Write your name here Surname		Other names
Edexcel Principal Learning	Centre Number	Candidate Number
Environment Studies Level 3 Unit 7: Sustainable		
Thursday 10 June 2010 – M Time: 1 hour	orning	Paper Reference ES307/01
You do not need any other ma	terials.	Total Marks

Instructions

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **all** questions.
- Answer the questions in the spaces provided
 - there may be more space than you need.

Information

- The total mark for this paper is 50.
- The marks for **each** question are shown in brackets
 - use this as a guide as to how much time to spend on each question.

Advice

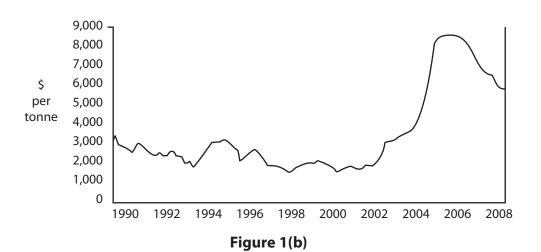
- Read each question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every question.
- Check your answers if you have time at the end.



1 Study Figure 1(a) which shows world copper reserves and production in millions of tonnes, and Figure 1(b) which shows copper prices per tonne in US \$.

Сор	per: a non-renewable resource	
	1975	2008
Proven reserves of copper ore (million tonnes)	409.5	165.5
Annual production of copper (million tonnes)	7.3	9.5

Figure 1(a)



(3)

(a) What is the evidence in Figures 1(a) and 1(b) to suggest that the world's supplies of copper ore are running low?

(b) What is meant by the term sustainable resource development (SRD)?	(3)

Study Figure 1(c) which shows some causes and consequences of the closure of a copper mine in Zambia (one of the world's major copper mining countries). Forest ecosystem changed as redundant miners turn to farming New materials replace copper National economy damaged because copper accounts for 98% of export earnings, 30% of GNP and 15% of employment Mines begin to run out of copper Local economy collapses as unemployed miners migrate Figure 1(c) (c) Discuss the importance of **SRD**. Refer to Figure 1(c) and your own example(s). (10)

(d) For a named anyironmental or land based management plan describe how it was	
(d) For a named environmental or land-based management plan, describe how it was	
produced to promote SRD .	
	(8)

(e) Explain how this, or similar management plans, migh	nt be evaluated. (6)	
(1	Total for Question 1 = 30 marks)	
	Total for Question 1 = 30 marks)	
	Total for Question 1 = 30 marks)	
	Total for Question 1 = 30 marks)	
(7	Total for Question 1 = 30 marks)	
(1	Total for Question 1 = 30 marks)	
	Total for Question 1 = 30 marks)	
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	Total for Question 1 = 30 marks)	

2 Study Figure 2 which shows an island with a growing population and various natural resources that the government wishes to develop in the future. The island has been dependent for its energy on power stations using coal and oil. The government had decided upon a future energy supply based on nuclear power. However, the newly elected government has employed you as a consultant to recommend a sustainable resource development (SRD) plan for its future energy supply, including a review of the nuclear power option.

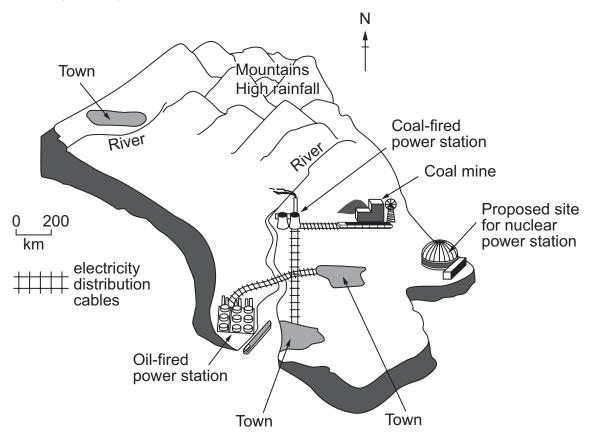


Figure 2

(a) Suggest **two** sustainability needs or priorities on which this **SRD** plan could be based.

1
2

(4)

Suggest why the proposal was controversial. Make referential influence of a variety of stakeholders.	ence to the views and
	(8)

8

your recommendations.	(8)
	(Total for Question 2 = 20 marks)



