

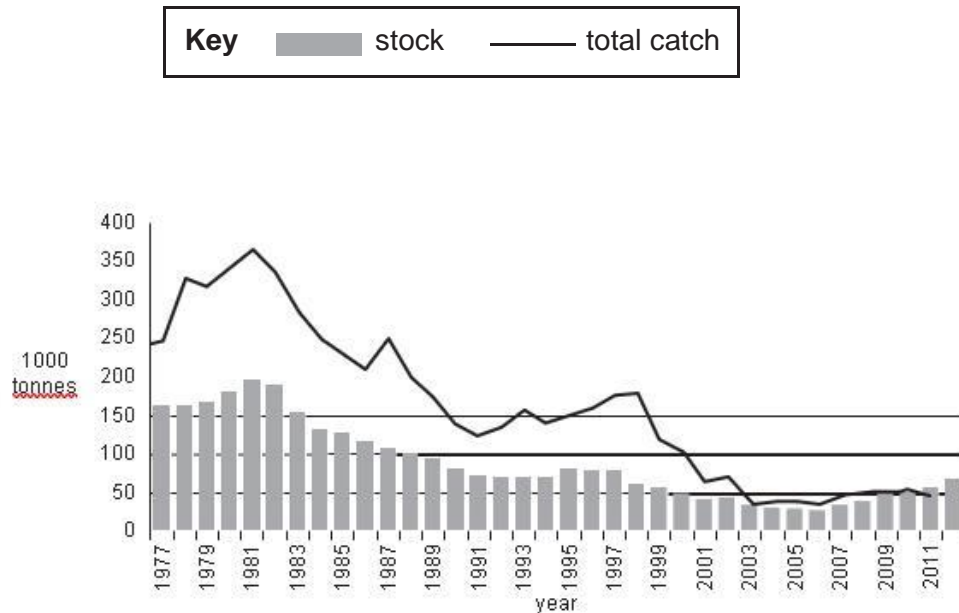
GCSE Biology B (Twenty First Century Science)
J257/01 Breadth in Biology (Foundation)

Question Set 7

Multiple Choice Questions

1. Cod is a type of fish that is served in fish and chip shops. Much of the cod sold in fish and chip shops is caught in the North Sea.

The graph shows the stocks of cod in the North Sea off the coast of Britain and the amount of cod caught (total catch).



- (a) (i) Describe and explain the trend shown in the graph.

As the stock levels fall so does the catch level fall.
 Catch was ^{the} highest in 1981 and ^{the} lowest in 2003.
 They were catching fish faster than they were reproducing.

- (ii) In 2002 very little cod was served in fish and chip shops, instead haddock was used.

Use the graph to explain why cod was removed from the menu.

Because stocks were too low.

- (iii) Human activities are having an impact on the biodiversity of the Earth. Explain why it is important to conserve biodiversity.

So that food chains are not affected and because ecosystems that are diverse are more stable.

- (iv) Fish such as cod reproduce sexually.

Give **one** advantage of cod reproducing sexually

Greater genetic variation in the population.

[3]

[1]

[2]

[1]

(b) Fish are an important source of protein in our diet.

Ben wants to show that fish contain protein. He uses the following method:

1. He adds a small sample of fish to a test tube.
2. He adds a small amount of Benedict's solution to the sample.
3. He observes a colour change.

- (i) Ben's friend thinks he has made a mistake in his method. Describe

the mistake Ben has made and how he should correct it.

Benedict's solution tests for presence of reducing sugar
So use the biuret solution to test for protein instead.

[2]

- (ii) What change would Ben observe when using the correct method?

Tick (✓) **one** box.

Colourless to cloudy white emulsion

Light blue to lilac/purple ✓

Red-brown precipitate formed

Pale brown to blue-black

[1]

Total Marks for Question Set 7: 10

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