



UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS  
International General Certificate of Secondary Education

CANDIDATE  
NAME

CENTRE  
NUMBER

--	--	--	--	--

CANDIDATE  
NUMBER

--	--	--	--



**GEOGRAPHY**

**0460/22**

Paper 2

**October/November 2010**

**1 hour 30 minutes**

Candidates answer on the Question Paper.

Additional Materials:     Ruler  
                                  Protractor  
                                  Plain paper

1:25 000 Survey Map Extract is enclosed with this Question Paper.

**READ THESE INSTRUCTIONS FIRST**

Write your Centre number, candidate number and name in the spaces provided.  
Write in dark blue or black pen.  
You may use a soft pencil for any diagrams, graphs or rough working.  
Do not use staples, paper clips, highlighters, glue or correction fluid.  
**DO NOT WRITE IN ANY BARCODES.**

Answer **all** questions.  
The Insert contains Photographs A and B for Question 3 and Fig. 6 for Question 4.  
Sketch maps and diagrams should be drawn whenever they serve to illustrate an answer.

The Survey Map Extract and the Insert are **not** required by the Examiner.

At the end of the examination, fasten all your work securely together.  
The number of marks is given in brackets [ ] at the end of each question or part question.

For Examiner's Use	
<b>Q1</b>	
<b>Q2</b>	
<b>Q3</b>	
<b>Q4</b>	
<b>Q5</b>	
<b>Q6</b>	
<b>Total</b>	

This document consists of **13** printed pages, **3** blank pages and **1** Insert.



1 The map extract is for Beau Bassin, Mauritius. The scale is 1:25 000.

(a) Fig. 1 shows the positions of some features in the south of the map extract.

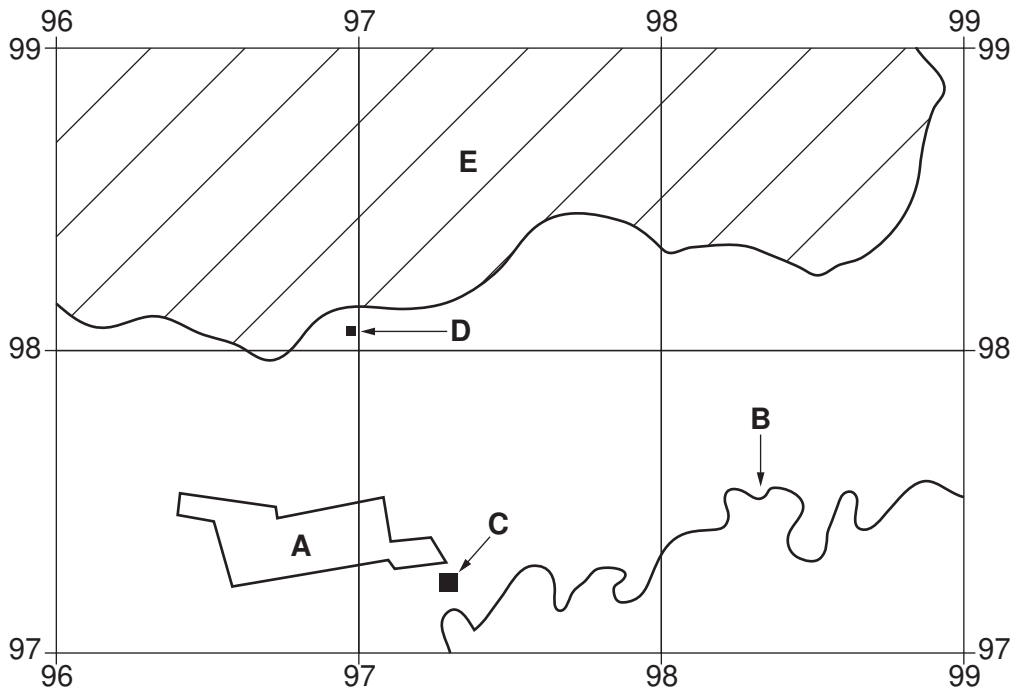


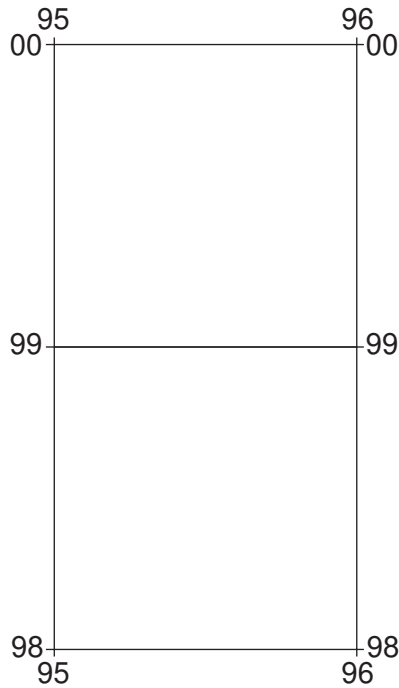
Fig. 1

Study the map and Fig. 1 and name the following features:

- (i) the plantation crop at **A**;  
.....[1]
- (ii) the river **B**;  
.....[1]
- (iii) the Named or Public Building at **C**;  
.....[1]
- (iv) the feature at **D**;  
.....[1]
- (v) the type of vegetation at **E**.  
.....[1]

(b) Fig. 2 shows two grid squares on the map.

For  
Examiner's  
Use



**Fig. 2**

Table 1 compares the features of the two grid squares. Complete the table by putting a tick in the correct **five** boxes. Use only **one** tick for each row.

**Table 1**

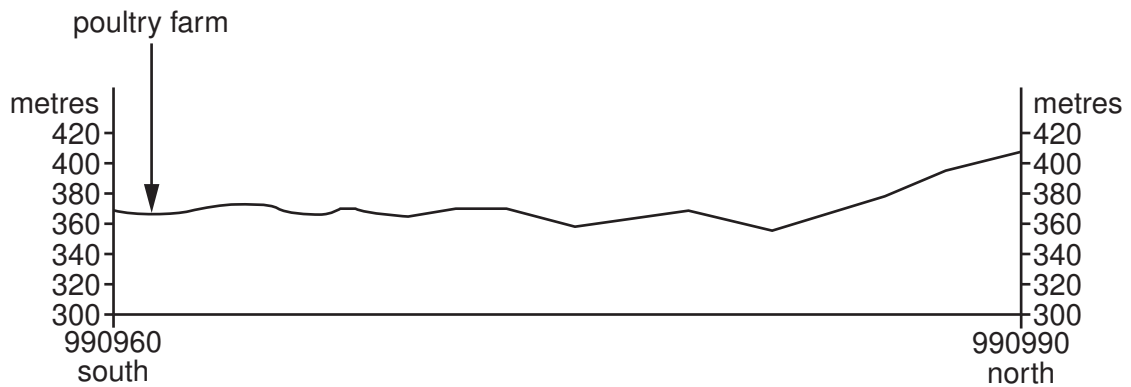
	northern square only (9599)	southern square only (9598)	both of these grid squares	neither of these grid squares
motorway				
school				
spur				
land sloping down to the NE				
land over 300 m				

[5]

(c) Fig. 3 is a cross section from south to north along grid line 99 from 990960 to 990990. The position of the eastern edge of the poultry farm (990961) has been labelled on it. Use labelled arrows to mark on the profile the positions of:

*For  
Examiner's  
Use*

- (i) the River Moka; [1]
- (ii) the bridge over a small river; [1]
- (iii) a main A road. [1]



**Fig. 3**

(d) (i) State the four figure grid reference of the grid square that contains the maize mill in the north west of the map extract.

..... [1]

(ii) Circle the six figure grid reference of the post office in the centre of the town of Beau Bassin in the south west of the map extract.

935968                      936969                      968935                      969936                      [1]



2 (a) Study Fig. 4 and Table 2, which show the climate data for a place in the Amazon Basin.

For  
Examiner's  
Use

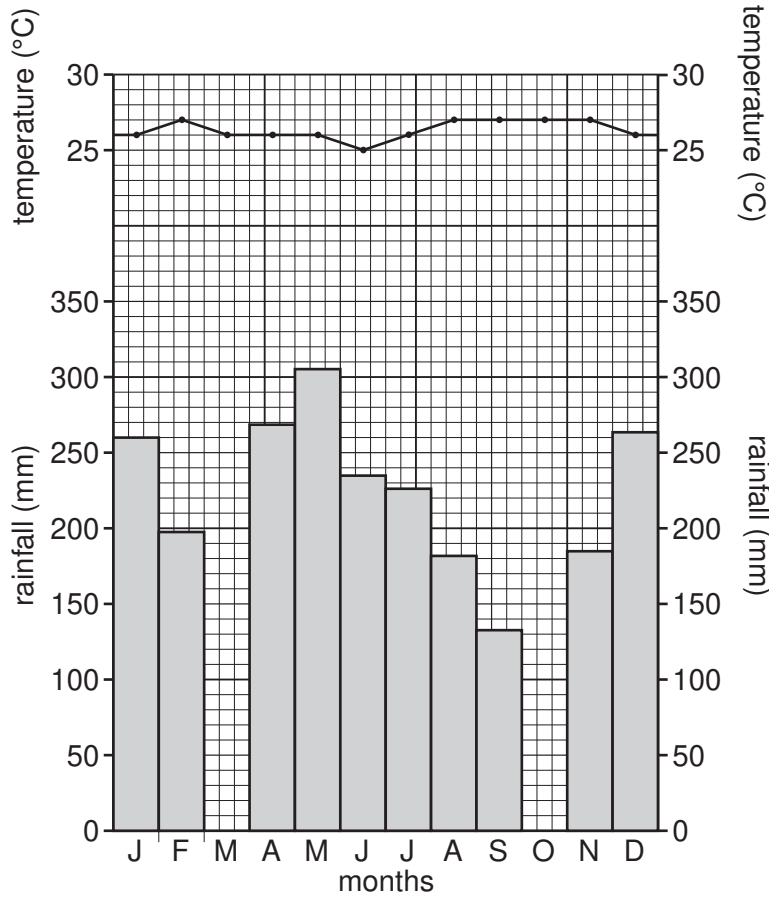


Fig. 4

Table 2

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
temperature (°C)	26	27	26	26	26	25	26	27	27	27	27	26	mean 26.3°C
rainfall (mm)	260	197	255	268	306	234	225	181	132	175	184	263	total 2680 mm

(i) Use the information in Table 2 to complete Fig. 4 by plotting the rainfall for March and October. [1]

(ii) Calculate the annual range of temperature.

..... °C [1]

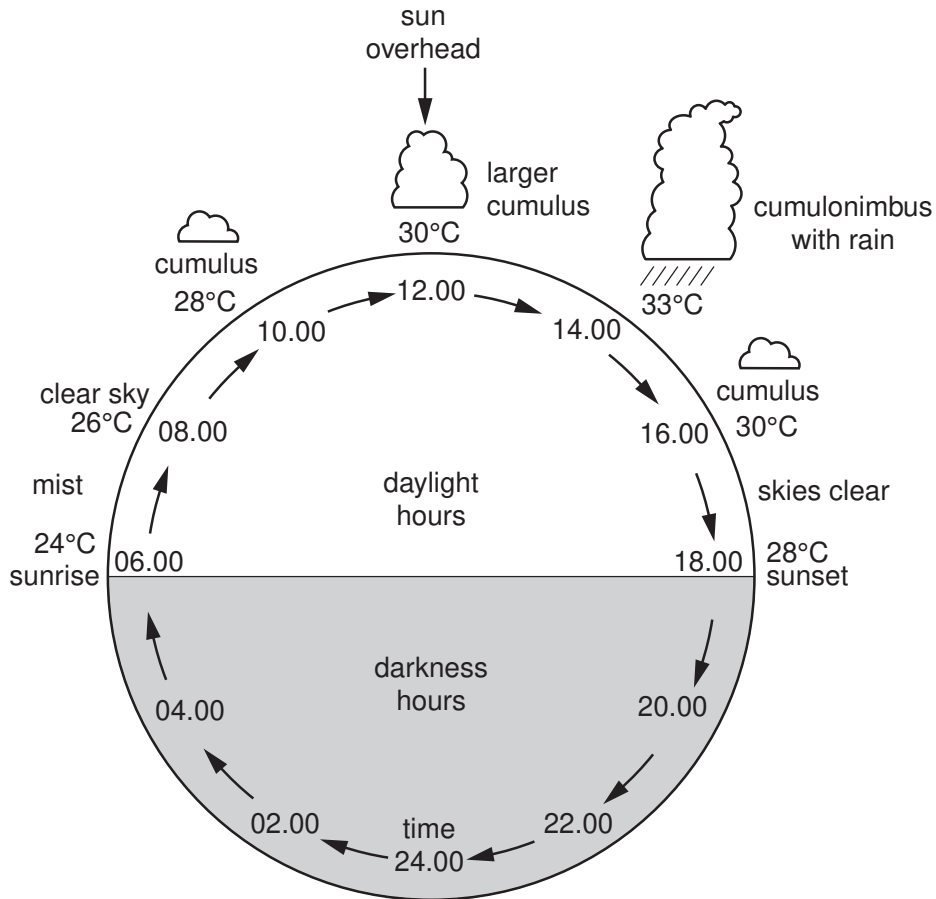
(iii) Circle the word below that describes the amount of annual rainfall.

low                                  moderate                                  high [1]

(iv) Describe the annual distribution of the rainfall.

.....  
 .....  
 .....  
 .....[2]

(b) Study Fig. 5, which gives information about the pattern of temperature and cloud development during daylight hours on a day in the Amazon Basin.



**Fig. 5**

Use information from Fig. 5 to state:

(i) the number of hours of daylight in the Amazon Basin;

..... hours [1]

(ii) the temperature at 14.00;

..... °C [1]

(iii) the relationship between the temperature and the daily cloud development.

.....  
 .....[1]

[Total: 8 marks]

3 Study Photographs A and B (Insert), which show features produced by weathering.

(a) (i) Describe the landforms in Photograph A.

.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....[4]

(ii) State the evidence that the nature of the rock in Photograph A helps weathering to take place.

.....  
.....  
.....  
.....[2]

(b) Photograph B was taken in a different location. Name the type of weathering that has occurred and state the evidence for this.

.....  
.....  
.....  
.....[2]

[Total: 8 marks]



4 Look at Fig. 6 (Insert), a map of an area of rural settlement in the northern hemisphere.

(a) Name the type of settlement pattern in areas **A**, **B** and **C**.

**A** .....

**B** .....

**C** .....

[3]

(b) (i) Explain why site **X** might have been an important site for early settlement.

.....

.....[1]

(ii) Describe the advantages site **Y** has for the growth of a settlement.

.....

.....

.....

.....

.....

.....[3]

(iii) The slope at **Z** faces north. Why is this a disadvantage?

.....

.....[1]

[Total: 8 marks]

- 5 (a) Fig. 7 shows the highest and lowest annual rainfall totals in a recent ten year period for a place in the Murray-Darling River Basin in Australia.

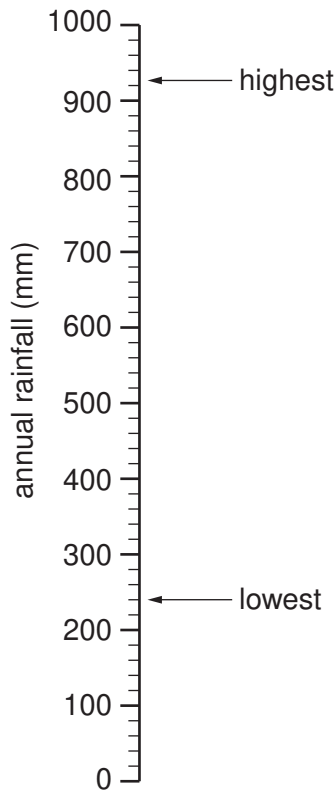


Fig. 7

- (i) The mean rainfall over a period of thirty years is 570 mm. Show this on Fig. 7, using an arrow. [1]
- (ii) How can water authority services in such areas ensure that water is available in dry years?

.....

.....

.....

..... [2]

(b) Study Fig. 8, which shows the different uses of water in two states in Australia.

For  
Examiner's  
Use

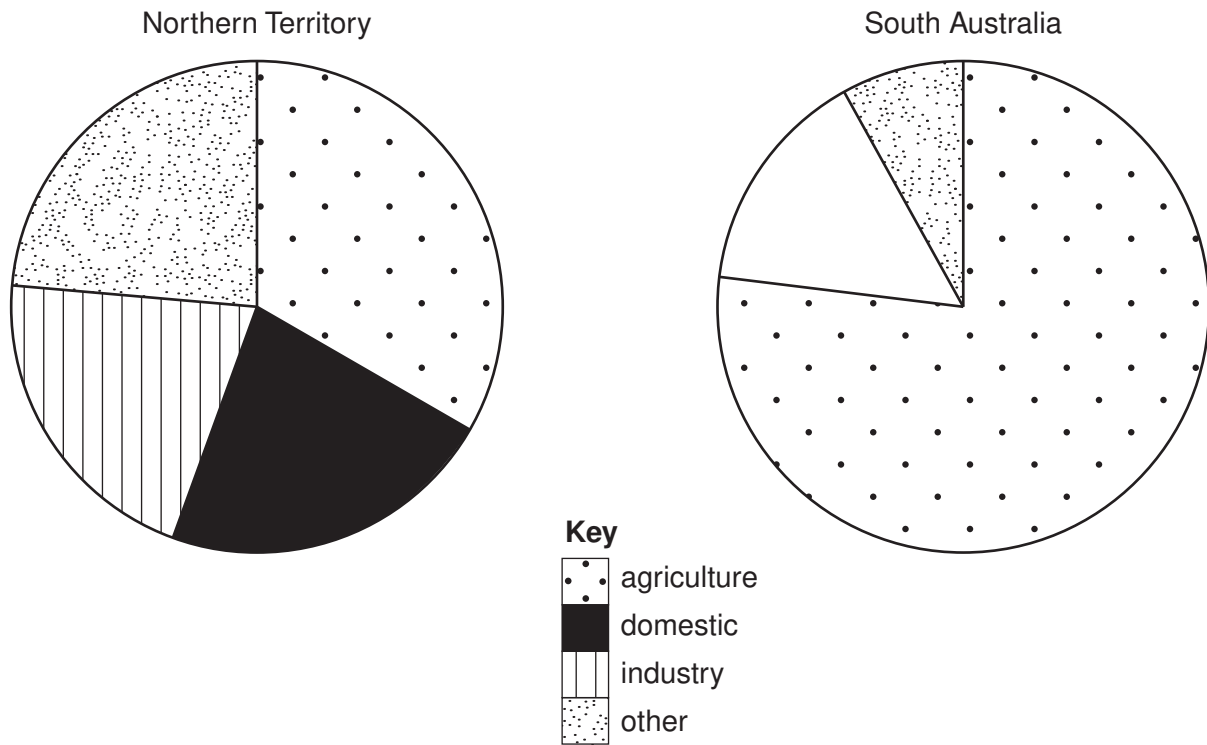


Fig. 8

Table 3

water use in South Australia	%
agriculture	77
domestic	10
industry	5
other	8

- (i) On Fig. 8, complete the pie graph for the state of South Australia using the information for domestic and industry in Table 3. Use the key provided for shading. [3]
- (ii) Which user consumes the largest amount of water in Northern Territory and what proportion of the supplies does it use? [1]
- (iii) Using the information given only, compare water use for agriculture in the two states. [1]

[Total: 8 marks]

6 Study Figs 9 and 10 opposite, which give information about iron and steel industries in Japan.

(a) Use Figs 9 and 10 to answer the following questions.

(i) Look at the locations of the **three** earliest steelworks on Fig. 10. State reasons for their locations.

.....  
.....  
.....  
.....[2]

(ii) Describe what the locations of the **other** iron and steelworks have in common.

.....  
.....  
.....  
.....[2]

(b) (i) Use Fig. 9 to explain why Japanese iron and steel manufacturers today have high production costs.

.....  
.....  
.....  
.....  
.....  
.....[3]

(ii) Suggest **one** reason why the Kimitsu iron and steelworks was built on reclaimed land.

.....  
.....[1]

[Total: 8 marks]

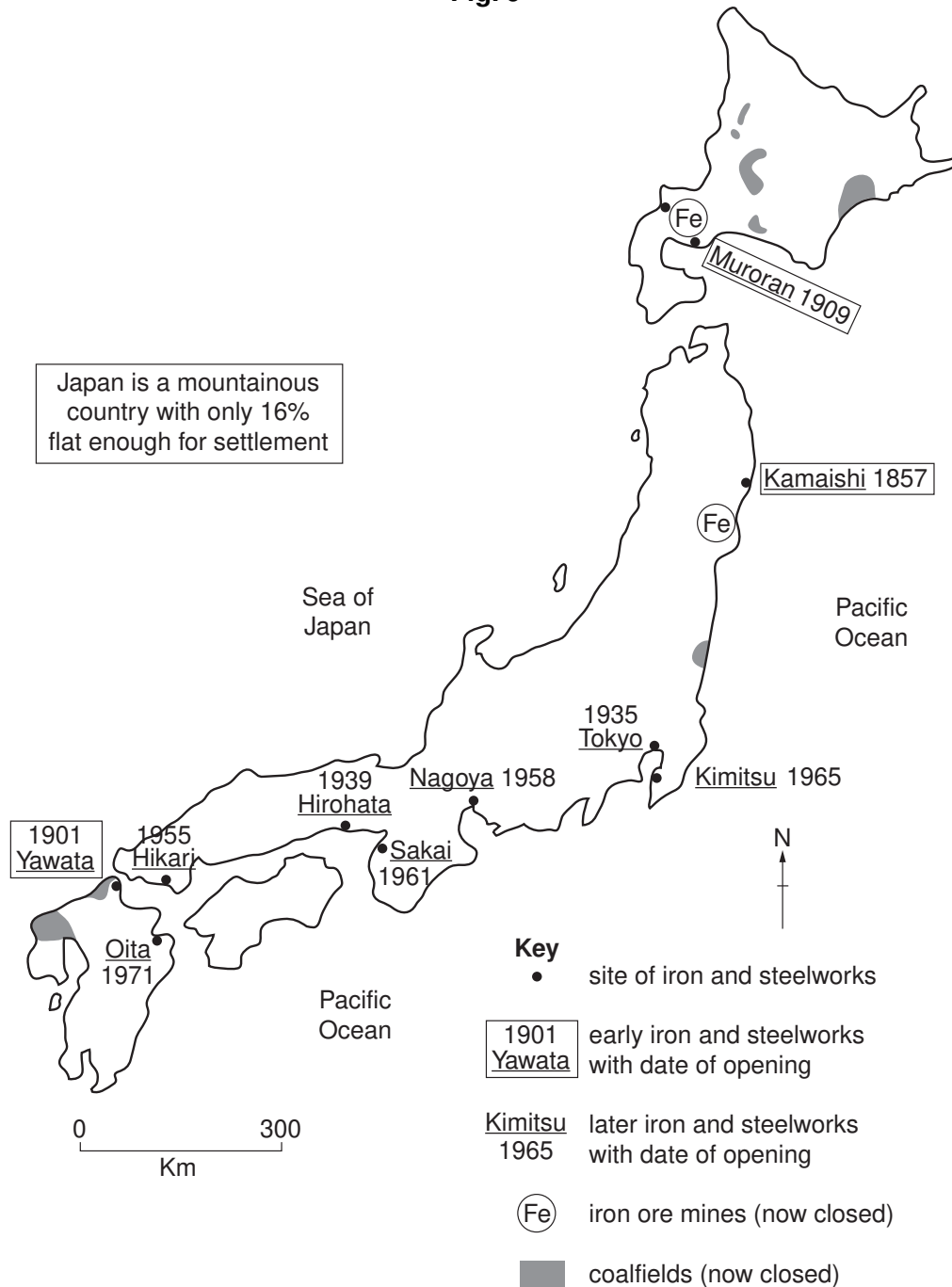
**The early Japanese Iron and Steel Industry**

- used coal and iron ore mined in Japan

**The Japanese Iron and Steel Industry Today**

- uses imported iron ore, over 80% coming from Australia and Brazil
- coal, mainly from Australia and Canada, is used in the production of pig iron
- the pig iron is made into steel in furnaces using mainly thermal electricity
- about 70% of the iron and steel produced is used in Japan
- about 70% of the remaining iron and steel is exported to Asian countries,
- the largest steelworks, Kimitsu, occupies a site more than 11 sq km
- the site of the Kimitsu Iron and Steelworks is on land reclaimed from the sea which extends out into deep water

**Fig. 9**



**Fig. 10**





