

6 (a) Microplastics are pieces of plastic with a diameter less than 0.5 cm.

Fig. 6.1 shows the mass of microplastics in the oceans between 2000 and 2040. The data between 2000 and 2020 is an estimate. The data after 2020 is a prediction.

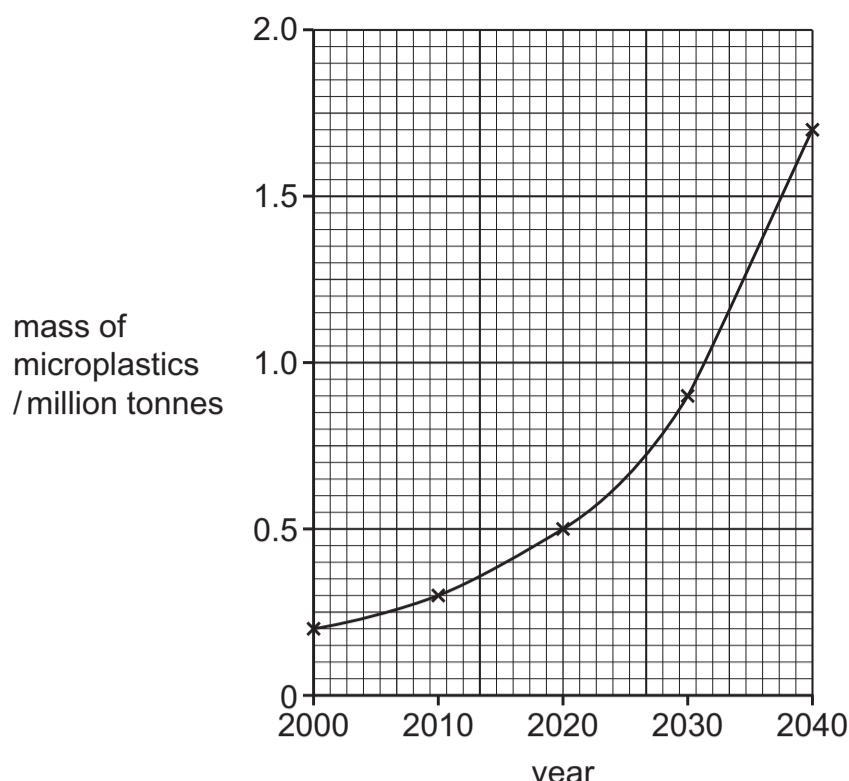


Fig. 6.1

(i) Suggest why the mass of microplastics between 2000 and 2020, shown in Fig. 6.1, is an estimate.

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(ii) Using Fig. 6.1, calculate the predicted percentage increase in the mass of microplastics in the oceans between 2000 and 2040.

Space for working.

.....%

[2]

(b) Phytoplankton are producers found in the ocean. Phytoplankton absorb microplastics into their cells.

(i) Describe what is meant by the term producer.

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(ii) Fig. 6.2 shows a shearwater bird.

Shearwater birds feed on fish in the ocean.



Fig. 6.2

Suggest how microplastics can end up in consumers such as shearwater birds.

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(iii) The population of shearwater birds is decreasing.

Describe **three** ways the population of shearwater birds can be conserved.

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(iv) Explain the risks to a population if its population size decreases.

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