

Variation

Question Paper 2

Level	International A Level
Subject	Biology
Exam Board	CIE
Topic	Selection and evolution
Sub Topic	Variation
Booklet	Theory
Paper Type	Question Paper 2

Time Allowed : 68 minutes

Score : / 56

Percentage : /100

Grade Boundaries:

A*	A	B	C	D	E	U
>85%	'77.5%	70%	62.5%	57.5%	45%	<45%

- 2 (a) A 50-year study of marine animal biodiversity in the coastal waters of Canada was carried out.

The percentage decrease in the number of marine animal species between 1950 and 2000 is shown in Fig. 1.1.

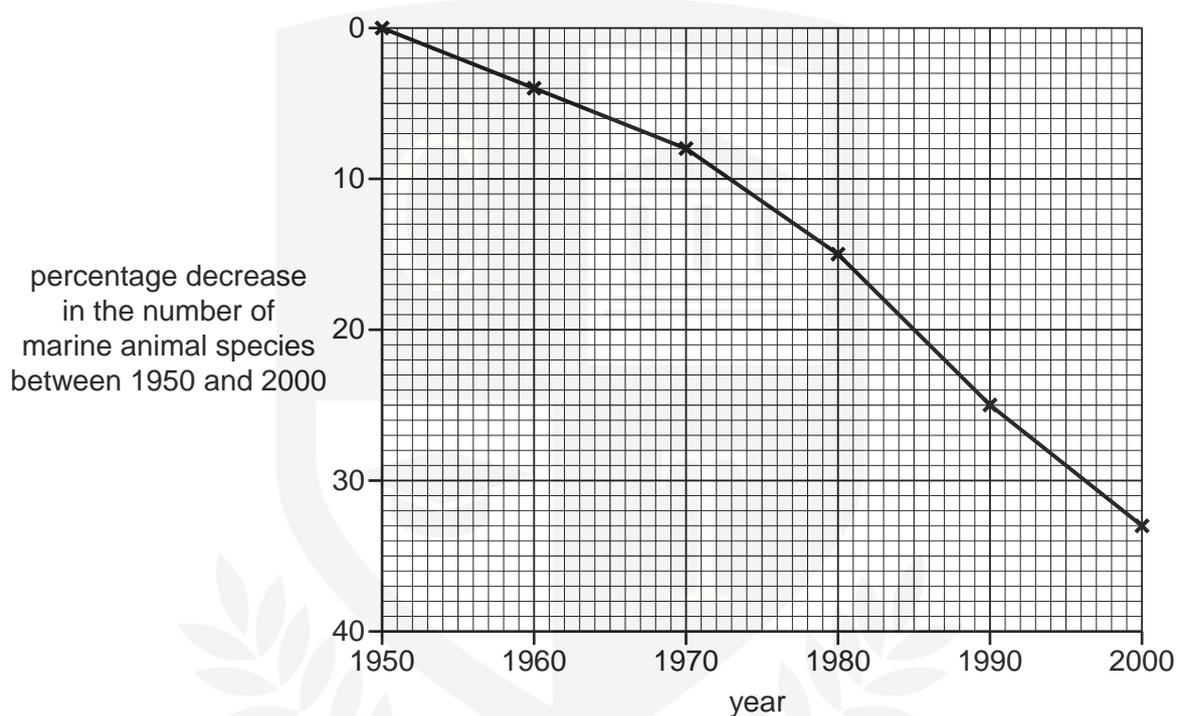


Fig. 1.1

Suggest explanations for the decrease in the number of marine animal species between 1950 and 2000.

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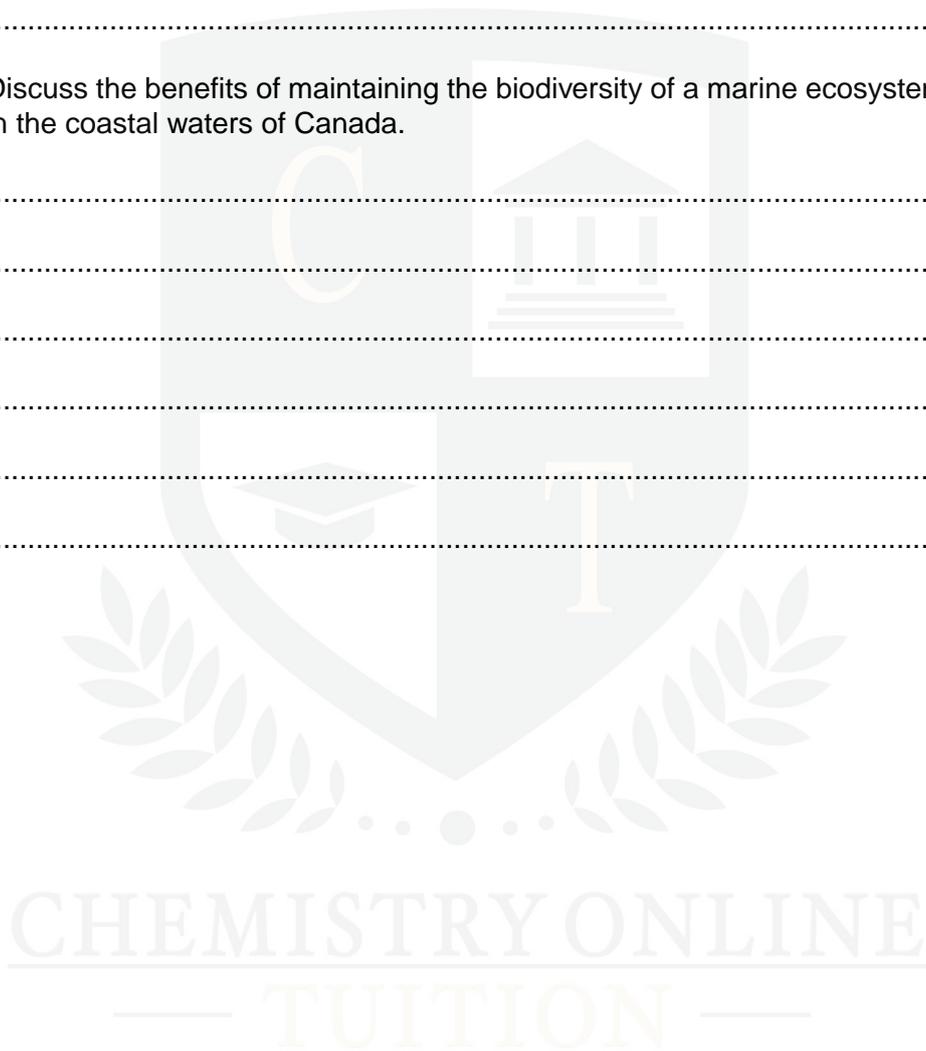
(b) Explain what is meant by the term *biodiversity*.

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(c) Discuss the benefits of maintaining the biodiversity of a marine ecosystem, such as that in the coastal waters of Canada.

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[Total: 8]



4 Fig. 2.1 is a diagram of pair of homologous chromosomes during meiosis.

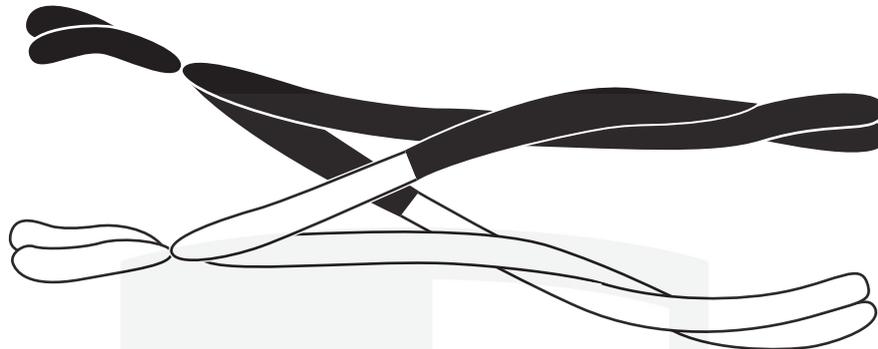


Fig. 2.1

(a) State what stage of meiosis is shown.
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(b) Describe what has occurred between the two homologous chromosomes.
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(c) Explain how this can lead to variation.
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(d) Describe **two** other sources of variation that are possible as a result of meiosis.
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