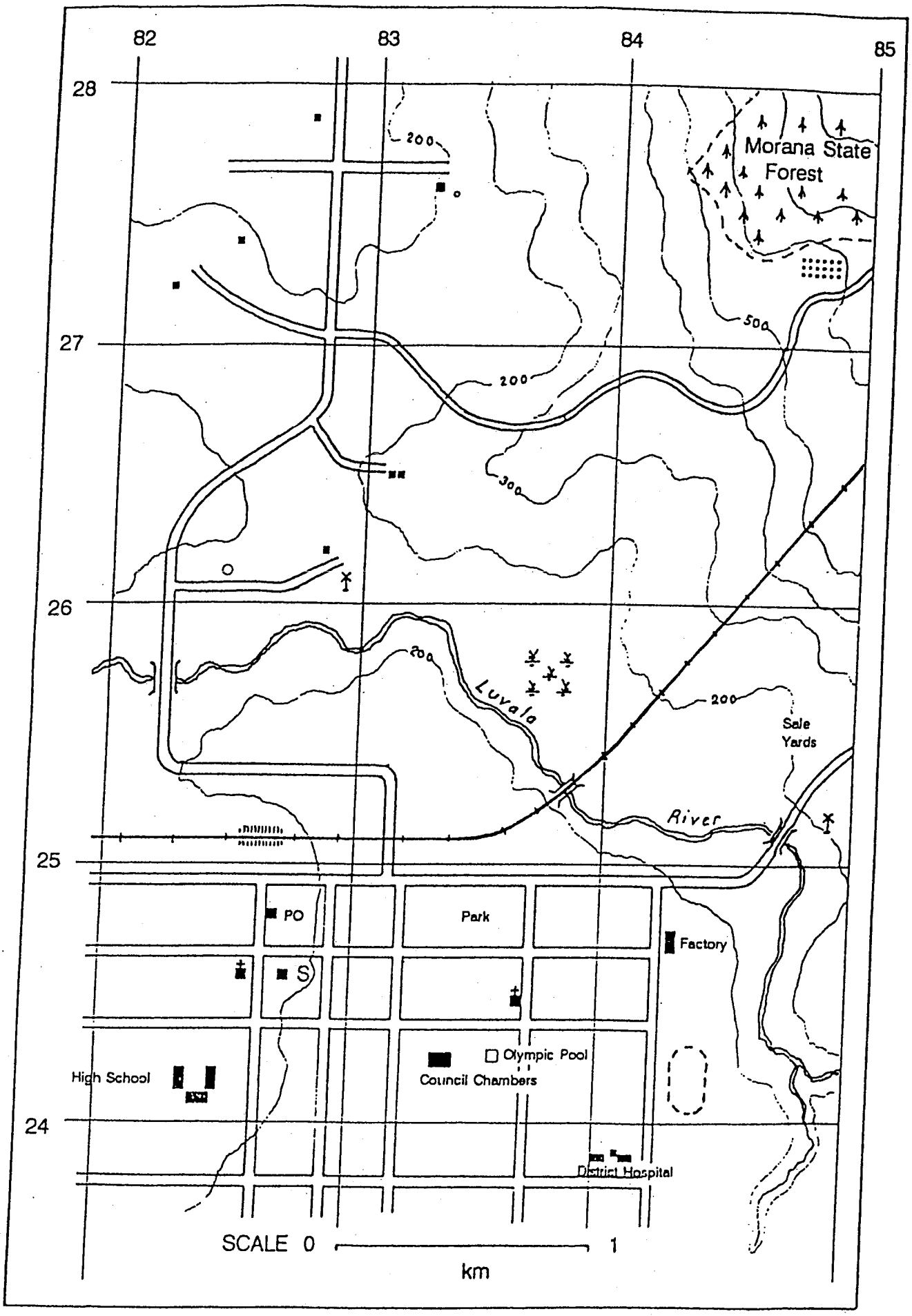
1. Travel north-west to grid reference 120285 where you encounter unfriendly natives
2. take a detour by travelling south to grid reference 120255, the Silver River now blocks tour path
3. You find a river crossing by travelling to grid reference 110250. You find a bridge
4. Cross the bridge and head south until you reach grid reference 110220. Here you find an old letter hidden in a tree stump. The letter was written by Captain Jack, and gives clues to where he buried his treasure. Now you must follow the clues in the note.

If you wish to be rich here's what to do,
Take out a compass and follow the clues.
Which way to go, which way is best?
First go east to grid reference 140220.
Put your back to the setting sun.
Travel to grid reference 165220. then take a rest.
Travel west-north-west to grid reference 130235.
right through the swamp, travel fast, don't get lost.
Face the rising sun with your arms outstretched from
your sides, follow the direction that your left arm points
to grid reference 130250.
You're nearly there or so you think,
another clue to where to look, over a hill or under a rock?
Treasure is prized, and held up high,
another clue is in the sky.
Travel east to grid reference 165250,
look to the north to see, a mountain rising majestically.
Travel north to grid reference 165275 past Shallow Bay.
Can you climb Diamond Mountain in just one day?
A final clue, it isn't here, look south-west to see reflected
The light from gold that's been misdirected.
Travel south-west to grid reference 150255
To the shores of Mirror Lake.
Face south-east, the GOLD's yours to take.
Go to grid reference 175235 make your collection
From your starting point what is the direction?_____



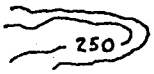
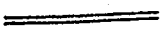
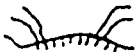
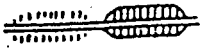
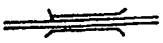
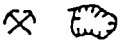
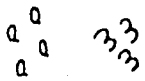


MAP REFERENCES AND LEGEND



MAP REFERENCES AND LEGEND

These symbols are used on the maps you will be using.

	Major road		Contour lines
	Minor road		Cliff
	Embankment; cutting	• 567	Trig station; spot height
	Bridge		Windpump
	Railway line; station		Mine; quarry
=====	Track		Swamp
■	Building		Orchard or vineyard
■ S ■	School; church		Forest; scrub
	Sand; water		State forest - pine
	Rock ledge	* ☼	Rock; lighthouse
O	Tank		Land subject to flooding

1. Describe what you can see in Area Reference :-

8424 _____

_____

8427 _____

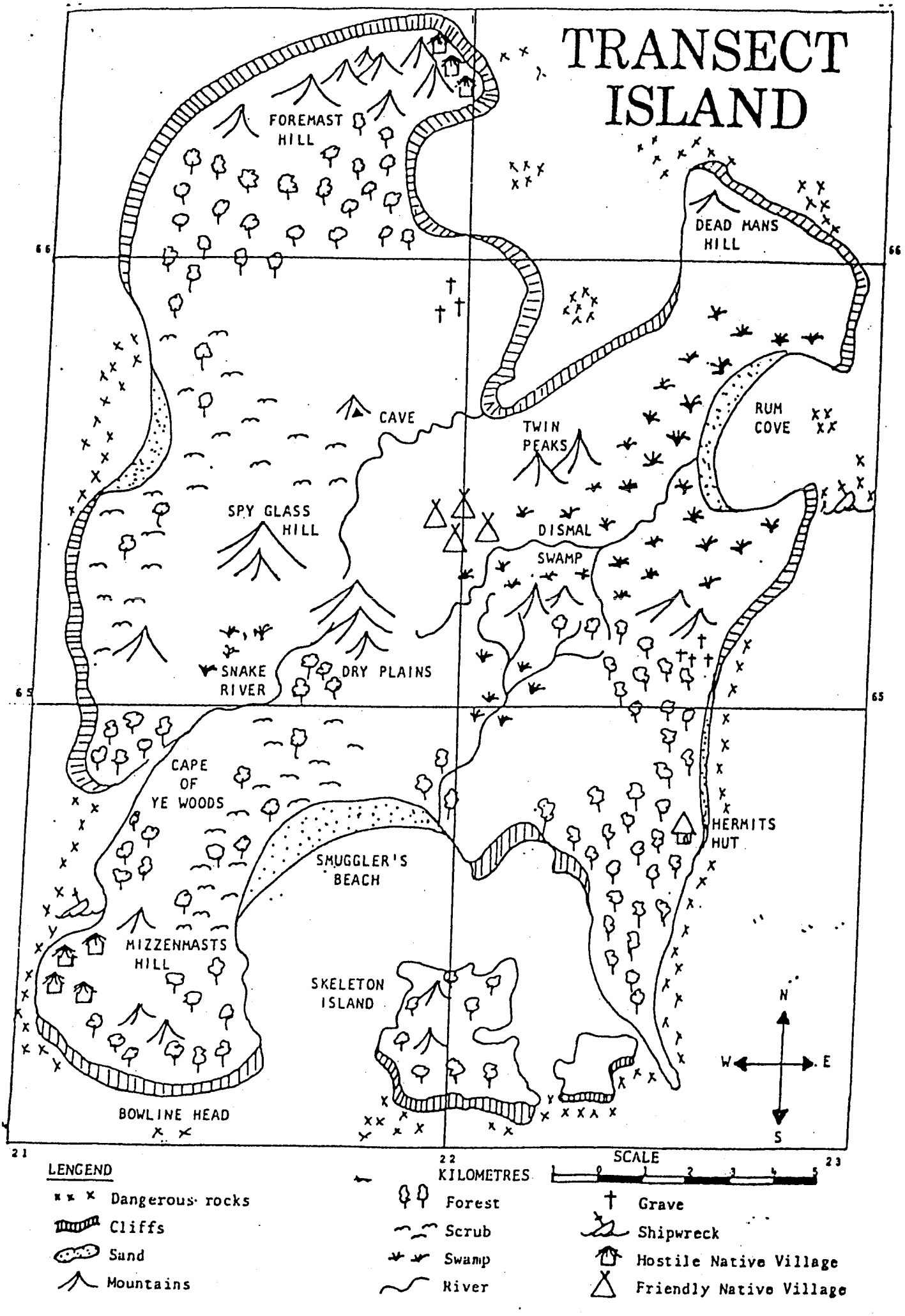
_____

2. Give Map References for the following:-

Council Chambers	_____	Sale Yards	_____
Factory	_____	High School	_____
Hospital	_____	Primary school	_____
Olympic Pool	_____	Post Office	_____

3. Name the features at:-

826246 _____
835248 _____
833276 _____
826251 _____
838253 _____
849252 _____
836245 _____
832265 _____
832247 _____
837257 _____


TRANSECT ISLAND
FOREMAST HILL
DEAD MANS HILL
CAVE
TWIN PEAKS
RUM COVE
SPY GLASS HILL
DISMAL SWAMP
SNAKE RIVER
DRY PLAINS
CAPE OF YE WOODS
HERMITS HUT
SMUGGLER'S BEACH
MIZZENMASTS HILL
SKELETON ISLAND
BOWLINE HEAD
66
65
21
22
23
N
W
E
S
SCALE
KILOMETRES
0 1 2 3 4 5
LENGEND
Dangerous rocks
Cliffs
Sand
Mountains
Forest
Scrub
Swamp
River
Grave
Shipwreck
Hostile Native Village
Friendly Native Village

LONG JOHN SILVER'S TREASURE

1. What does the title of the map tell you?

_____

_____

2. What is the scale of this map?

_____

3. Where would you land on the island, and why?

_____

_____

4. Long John's search for a site to bury his treasure starts at grid reference 218647. From this point Long John Silver, and ten members of his crew, head directly North for 4 kms. To grid reference 218651. What is the name of this point? _____

5. His second marching point lies 3 kms away in a North-West direction. What is the name and grid reference of this point? _____

_____

What did they cross on their way to this point? _____

_____

6. They then walk for a distance of about 10 kms directly North till they come to the base of a hill. What is the name of this hill?

_____

Describe the different types of vegetation they pass through on their way to this point. _____

7. At this point they are attacked by some hostile natives from a nearby village. They try to escape by running through a forest in a South-East direction. However, after a 5 km chase they are caught up with by the natives and three of the crew men are killed before the savages are driven off. They then bury their dead. What is the grid reference of the graves? _____

8. After burying their dead they head directly South for nearly 4 kms, where they come across a friendly native village. Here they rest and have something to eat and drink. What is the grid reference of the village? _____

9. Once they regain their strength they move off again to a point which lies approximately 9.5 kms directly South of Deadman's Hill. What did they pass through on the way? _____

How many rivers did they cross? _____

10. At this point, some of the men have become discontented and want to split up the treasure. A fight breaks out amongst them and four are killed before things settle down. They then quickly bury their dead. From this point, looking in an easterly direction, what can be noticed off the coast? _____

_____

11. Long John Silver and his remaining men then travel due South for nearly 3 kms. What do they come across at this point?

_____

What is the grid reference of this point? _____

12. From this point they ask directions so they can find their way out of the forest. They are told to go West. They set out at a quick pace and find their way out of the forest. They then come across a fast flowing _____ where one of the men gets washed away and drowns. The rest press on and end up on the far side of the island at grid reference 213648. This point is called _____ and is a distance of _____ kms. from the hermit's hut.

13. From here they travel South to grid reference 213645. This point is called _____. If they looked West of this point what would they see just off the coast? _____
What do you think would have caused this?

_____

14. After looking in a South-West direction Long John decides to leave the area very quickly. Why did he make this decision?

_____

_____

So Long John and his remaining _____ men head off at a very rapid pace for 12.5 kms in a North-East direction, actually a bit more North than East. Where did they arrive? _____

What is the grid reference of this point? _____

15. Upon arriving at this point Long John Silver decides that this would be a good place to hide his treasure. (Mark this point with a red cross). Long John then gets his remaining men to take the treasure inside, he then shoots them in the back and seals up the entrance. Approximately how far does Long John have to travel to get back to his landing point? _____

What is the grid references for three other points on the map where treasure may be found? _____

_____

What is the length of the longest part of the island? _____

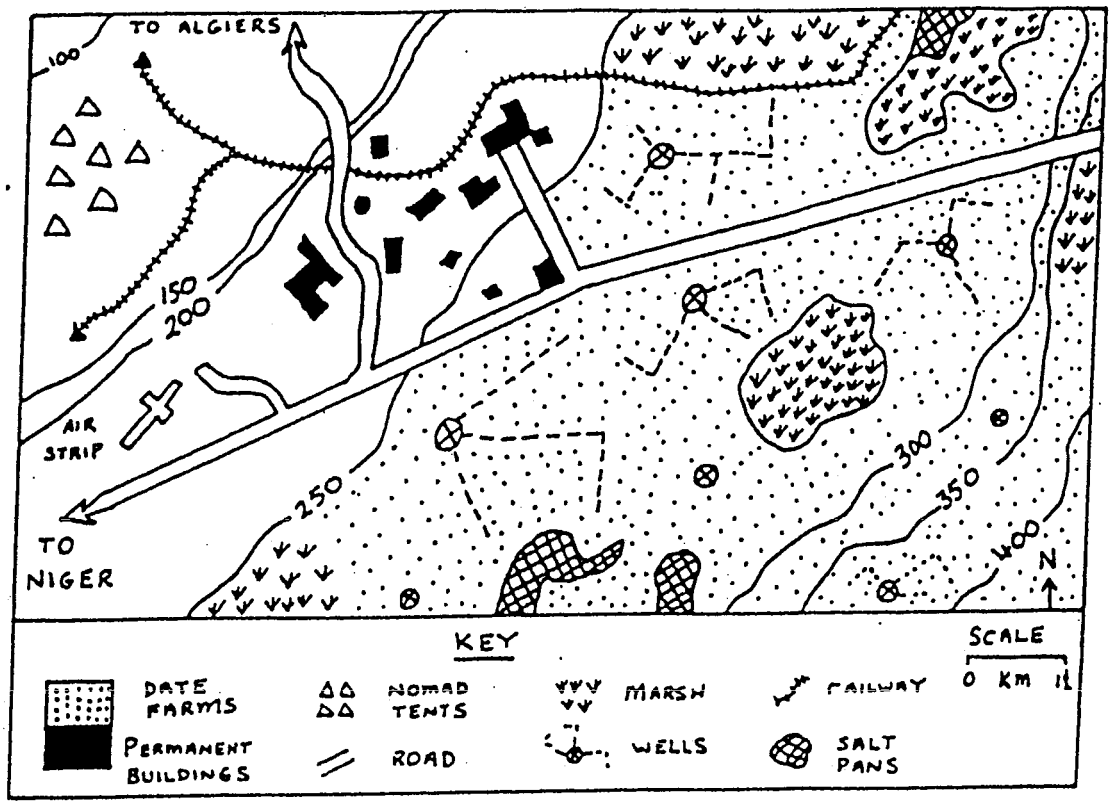
What is the width of the broadest part of the island? _____

Between what two landforms would Long John have to sail when leaving the island? _____

MAPPING SKILLS

INSTRUCTIONS : Look at the map below and then answer the questions.

TOUGGOURT – A DESERT OASIS IN THE SAHARA



1. What is the location of the map? _____

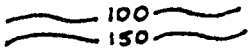
_____

2. What is the scale of the map? _____

_____

3. What does this symbol represent? 

_____

4. What are these called? 

_____

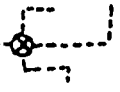
5. What does it mean when these lines are:

(a) Far apart : _____

(b) Close together : _____

6. What modes of transport would you use to get to Algiers?

_____

7. (a) What are these? 

_____

(b) Why are they located where the date farms are?

_____

_____

LATITUDE AND LONGITUDE

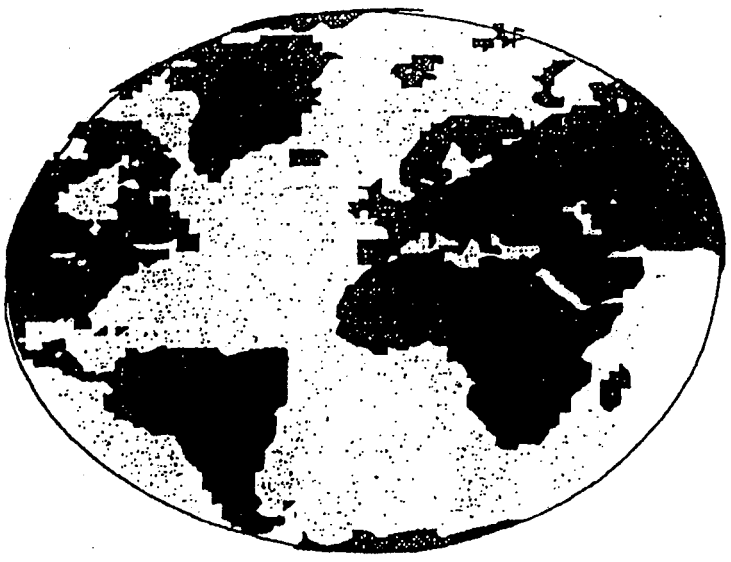
Latitude and longitude are lines on map to help us find the exact location of places.

Lines of latitude are imaginary lines which run across the world from west to east. Each line (or parallel) is given a number between 0° and 90° and they are measured north or south of the equator.

Lines of longitude are imaginary lines which run up and down the world from north to south. Each line (or meridian) of longitude is given a number between 0° and 180° and are measured east or west of the Prime Meridian.

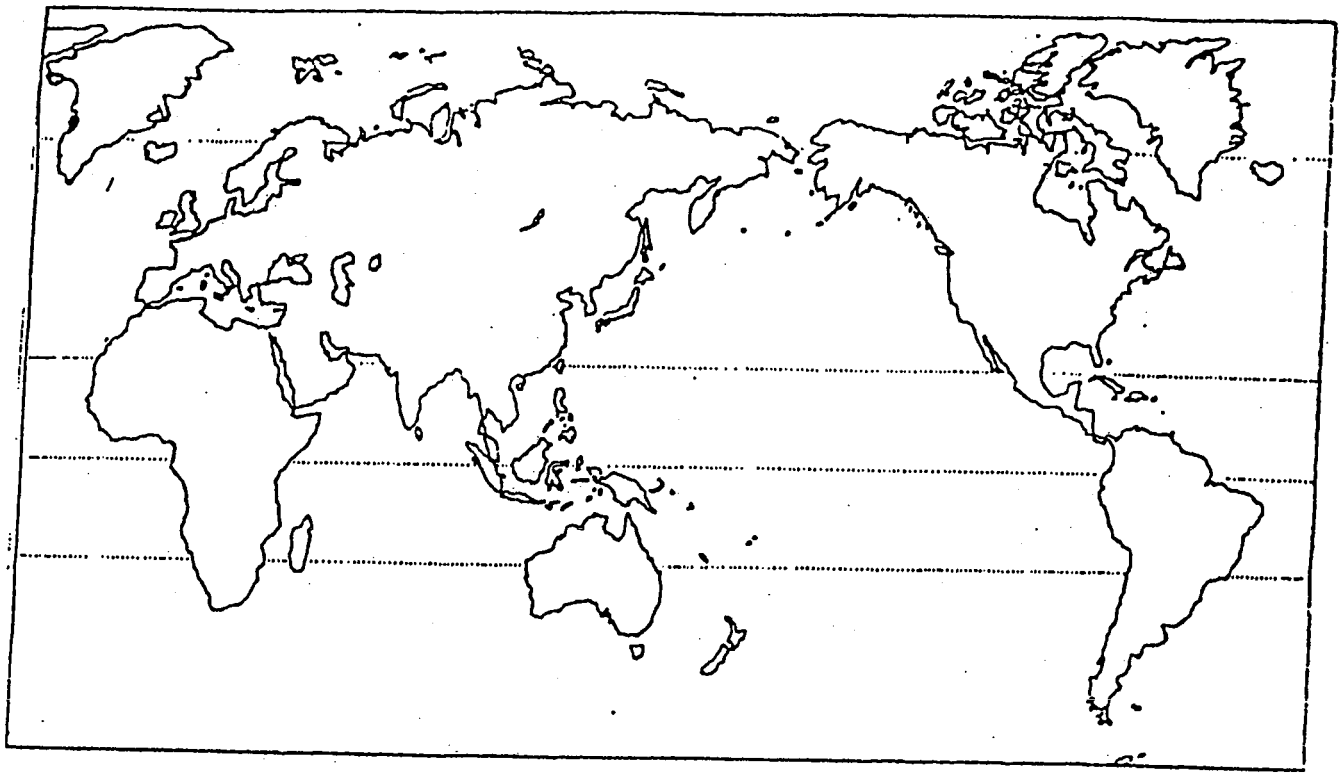
We use latitude and longitude to find places in the world. The location of any place on a map is given by the **latitude** followed by the **longitude.**

Remember : latitude comes before longitude in the alphabet.



WHERE DO I LIVE ?

LONGITUDE AND LATITUDE



WHAT LATITUDE IS THE EQUATOR ? _____

WHAT CONTINENTS DOES IT PASS THROUGH ? _____

WHAT LATITUDE IS THE SOUTH POLE ? _____

HOW MANY DEGREES SOUTH IS SYDNEY ? _____

HOW MANY DEGREES EAST IS SYDNEY ? _____

THE INTERNATIONAL DATE LINE IS AT LONGITUDE _____ DEGREES

WHAT OCEAN DOES IT PASS THROUGH ? _____

WHAT IS THE LONGITUDE ON THE OPPOSITE SIDE OF THE GLOBE FROM THE INTERNATIONAL DATE LINE ? _____

LATITUDE AND LONGITUDE

Using the co-ordinate markings on the map, give the approximate co-ordinates for the following questions.

1) What latitude marks the northern boundary of Queensland ? _____

2) What longitude marks the south-western boundary of Western Australia ?_____

3) Approximately how many degrees does Australia cover from west to east ? _____

4) What longitude is Broken Hill close to ? _____

Write the name of the city that is close to the location of each set of co-ordinates

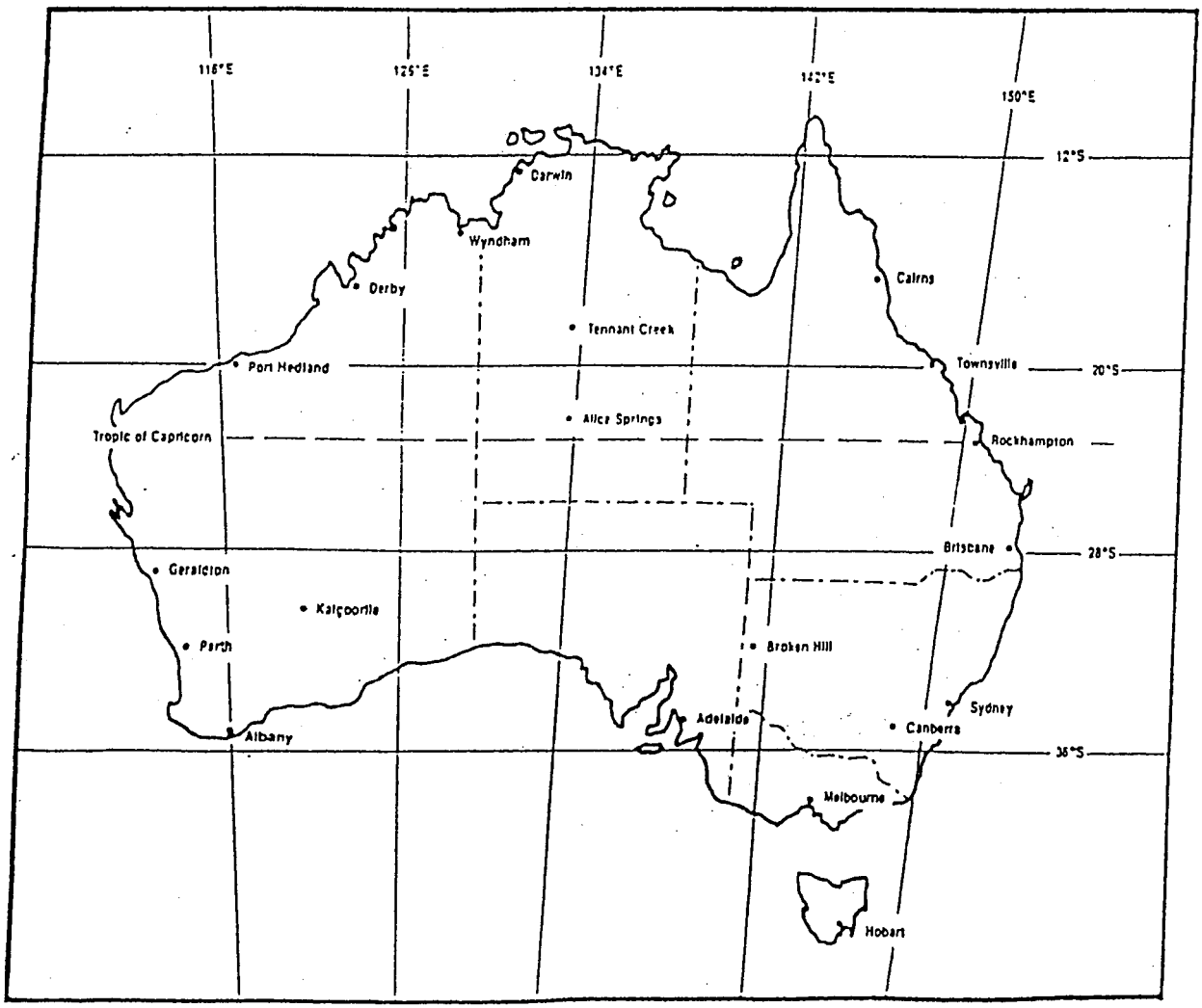
) 36°S 139°E _____

) 28°S 150°E _____

) 36°S 118°E _____

) 20°S 134°E _____

) 20°S 118°E _____



It's Magic

Note: You will need your atlas for this one.

What happened when the wizard discovered gunpowder?

Find the latitude and longitude of each of the capital cities below. There is a list of co-ordinates at the bottom of the page that will help you. Then, in order, read the letters next to the co-ordinates you have used to find the answer to the riddle.

1	Madrid	_____	8	Reykjavik	_____
			9	Warsaw	_____
2	Rome	_____	10	Ulan Bator	_____
3	Windhoek	_____	11	Washington D.C.	_____
4	Kabul	_____	12	Rangoon	_____
5	Jakarta	_____	13	La Paz	_____
6	Buenos Aires	_____	14	Lagos	_____
7	Mexico City	_____	15	Nairobi	_____

Co-ordinates

A	40°25'N	3°41'W	L	22°35'S	17°04'E
E	6°28'N	3°30'E	C	38°52'N	77°00'W
I	6°10'S	106°10'E	Y	34°15'N	69°00'E
R	16°20'S	68°15'W	E	16°50'N	96°10'E
O	52°15'N	21°00'E	R	48°00'N	107°00'E
S	64°06'N	21°59'W	G	19°24'N	99°09'W
F	41°55'N	12°28'E	R	1°17'S	36°48'E
N	34°30'S	58°28'W			

LATITUDE AND LONGITUDE

Use a world map to locate the countries or places indicated below

pg 56 or 62 in Australian School Atlas)

Write the latitude and longitude and then the name of the place.

eg 20°S 130°E - Australia

) 20° S 130° E - _____

) 30° S 20° E - _____

) 10° N 120° E - _____

) 50° N 0° - _____

) 60°N 150° W - _____

) 40° N 100°W - _____

) 0° 60°W - _____

) 40° S 80° E - _____

20° N 80°E - _____

) 40° N 40°W - _____

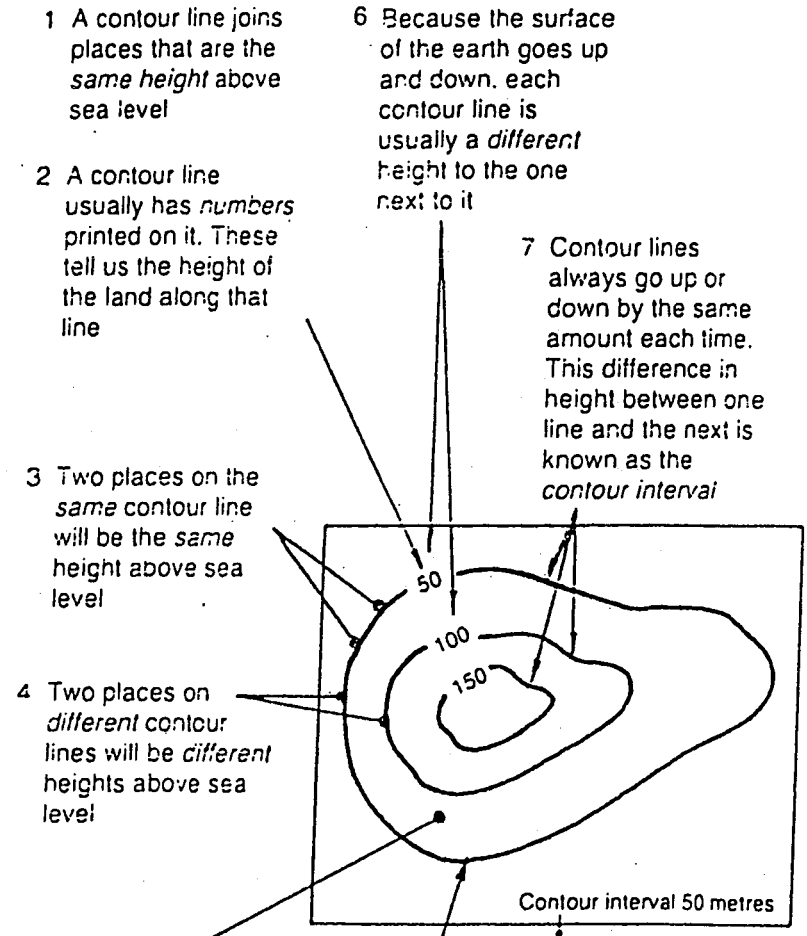
JUMBLED ANSWERS

DIA	ALASKA	USA
RAZIL	PHILIPPINES	SOUTH AFRICA
NGLAND (UK)	INDIAN OCEAN	NORTH ATLANTIC OCEAN
USTRALIA		

CONTOUR LINES

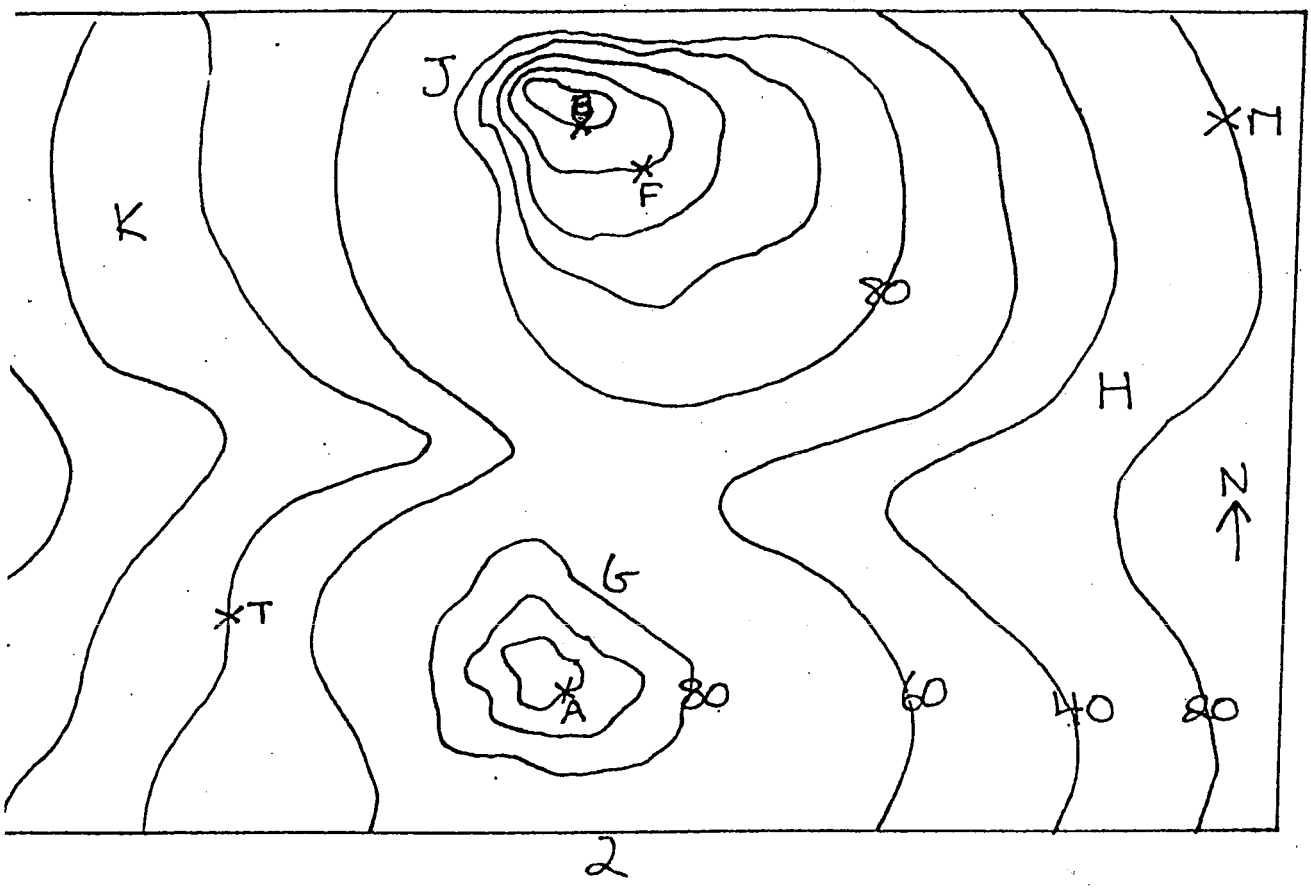
The most useful way of showing both height and shape on a map is by using special lines known as *contour lines*. These are lines drawn on a map joining places that are the same height above sea level.

There are several things you should know about contour lines. they are shown in the following illustration.



TOPOGRAPHIC MAP EXERCISE

ook at the topographic map below, then answer the following questions



UESTIONS

What is the contour interval ? _____

What is the height of the following points ?

A _____ M _____

F _____ T _____

What is the highest point named on the map ? _____

A steep slope is at G, H, J or K ? _____

What direction is A from B ? _____

What direction is T from F ? _____

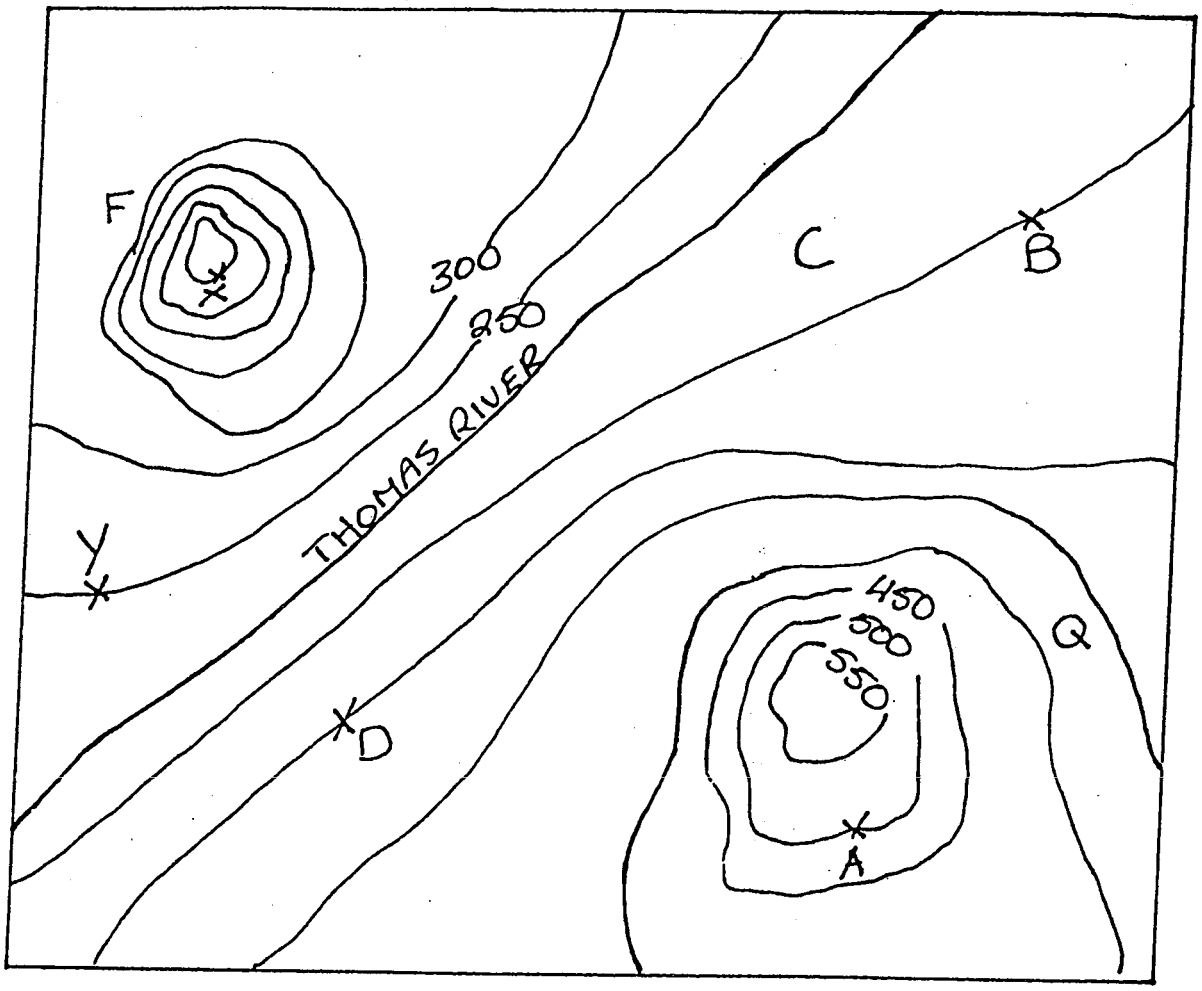
If you were standing at H could you see J ? _____

What is the lowest point named on the map ? _____

Describe the shape of the land - what landform could it be ? _____

_____

Look carefully at the map then answer the following questions



QUESTIONS

1) What is the contour interval ? _____

2) What is the height of the following points ?

A _____ X _____

B _____ Y _____

3) What is the highest point on the map ? _____

4) What is the lowest point on the map ? _____

5) At what letter is there a steep slope ? _____

6) At what letter is there a gentle slope ? _____

7) Which point is higher, A or X ? _____

3) Which point is lower, C or D ? _____

) What do you think the landform is ? _____

WEATHER MAPS

ı weather map or synoptic chart is just like any other map we might use. 'he following points help explain not only the symbols used on the map but also ıe weather conditions that could be expected.

) Isobars and air pressure

/eather maps have a pattern of fine black lines across them. These lines are ılled isobars and show air pressure. there are 2 main air pressure systems.
high pressure system normally means fine settled weather
low pressure system usually means cloudy unsettled weather with a chance of in.

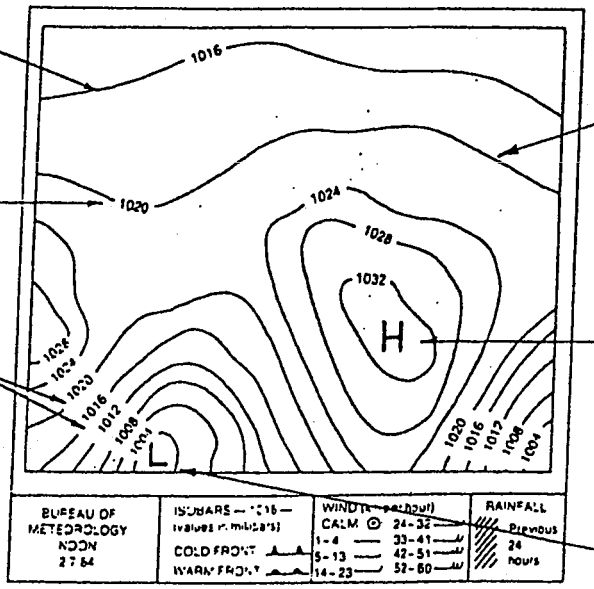
1 Each *isobar* is a line on a map joining places that have the same atmospheric pressure (air pressure)

2 Each isobar usually has numbers printed on it. These tell us the *air pressure* along that isobar. The air pressure on this map has been measured in *millibars*

3 Two places on the *same* isobar will have the *same* air pressure

4 Two places on *different* isobars will have different air pressures

5 A place that is *halfway* between one isobar and the next will probably have an air pressure that is *halfway* between the pressures shown on these isobars



6 The isobars go up or down by the same amount each time

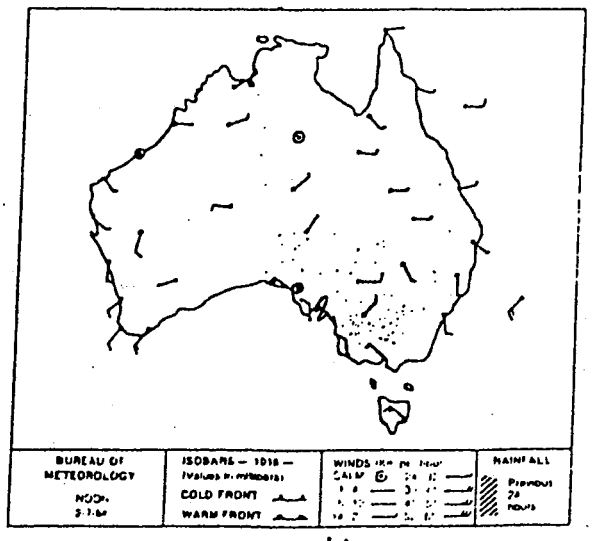
7 Follow an isobar around the map to find out its air pressure, or work out the air pressure by looking at the pressures shown on the isobars on either side

8 This circle pattern of isobars is a *high* pressure system. The pressure gets higher and higher towards the circle in the middle

9 This circle pattern of isobars is a *low* pressure system. The pressure gets lower and lower towards the circle in the middle

Wind direction and speed

below diagram shows us the small arrow-like symbols that have been used on weather map. These give us information about the direction of the wind and speed of the wind at different places in Australia.



* the dot at the end of each arrow tells us where each place is
* the stem or shaft of each arrow tells us from which direction the wind is coming. Winds are always named according to the direction from which they are blowing.
* the feathers on each arrow tell us the speed of the wind. These are explained in the key at the bottom of the weather map.

Eg

This symbol shows a wind blowing from the north-east at around 14-23 km/h.

3) Cold fronts and warm fronts

A cold front forms when cold air moves into an area in which there is already warmer air. The cold air pushes the warm air up and out of the way. When this happens :

* there is a fall in temperature
* dark heavy clouds
* a chance of heavy rain

A warm front forms when warm air moves into an area where there is cooler air. The warm air slides up and over the cooler air. Then this happens :

* there is a rise in temperature
* layers of cloud may form
* a chance of long periods of rain

The following diagrams show the symbols used on weather maps for a cold front and a warm front.

COLD FRONT

Cold air behind

warmer air in front

cold air is moving in direction of arrows

WARM FRONT

Warm air behind

Cool air in front

warm front is moving in direction of arrow

) Rainfall

his is shown on a weather map by shading the area as shown below.

WEATHER MAP EXERCISE

Using the information given on the weather map and the rules underneath it, complete the exercises below.

1) What is the direction of the wind and its speed at
   a) Kalgoorlie ? _____
   b) Townsville ? _____
   c) Darwin ? _____
   d) Perth ? _____

2) What is about to happen at Perth ?
   _____

3) What effect will this have on the wind direction there ?
   _____

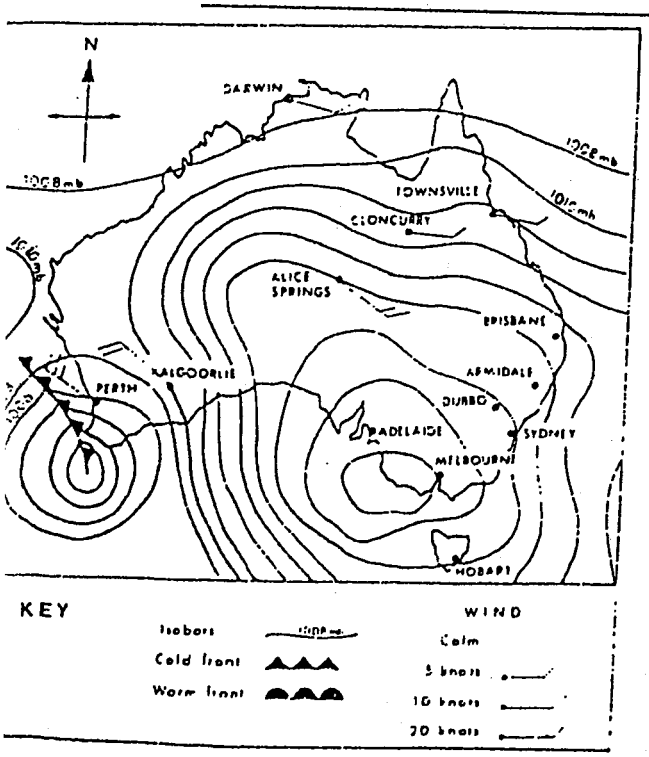
4) Name 2 centres which are experiencing calm conditions
   a) _____
   b) _____

5) Which town would have the hottest day and why ?
   _____
   _____

6) Which area of Australia is most likely to have rain ?
   _____

7) Would it be cloudy or not at
   a) Alice Springs ? _____
   b) Townsville ? _____

8) If the pressure cells continued to move in the normal way, what weather could Adelaide expect to have in the next 2 days ?
   _____
   Why ?
   _____



Some Rules to follow when reading Weather Maps.

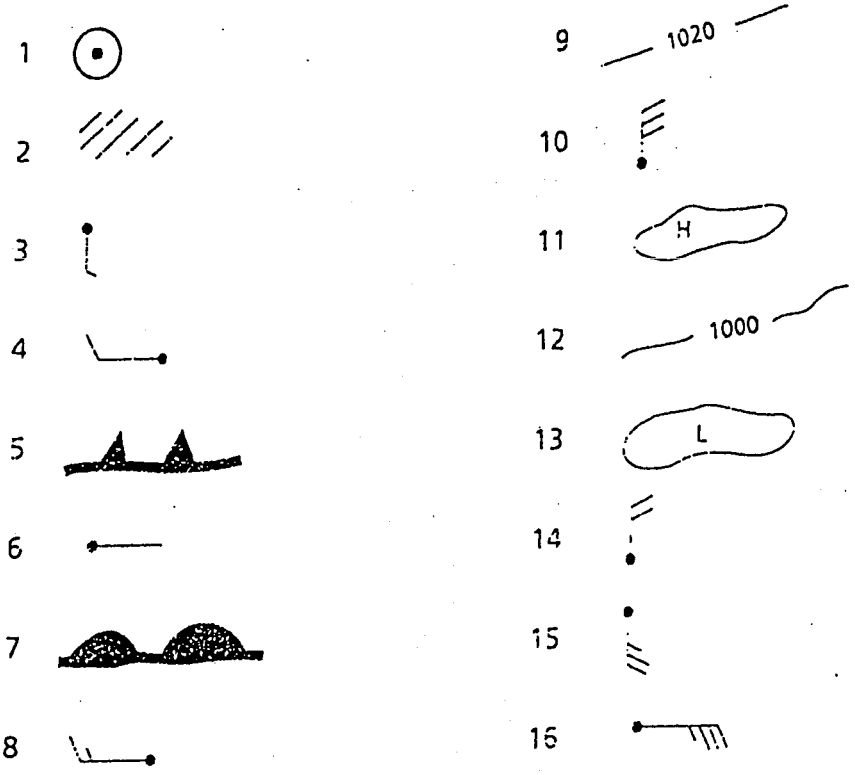
1. Lines joining places of equal air pressure are called isobars. All isobars are numbered and they show areas of high or low pressure (cells). The unit of measurement is the millibar (mb).
2. High pressure is shown by high millibar numbers (say more than 1010mb), while low pressure is shown by low millibar numbers (say below 1000mb).
3. Winds blow clockwise around a low pressure cell and anti-clockwise around a high pressure cell.
4. Many close isobars mean strong winds, few widely-spaced isobars mean light winds.
5. Winds tend to blow in the same direction as the isobars.
6. Pressure cells in Australia tend to move in an east to south-easterly direction. They usually move about 500 to 700 kms a day.
7. An advancing mass of cold air is called a cold front.
8. Air from the sea brings moisture. Air from inland is usually hot and dry.
9. Mountain barriers cause air to rise and if it is moist then rain results.
10. Mountain barriers stop moist winds from reaching inland.
11. Northern areas are generally hotter than southern areas because of the effect of latitude. Inland areas have greater extremes of temperature.

Weather or Not

Why couldn't they play cards in the ark?

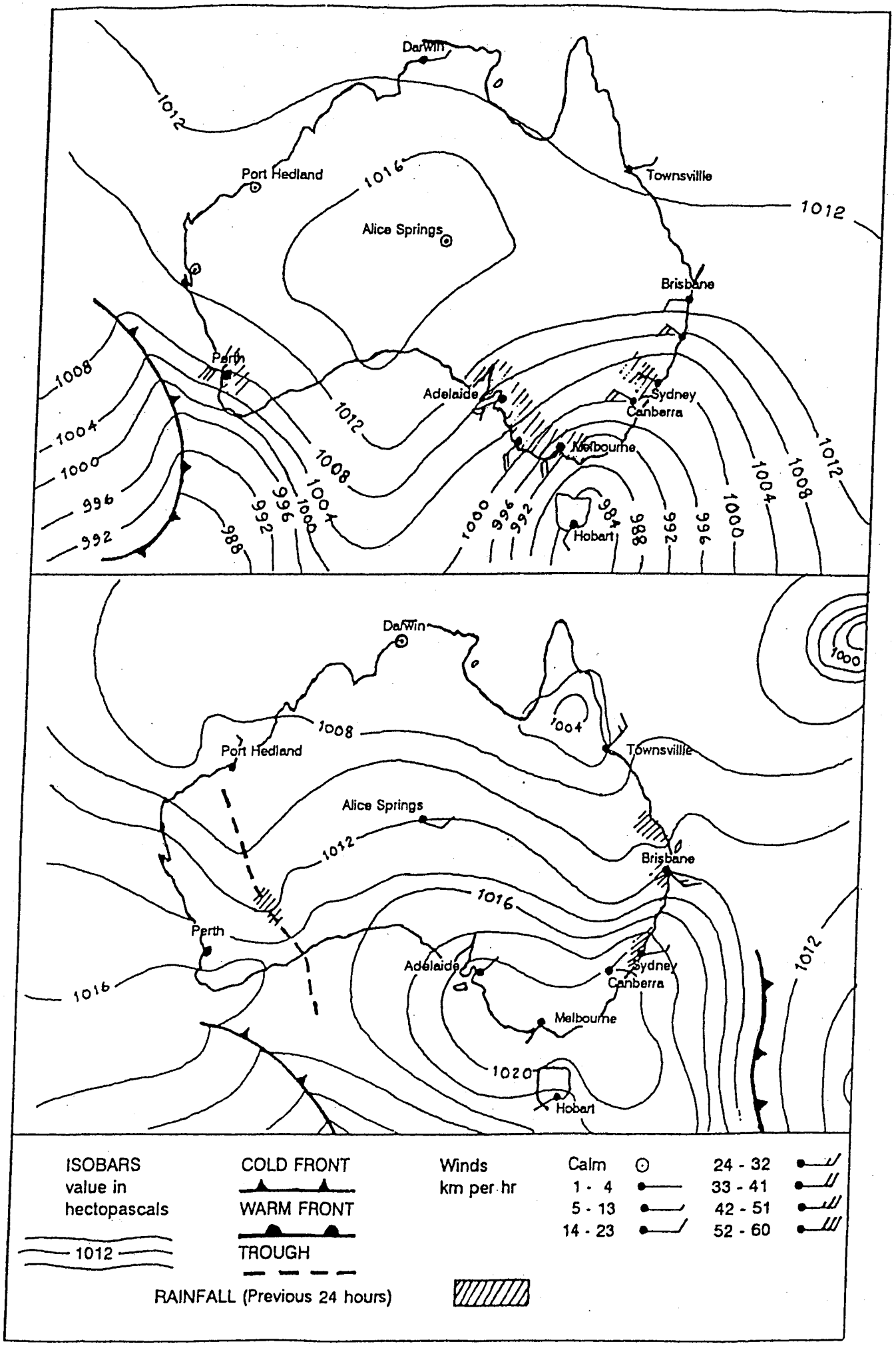
Note: The north point for these questions is at the top of the page.

A number of symbols commonly used on weather maps are shown below.
Beside each symbol, write down what it represents, choosing your answers from the list at the bottom of the page.
Then, in sequence, use the letters next to the answers to find the riddle's solution.



What the symbols represent

A Southerly wind at 5–13 kilometres per hour
T Warm front
N Calm
A Wind from the east at 1–4 kilometres per hour
N Isobar, value 1020 millibars
D Low pressure system
K East wind at 61–68 kilometres per hour
E Isobar, value 1000 millibars
S Cold front
O West wind at 24–32 kilometres per hour
O Rainfall
T North wind at 52–60 kilometres per hour
H Wind from the west at 14–23 kilometres per hour
C South wind at 42–51 kilometres per hour
H High pressure system
E North wind at 33–41 kilometres per hour


Darwin
Port Hedland
Alice Springs
Townsville
Brisbane
Perth
Adelaide
Sydney
Canberra
Melbourne
Hobart
1012
1016
1008
1004
1000
996
992
988
1020
ISOBARS
value in
hectopascals
1012
COLD FRONT
WARM FRONT
TROUGH
RAINFALL (Previous 24 hours)
Winds
km per hr
Calm
1 - 4
5 - 13
14 - 23
24 - 32
33 - 41
42 - 51
52 - 60

WEATHER MAPS

Weather maps (synoptic charts) show isobars which are lines joining places with the same atmospheric pressure. Winds flow around these isobars, clockwise in the case of LOWS and anticlockwise in the case of HIGHS. Just as with contour lines, these form areas of higher or lower pressure, called cells. The closer the isobars are together, the stronger are the winds, just as contours indicate relative steepness.

MAP A:

1. Find the atmospheric pressure at :-

Canberra _____ hPa Perth _____ hPa
Melbourne _____ hPa Alice Springs _____ hPa

2. Name the feature in the bottom left corner of the map.

_____

3. Which centre is experiencing the strongest winds?

centre _____ strength ____ kph

4. Give the wind direction and strength at the following centres :-

Brisbane direction _____ strength _____ kph
Melbourne direction _____ strength _____
Canberra direction _____ strength _____

5. Which centres have experienced rain during the past 24 hours?

_____

MAP B:

1. Find the atmospheric pressure at :-

Hobart _____ hPa Townsville _____ hPa
Brisbane _____ hPa Alice Springs _____ hPa

2. Name the feature extending south from near Port Hedland.

_____

3. Which centre is experiencing the strongest winds?

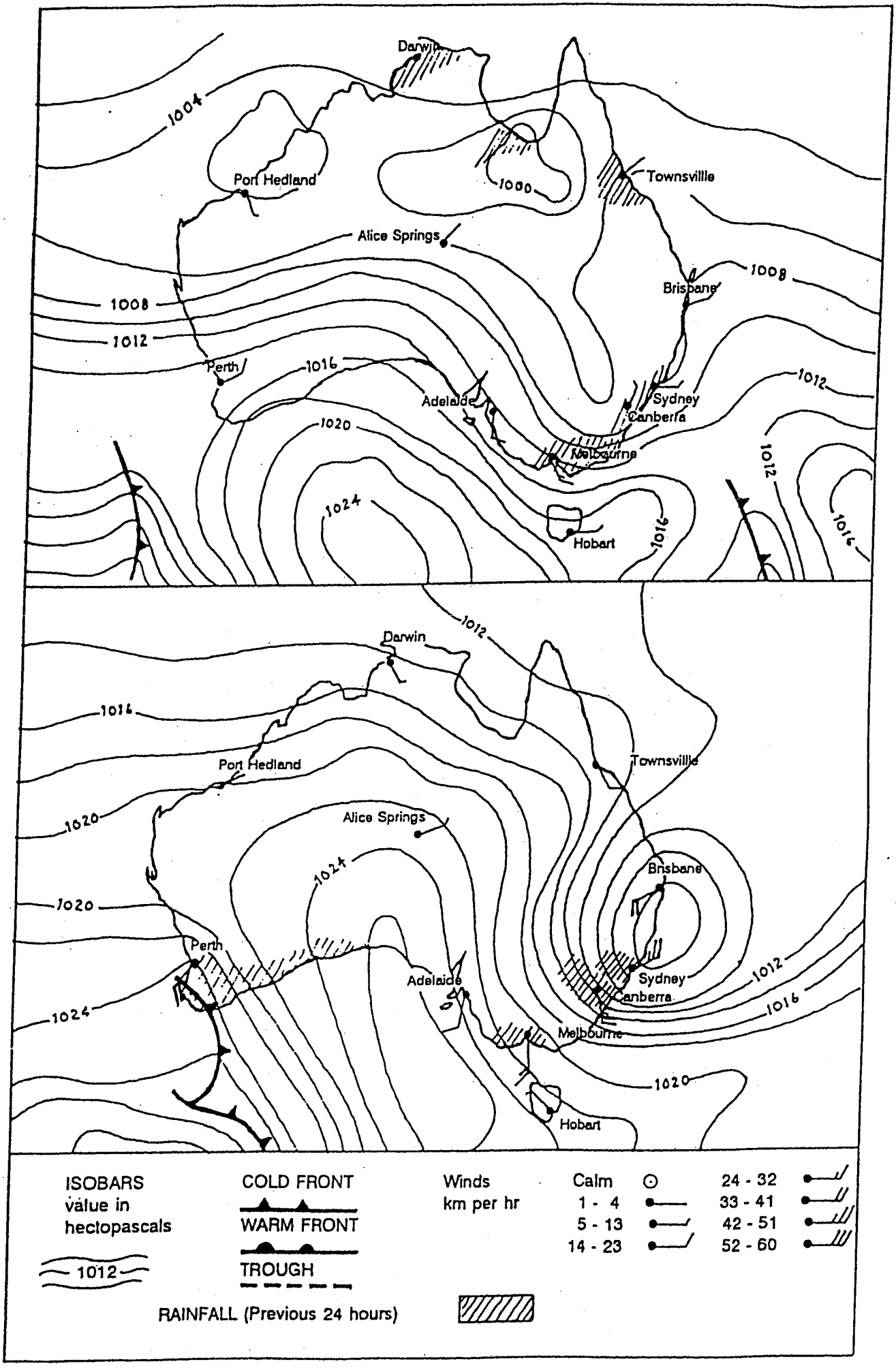
centre _____ strength ____ kph

4. Give the wind direction and strength at the following centres :-

Alice Springs direction _____ strength _____ kph
Sydney direction _____ strength _____
Port Hedland direction _____ strength _____

5. Which centres have experienced rain during the past 24 hours?

_____


Darwin
1004
Port Hedland
1000
Townsville
Alice Springs
1008
Brisbane
1008
1012
Perth
1016
Adelaide
Sydney
Canberra
1012
1020
Melbourne
1012
1024
1016
Hobart
1016
1012
Darwin
1016
Port Hedland
Townsville
1020
Alice Springs
1024
Brisbane
1020
Perth
Adelaide
Sydney
1012
Canberra
1016
1024
Melbourne
1020
Hobart
ISOBARS
value in
hectopascals
1012
COLD FRONT
WARM FRONT
TROUGH
RAINFALL (Previous 24 hours)
Winds
km per hr
Calm
1 - 4
5 - 13
14 - 23
24 - 32
33 - 41
42 - 51
52 - 60

WEATHER MAPS

Weather maps (synoptic charts) show isobars which are lines joining places with the same atmospheric pressure. Winds flow around these isobars, clockwise in the case of LOWS and anticlockwise in the case of HIGHS. Just as with contour lines, these form areas of higher or lower pressure, called cells. The closer the isobars are together, the stronger are the winds, just as contours indicate relative steepness.

MAP A:

1. Find the atmospheric pressure at :-

Melbourne _____ hPa Alice Springs _____ hPa
Port Hedland _____ hPa Townsville _____ hPa

2. Name the two features in the bottom corners of the map.

_____

3. Which centre is experiencing the strongest winds?

centre _____ strength ____ kph

4. Give the wind direction and strength at the following centres :-

Perth direction _____ strength _____ kph
Hobart direction _____ strength _____
Canberra direction _____ strength _____

5. Which centres have experienced rain during the past 24 hours?

_____

MAP B:

1. Find the atmospheric pressure at :-

Sydney _____ hPa Port Hedland _____ hPa
Perth _____ hPa Darwin _____ hPa

2. Name the feature in the bottom left corner of the map.

_____

3. Which centre is experiencing the strongest winds?

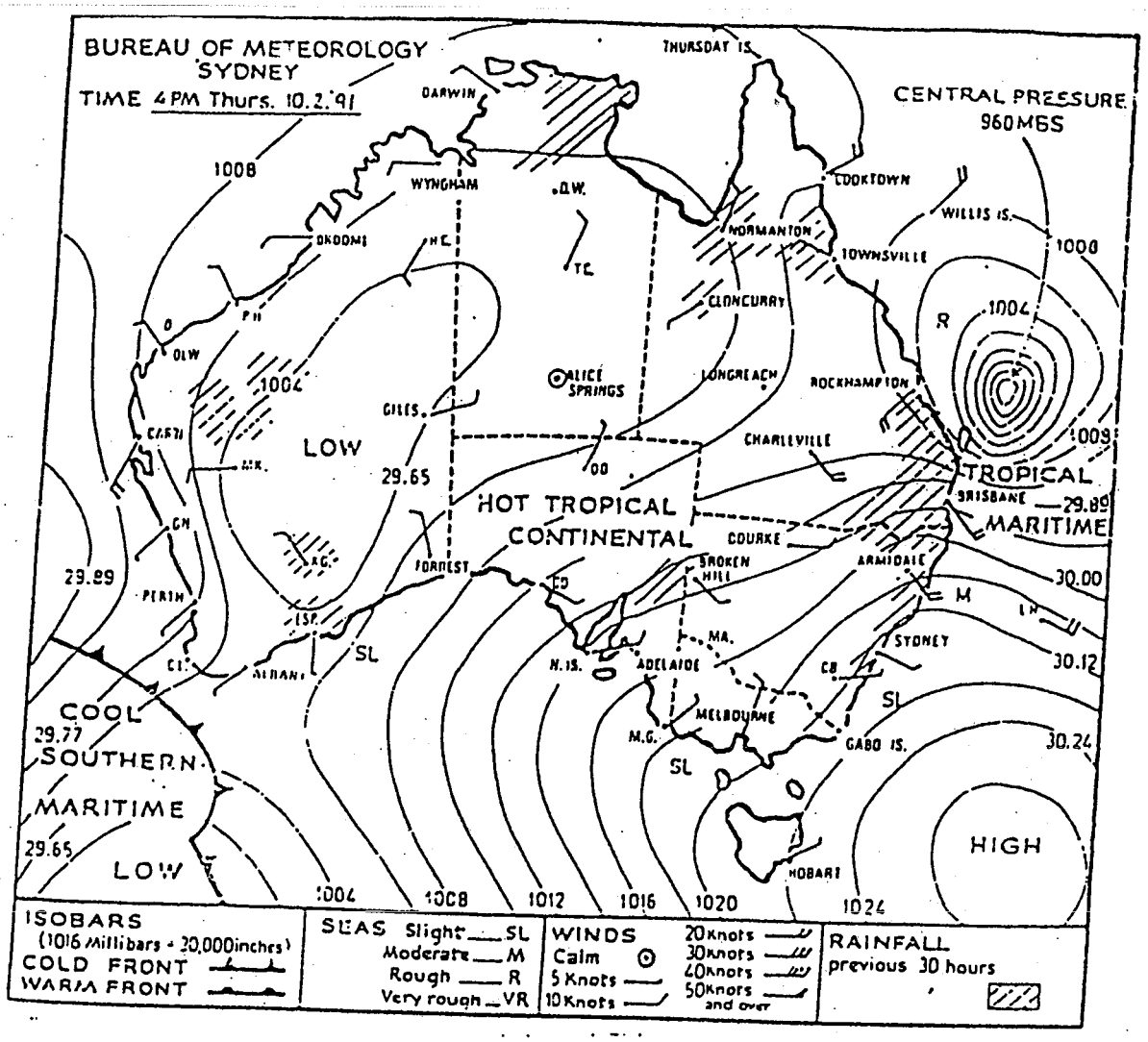
centre _____ strength ____ kph

4. Give the wind direction and strength at the following centres :-

Perth direction _____ strength _____ kph
Sydney direction _____ strength _____
Canberra direction _____ strength _____

5. Which centres have experienced rain during the past 24 hours?

_____



ANSWER THE FOLLOWING QUESTIONS FROM THE SYNOPTIC CHART.

1.) Who produced this synoptic chart? _____

2.) When was this synoptic chart produced? _____

3.) What is the difference in pressure between each isobar? _____

4.) What is the air pressure at each of the following towns?

a) Normanton _____ d) Perth _____

b) Cooktown _____ e) Broken Hill _____

c) Hobart _____ f) Alice Springs _____

5) What is the highest air pressure shown on the map? _____

6) What is the lowest air pressure shown on the map? _____

7) What type of pressure system is located to the east of Hobart? _____

8) What type of pressure system is located to the east of Rockhampton?

_____

9) Give the direction and speed of the wind at Armidale.

_____

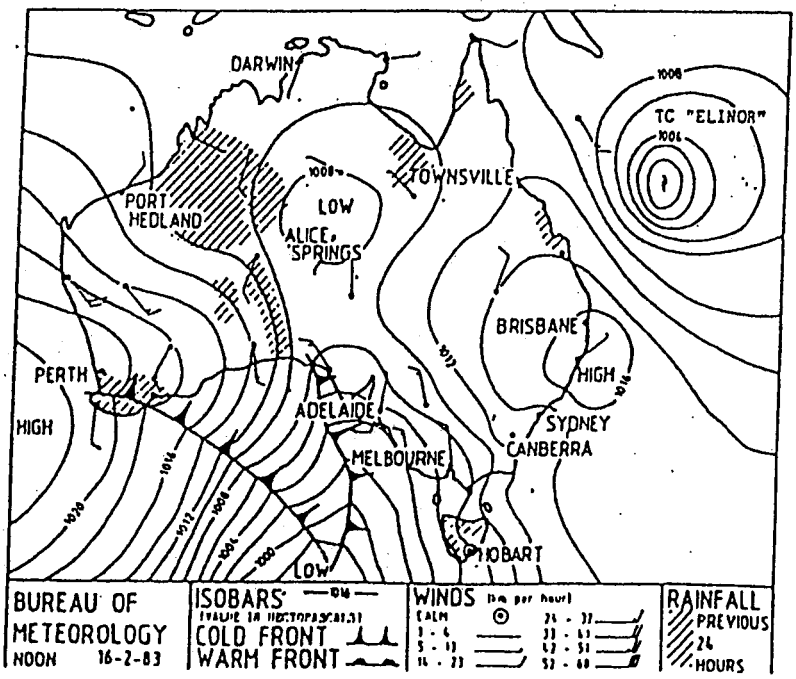
10) What type of weather is Brisbane experiencing? _____

_____

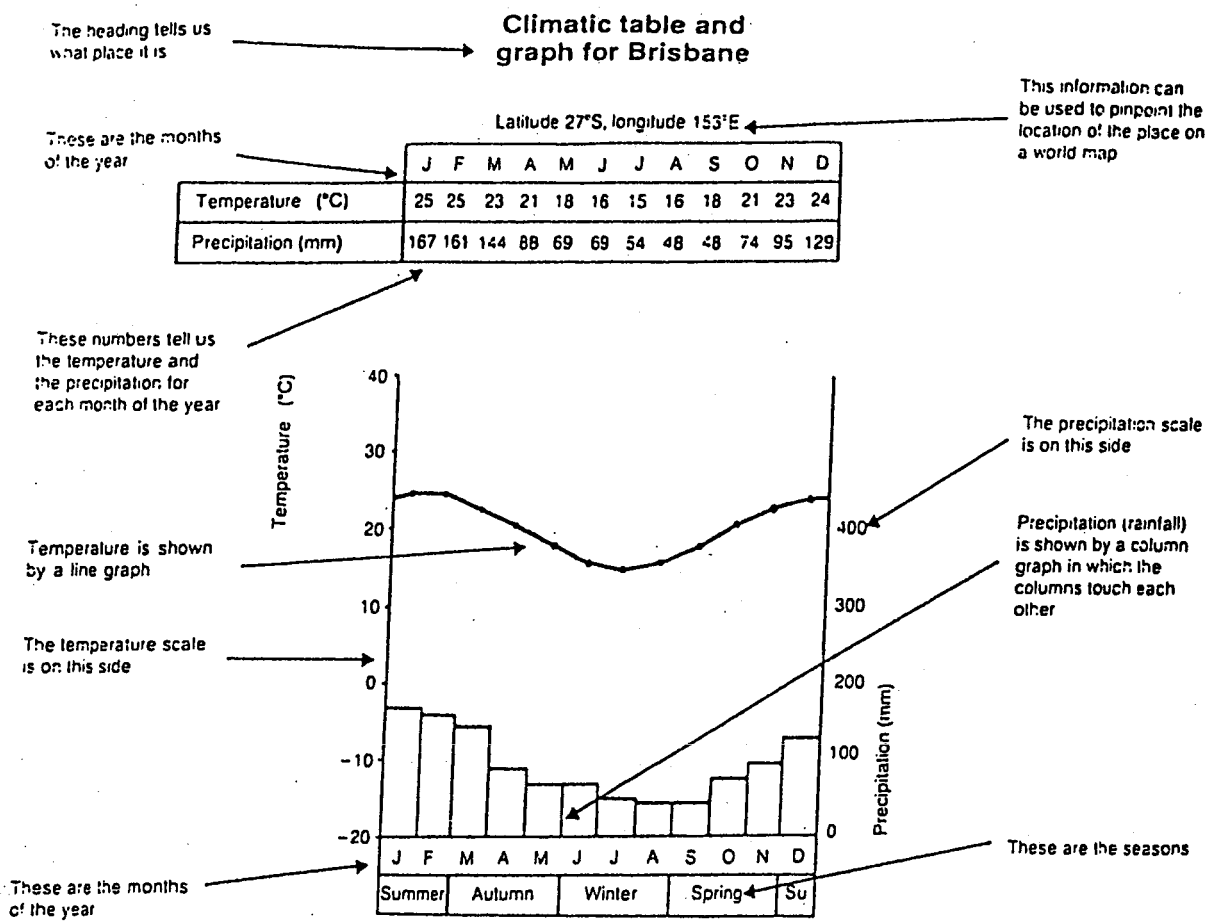
SYNOPTIC CHART EXERCISE

Study the map below and answer the following questions :

1. What sort of pressure system is to be found north-east of Brisbane ? ___
2. What is the lowest isobar value for this system ?_____
3. Why is it raining around Rockhampton ? _____
4. In what direction is wind blowing around darwin ? _____
5. What climatic change is occurring around Perth ? What evidence is there to support this ? _____
6. Which area is receiving the most rain ? Why is it occurring here ? _____
7. What atmospheric pressure would Sydney be experiencing ? _____
8. What atmospheric pressure would Brisbane be experiencing ? _____
9. What wind speed is associated with the cyclone ? _____
10. What is the highest isobar value to be found on this map ? _____
11. What is the strongest wind speed that is recorded on this map ? _____



A climatic graph is a graph which shows the average temperatures and precipitation (rainfall) for a place over the twelve months of the year. Climatic graphs are drawn from information in a climatic table. A climatic table and a climatic graph are shown below.



Interpreting climatic graphs

A climatic graph is a combination between a line graph and a bar graph. This sort of graph can give you lots of information about temperature, precipitation, the seasons and the location of the place shown.

Temperature

* The **maximum** (highest) temperature will be shown by the highest point on the line graph or the highest temperature shown in the table.
* The **minimum** (lowest) temperature will be shown by the lowest point on the line graph or the lowest temperature in the table.
* The **temperature range** is the difference between the highest and lowest temperature.
* The **average temperature** can be calculated by adding up all the temperatures in the table and dividing the total by the number of months (12)

Precipitation

* The **highest** precipitation will be shown by the highest column in the graph or the largest precipitation figure in the table
* The **lowest** precipitation will be shown by the lowest column in the graph or the smallest precipitation figure in the table.
* A grouping together of a number of higher columns will show a distinct **wet season**
* A grouping together of a number of low columns will show a distinct **dry season**
* If all columns are quite high it is probably **wet** all year round.
* If all columns are very low it is probably very **dry** all year round.
* To find out the **total precipitation** for the year, add up all 12 precipitation figures from the table.
* To find out the **average precipitation** add up the 12 precipitation figures from the table and divide them by the number of months (12)

The seasons

* **Winter** is shown by a dip (⌣) in the temperature line during one part of the year.
* **Summer** is shown by a (⌢) in the temperature line during one part of the year.
* **Spring** is the season when the temperature line is on the way up
* **Autumn** is the season when the temperature line is on the way down.

Location

* A temperature line which is almost flat or level shows that this place is close to the equator. Places close to the equator have a small temperature range.
* A temperature line which has a large dip in it shows a place that is either quite a long way from the equator or a long way inland. These places have large temperature ranges.

* If the temperature line dips during June, July and August (showing winter is in the middle of the year), this place is in the southern hemisphere
* If the temperature line dips during December, January and February, this place is in the northern hemisphere.

REMEMBER :

WHEN DRAWING A CLIMATIC GRAPH TEMPERATURE IS DRAWN IN RED AND PRECIPITATION IS DRAWN IN BLUE

CLIMATE GRAPHS

1. The highest temperatures are found at Station ___ ?

2. In which hemisphere is Station A ? _____

3. Work out the lowest monthly temperature in A.
   Month _____ Temperature _____ °C

4. Work out the highest monthly rainfall in B.
   Month _____ Rainfall _____ mms

5. Calculate the temperature range in each station.
   A _____ C° B _____ C°

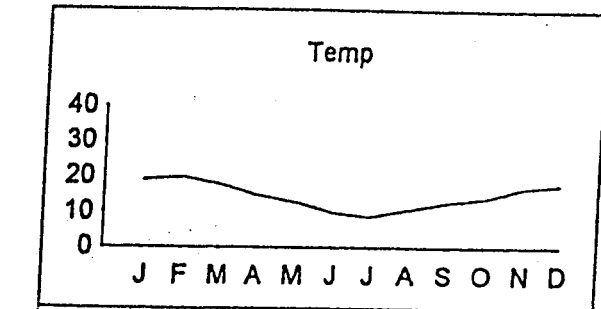
6. Calculate the annual rainfall in each station.
   A _____ mms B _____ mms

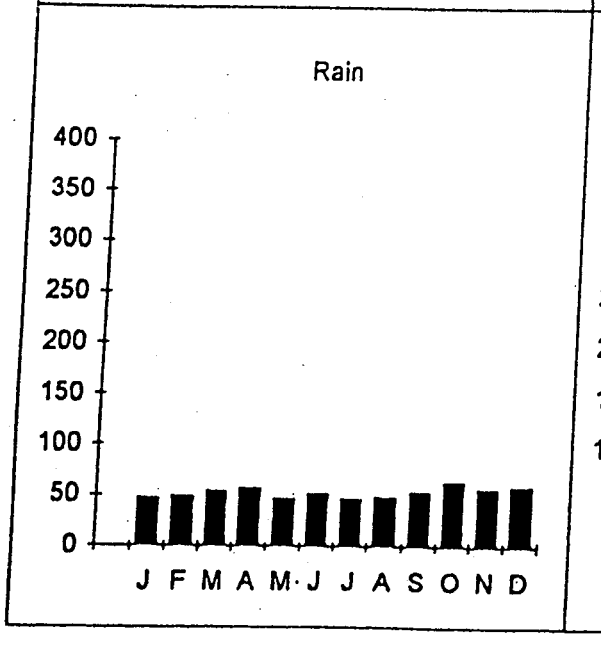
7. Describe the annual rainfall in each station.

_____

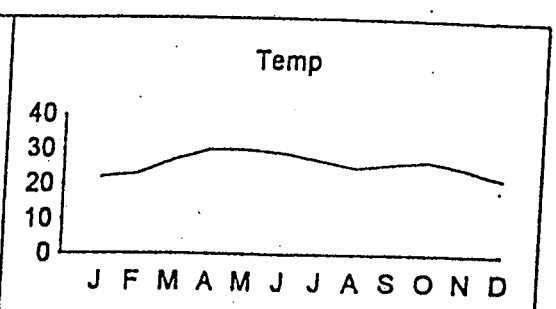
_____

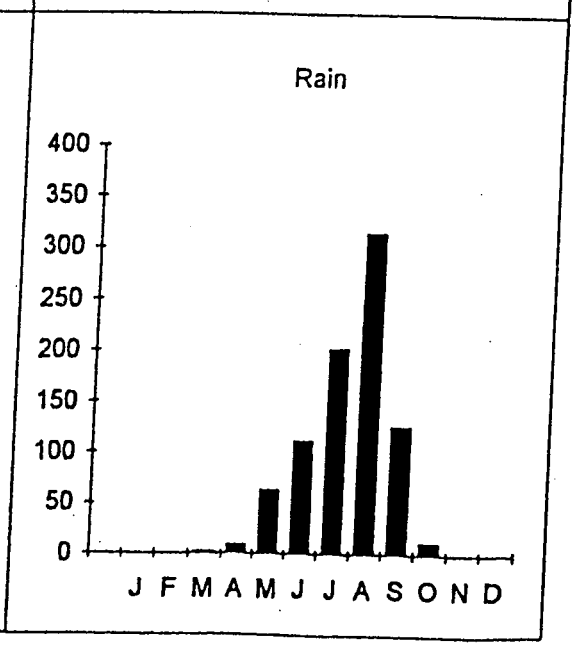
A





B





CLIMATE GRAPHS

1. The highest temperatures are found at Station ___ ?

2. In which hemisphere are these stations ? _____

3. Work out the lowest monthly temperature in A.
   Month _____ Temperature _____°C

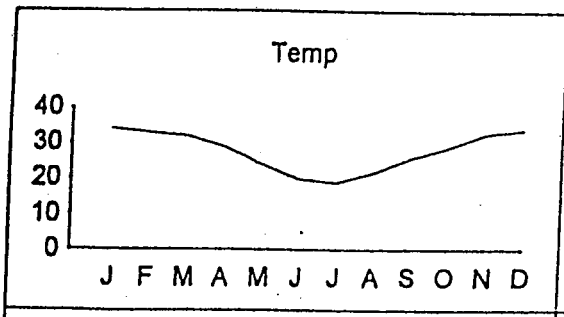
4. Work out the highest monthly rainfall in B.
   Month _____ Rainfall _____ mms

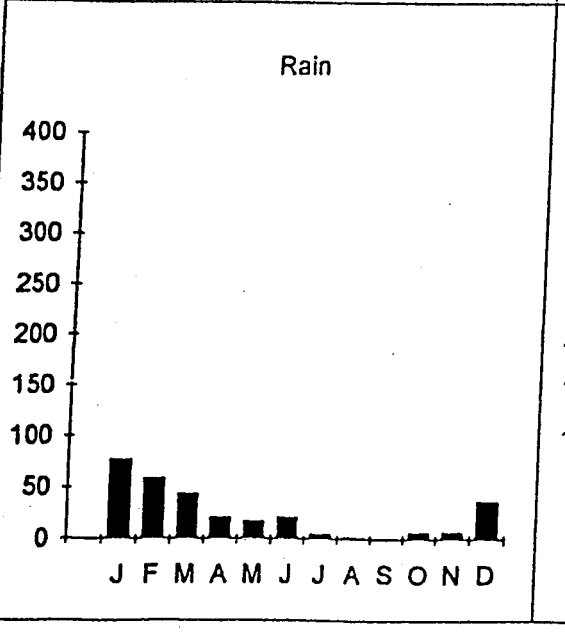
5. Calculate the temperature range in each station.
   A _____ C° B _____ C°

6. Calculate the annual rainfall in each station.
   A _____ mms B _____ mms

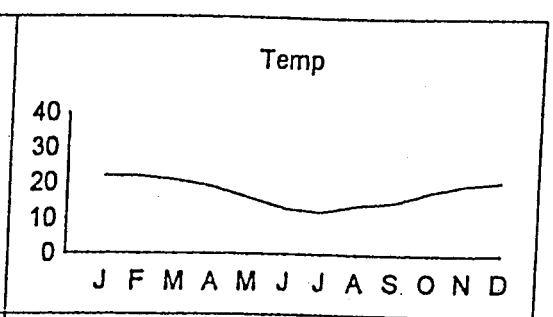
7. Describe the annual rainfall in each station.
   _____
   _____

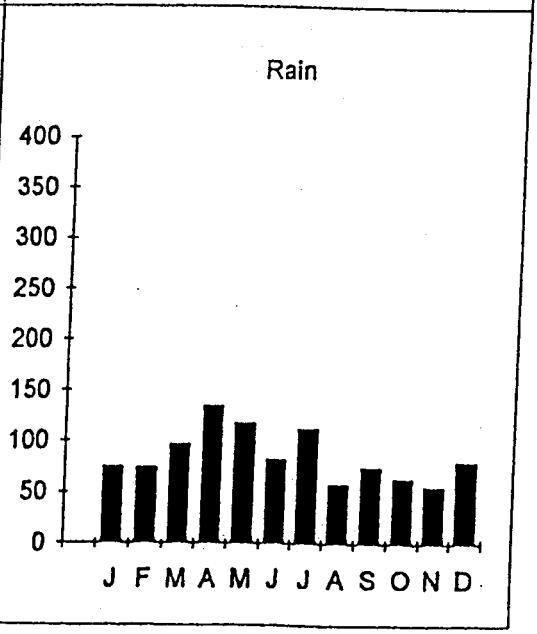
A

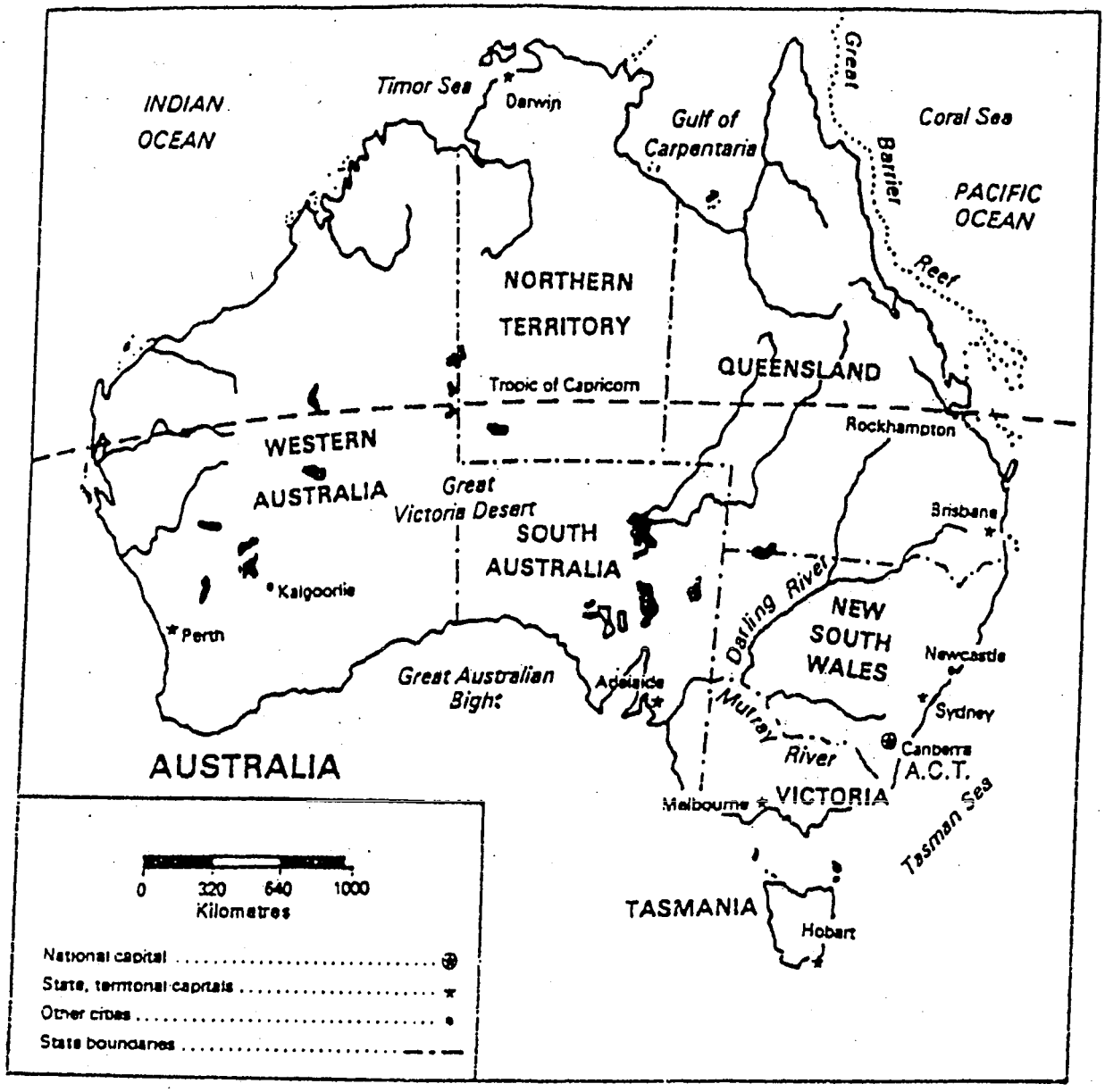




B







Use the map to answer the following questions.

1. In what two hemispheres is Australia located? _____

2. What natural feature in the Coral Sea lies along the northeast coast of Australia? _____

3. What major latitude runs through the middle of Australia? _____

4. What body of water is located between Queensland and Northern Territory? _____

_____

5. Australia is located between what two oceans? _____

7. What are the six states and two territories of Australia? _____

_____

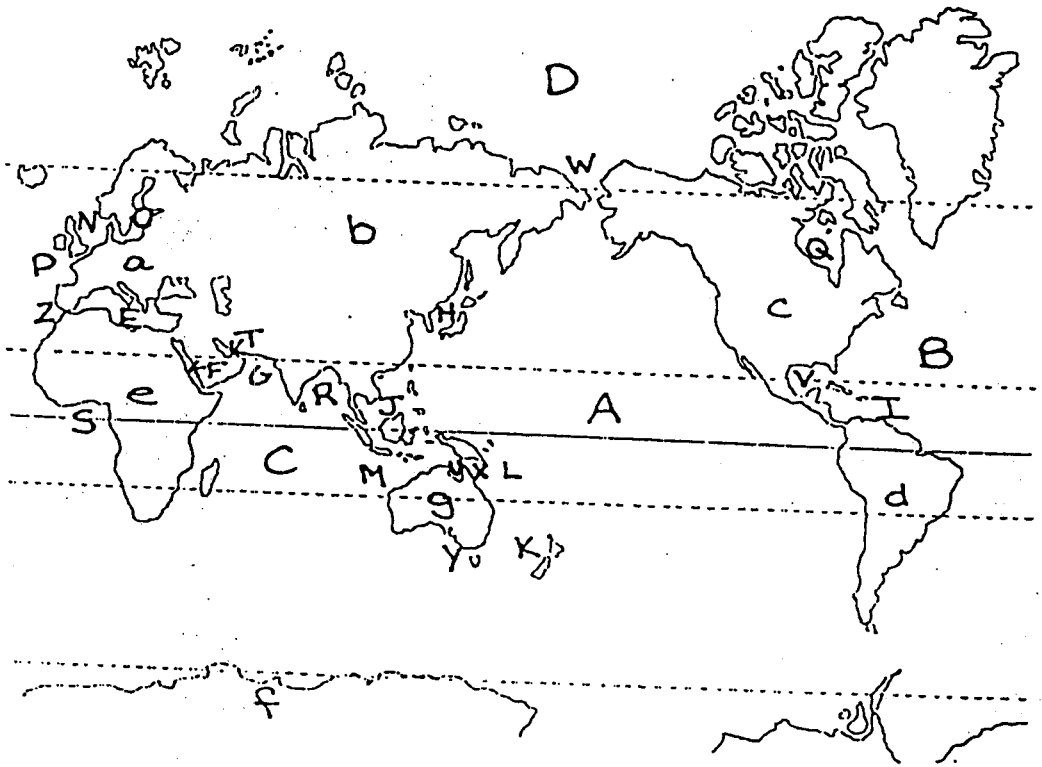
8. What is the largest state or territory in Australia? _____

9. What is the distance across Australia from east to west? _____

10. What river forms the boundary between New South Wales and Victoria? _____

OF THE WORLD !

USE AN ATLAS TO HELP YOU IDENTIFY
THE FEATURES SHOWN ON THE MAP OPPOSITE.



1. **Name the continents marked**

a)_____
b)_____
c)_____
d)_____
e)_____
f)_____
g)_____

2. **Name the oceans marked**

A)_____
B)_____
C)_____
D)_____

3. **Name the seas marked**

E)_____
F)_____
G)_____
H)_____
I)_____
J)_____
K)_____
L)_____
M)_____
N)
O)_____

4. **Name the bays marked**

P)_____
Q)_____
R)_____

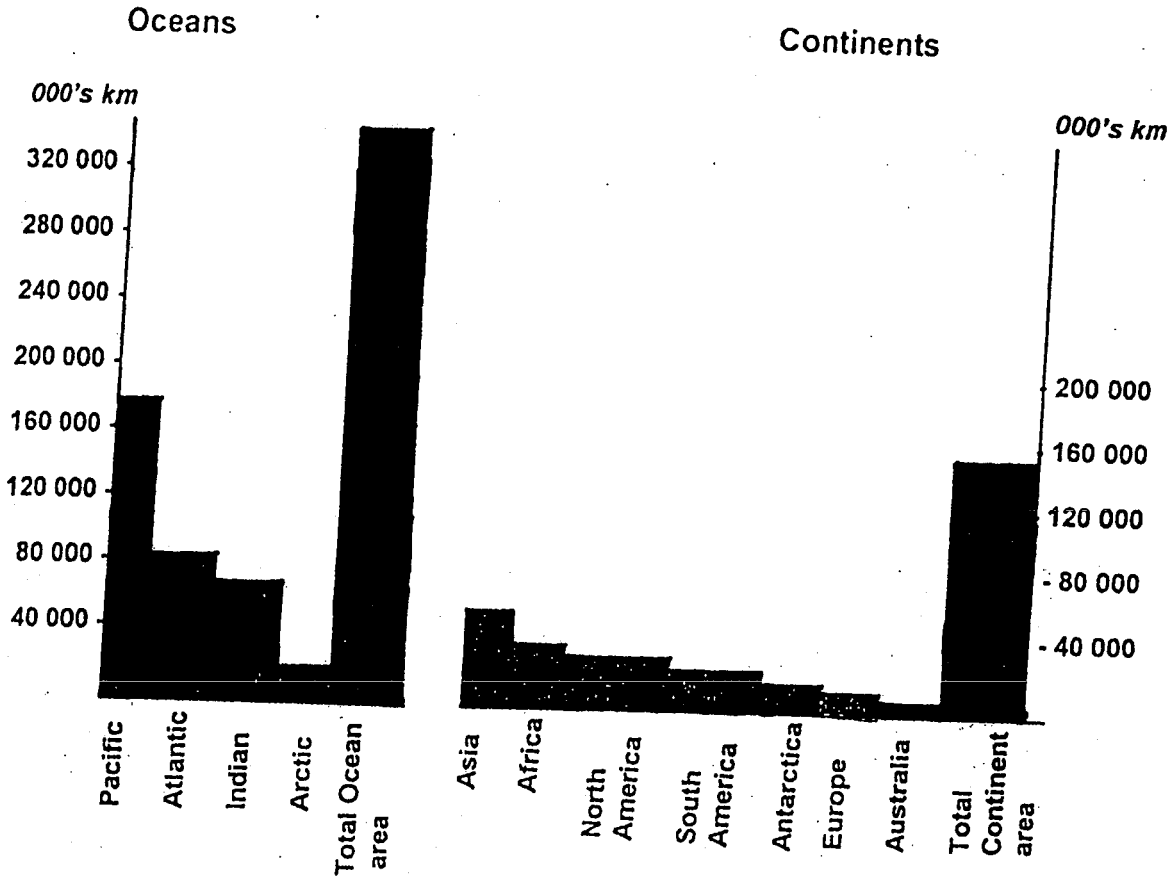
5. **Name the gulfs marked**

S)_____
T)_____
U)_____
V)

6. **Name the straits marked**

W)_____
X)_____
Y)_____
Z)_____

OCEANS AND CONTINENTS



Look at the graphs above and answer these questions :

1) List the 7 continents

a) _____ b) _____

c) _____ d) _____

e) _____ f) _____

g) _____

2) What is the worlds largest ocean ? _____

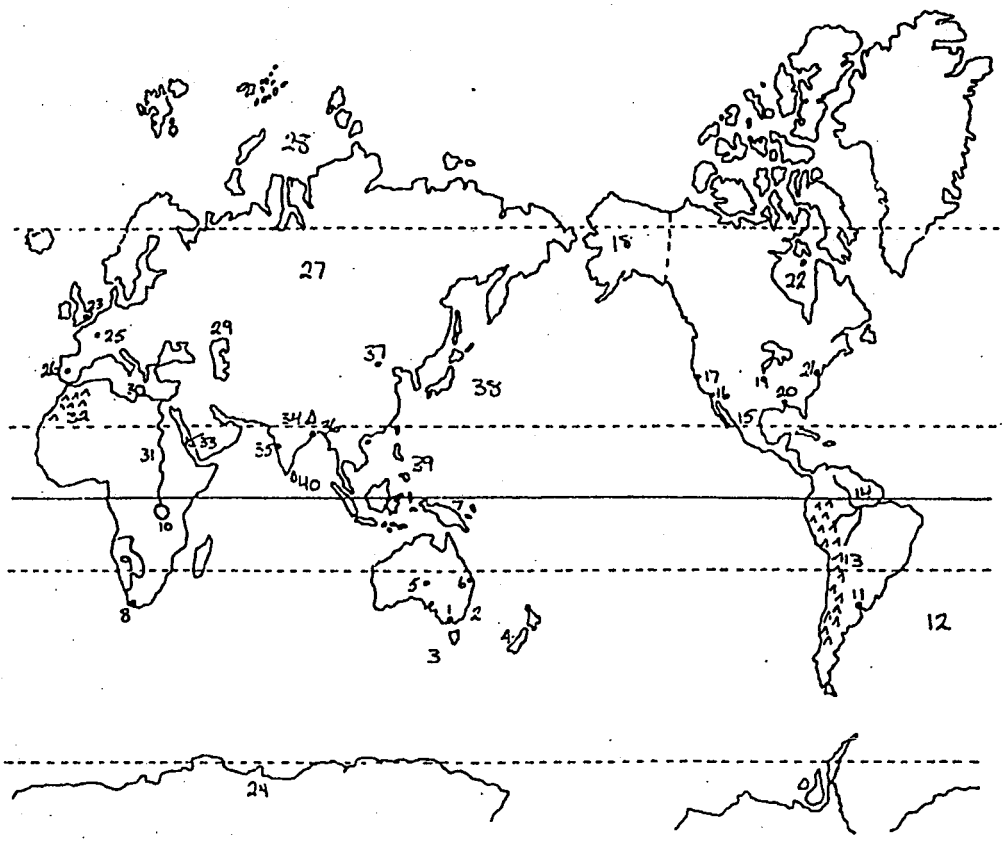
3) What is the area of the Atlantic Ocean ? _____

4) Which ocean has an area of about 170 000 000 km ? _____

5) What is the world's largest continent ? _____

6) What is the world's smallest continent ? _____

TEST YOUR KNOWLEDGE OF THE WORLD



t the map and complete the following list like this :
The city of **Melbourne**

The city of _____
The city of _____
The state of _____
The country is _____
The city of _____
The city of _____
The country is _____
The city is _____
The _____ Desert
ake _____
he city of _____
he _____ Ocean
he _____ Mountains
ne _____ River
ne country is _____
_____ A_____
an _____
ne state of _____
ne city of C_____
ne city of N_____ O_____

21. The city of N_____ Y_____
22. _____ Bay
23. _____. The capital city of Great Britain
24. The continent is _____
25. _____ The capital city of Belgium
26. The capital of S_____ is _____
27. The C_____ of Independent States
28. _____ Ocean
29. The _____ Sea
30. The _____ Sea
31. The _____ River
32. The _____ Mountains
33. The _____ Gulf
34. Mt _____ The world's highest
35. The city of _____
36. The city of C_____
37. The capital city of C_____ is B_____
38. The city of T_____
39. The country is _____
40. The country is _____

POPULATION PYRAMIDS

The study of population is called DEMOGRAPHY.

Here is some DEMOGRAPHIC information about JAPAN'S POPULATION.
Study the POPULATION PYRAMID, BAR GRAPH and two TABLES carefully.
Complete the following EXERCISES, writing your answers in the spaces provided.

EXERCISES

1. What was Japan's total population in 1990?

2. In Japan today are there more males or more females? By exactly how many?

3. Describe the population changes which have taken place between 1920 and 1990.

4. What will be the main demographic problem facing Japan in 2025?

Figure 1 - Japan's Population by Age and Sex (1990)

Age Groups	Total ('000's)	Male ('000's)	Female ('000's)
0 - 4	6,536	3,354	3,182
5 - 9	7,429	3,799	3,630
10 - 14	8,520	4,363	4,157
15 - 19	10,022	5,133	4,889
20 - 24	8,937	4,573	4,364
25 - 29	8,169	4,151	4,018
30 - 34	7,799	3,932	3,867
35 - 39	9,016	4,534	4,482
40 - 44	10,677	5,359	5,320
45 - 49	9,044	4,494	4,550
50 - 54	8,105	4,006	4,099
55 - 59	7,726	3,795	3,941
60 - 64	6,732	3,228	3,505
65 -	14,899	5,983	8,916
Total	123,612	60,692	62,920

Figure 2 - Japan's Population Pyramid (1920-2025)

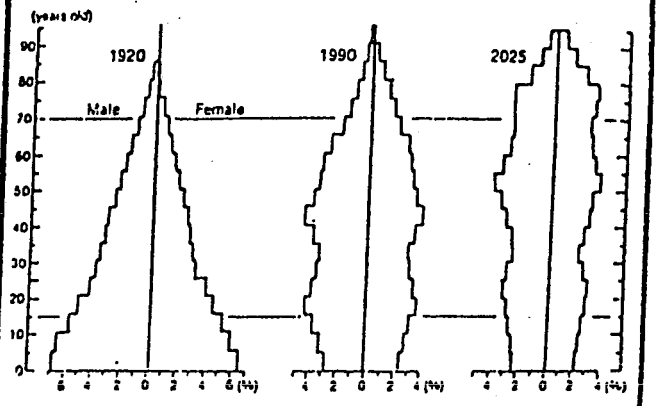
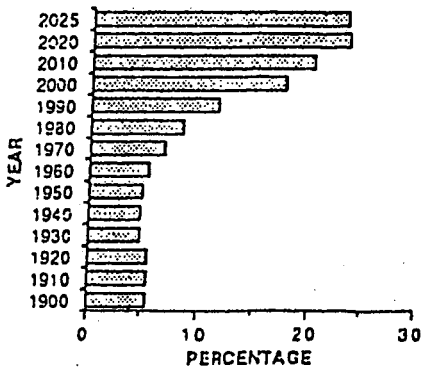


Figure 3 - Expectation of Life at Birth

	Year Period	Male (years)	Female (years)
Japan	1970	69..31	74.66
	1980	73.35	78.76
	1990	75.86	81.81
Iceland	1987 - 1988	74.58	79.74
Sweden	1988	74.15	79.96
Norway	1990	73.44	79.81
Australia	1987	73.03	79.46
U.S.A.	1987	71.50	78.30
France	1987	72.03	80.27
U.K.	1986 - 1988	72.40	78.10
Fermany F.R.	1985 - 1988	72.21	78.68
U.S.S.R.	1986 - 1987	65.04	73.79
China	1985 - 1990	67.98	70.94

Figure 4 - Percentage of Total Population 65 Years and Over



5. What was the average life expectancy for males and females in Japan in 1990?

6. Give two significant features about life expectancy in the last decade in Japan.

7. How does life expectancy in Japan compare to the other countries shown?

8. How can you explain the large number of people in the 40-44 year age group in Japan today.

9. Looking at the 1990 pyramid, work out when the Japanese Government began to implement a strong policy on birth control.

10. In which countries do women live the longest relative to men?

11. In 1990 approximately what percentage of Japan's population was in the productive age group 20 to 64?

12. What percentage of the Japanese population is expected to be non-productive in the year 2025? Approximately what change will have taken place over the preceding 100 years?

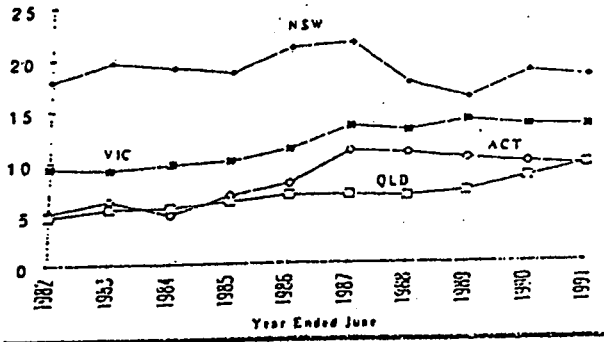
13. In 2025 is the birth rate expected to be low or high?

GONE MISSING !!

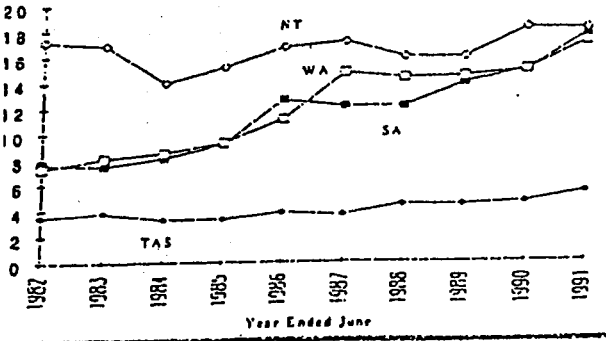
CAR THEFT is a major problem throughout the world and Australia is no exception

Study the 5 FIGURES below (4 GRAPHS and 1 TABLE) then complete the following EXERCISES. Write your answers in the spaces provided.

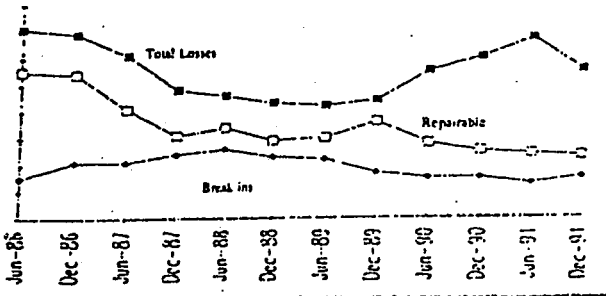
ure 1 - Theft Rate : Eastern States



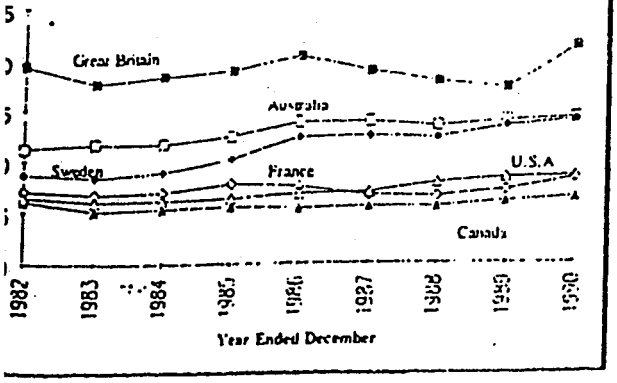
ire 2 - Theft Rate : Other States



re 3 - Theft Rate : By Type of Claim



re 4 - Theft Rate : Overseas Comparison

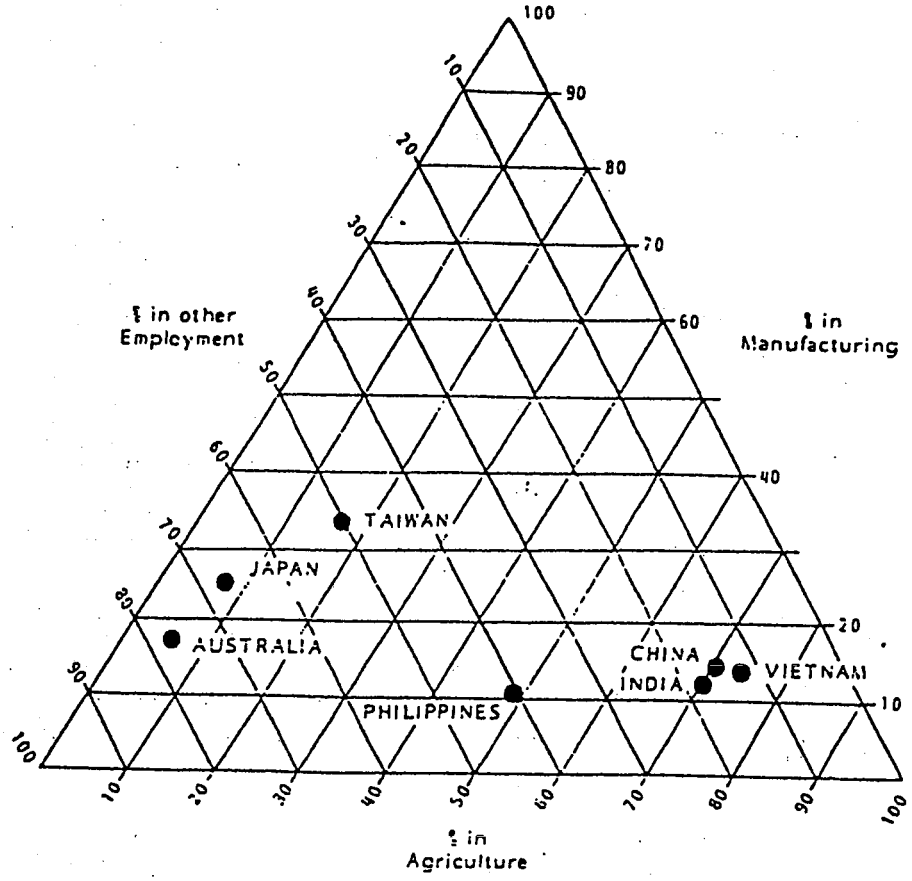


1. Which is the more common , 'Total Loss' claims or 'Repairable' claims?
2. Is car theft a local or national problem?
3. Which States have the highest theft rate?
4. Which State has shown the largest increase in theft rate since 1990?
5. Describe the theft trend in Victoria in the last decade (use words like 'increasing', 'decreasing', 'steady').
6. Describe the trend line for 'Repairable' claims for the years 1986 to 1991.
7. How does the theft rate for the Eastern States compare with the Other States?
8. When did Queensland's theft rate peak?
9. What does the figure '-2.7' for the ACT in Table 5 mean?
10. Is car theft in Tasmania on the increase or not? What makes you say this?
11. How does Australia compare to other Western Countries?
12. Of the six countries shown, which one recorded the smallest increase in car theft?

Figure 5 - Theft Rate : Percentage Comparison

State	Thefts Per 1,000 Vehicles in 1990/91	% Change Last Year
NSW	18.0	-2.5
NT	18.0	-1.0
SA	17.6	17.6
WA	17.0	13.7
VIC	13.2	-1.4
QLD	9.5	14.6
ACT	9.4	-2.7
TAS	5.3	13.8

TRIANGULAR GRAPHS



WORKFORCE STRUCTURE IN SELECTED COUNTRIES - 1985

Refer to Figure 1 Workforce Structure in Selected Countries (1985) then -

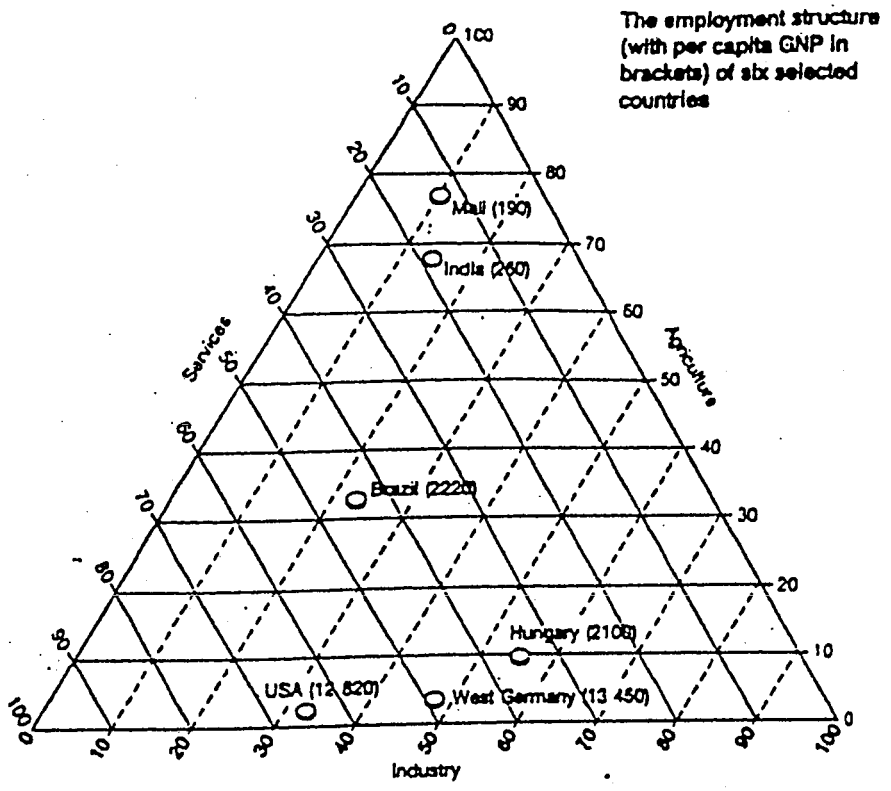
a) Complete the following table.

Percentage of Workforce in Selected Countries (1985)

COUNTRY	% in Agriculture	% in Manufacturing	% in other Employment
Australia			
Japan			
Taiwan			
Philippines			
China			
India			
Vietnam			
Ethiopia	80	8	12
U.S.A.	.4	31	66
Sudan	71	8	21

TERNARY GRAPHS

Refer to the triangular graph below to answer the following questions:-



1. What country is the poorest as shown on the graph? .....

2. Name a) the richest country on the graph ..... and
   b) it's GNP per person .....

3. What proportion of India's population is employed in
   a) agriculture? .....%
   b) manufacturing? .....%

4. Which country has the highest proportion of it's population employed in agriculture, the U.S.A. or Brazil? .....

5. Which country has 10% of it's workforce employed in agriculture, 55% in manufacturing and 35% engaged in the services sector? .....

6. (a) If Australia has 6% of it's workforce engaged in agriculture, 18% in manufacturing, what proportion is employed in the tertiary sector? .....%
   (b) Using the figures in 6(a), locate and label Australia onto the graph.

7. Explain the relationship between per capita GNP and the proportion of people employed in agriculture