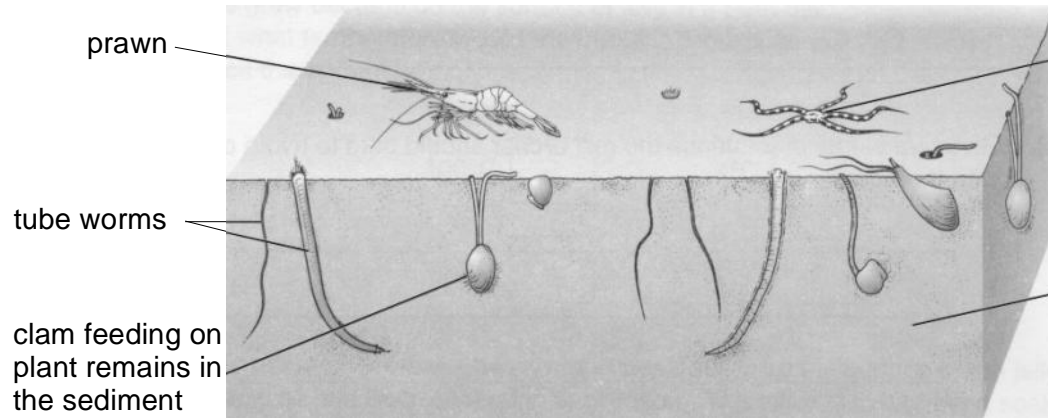


1. The drawing shows some of the animals which live at the bottom of the North Sea.



starfish
hunting
for clams

sediment
containing
the remains
of plants

not to scale

WWF - UK Data Support For Education Service

(a) Suggest **two** advantages clams get from living in the sediment.

1.

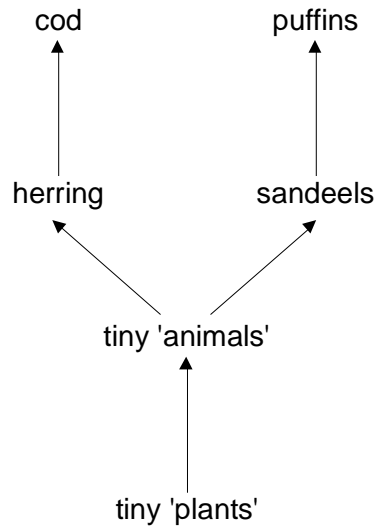
.....
.....

2.

.....
.....

2 marks

(b) Part of a food web in the North Sea is shown below.
 Herring, sandeels and cod are types of fish. Puffins are sea birds.



- Herring lay eggs in the gravel on the seabed.
- Sandeels live where the seabed is covered with sand.

Millions of cubic metres of gravel and sand are removed from the bottom of the North Sea every year for roads and buildings.

(i) Give **one** way removing some of the sand and gravel might cause the numbers of herring and cod to decrease.

herring

.....

.

.....

.

1 mark

cod

.....

.....

.

.....

.

1 mark

(ii) Explain why removing some of the sand has led to a decrease in the number of puffins.

.....

.....

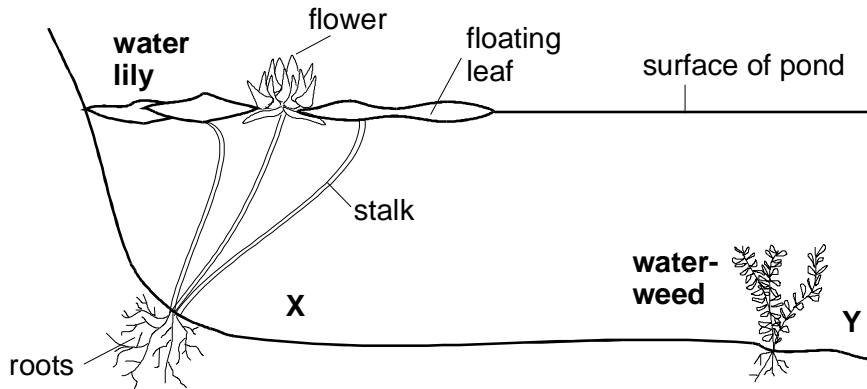
.....

.....

2 marks

Maximum 6 marks

2. The drawing shows a water lily and some waterweed growing in a pond.



(a) Waterweed grows well at Y but not at X. Why is this?

Tick the correct box.

There is not enough food at X.

There is not enough light at X.

There is not enough oxygen at X.

There is not enough water at X.

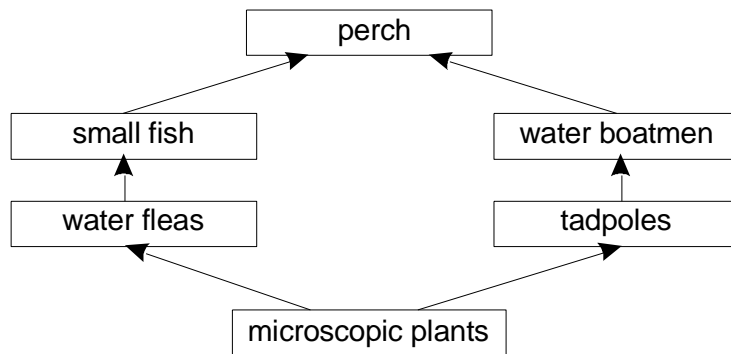
1 mark

(b) Which **named** part of the water lily produces seeds?

.....

3. A pupil studied the organisms in a pond.

From her observations she drew this simple food web.



(a) Use **only** the information in the food web to answer the following.

(i) Write down **one** food chain from this food web. There should be **four** organisms in the food chain.

..... → → →

1 mark

(ii) Write down the **producer** in the food web.

.....

1 mark

(b) Disease suddenly kills all the small fish. Complete the sentence to explain what is likely to happen to the number of water boatmen.

The number of water boatmen is likely to

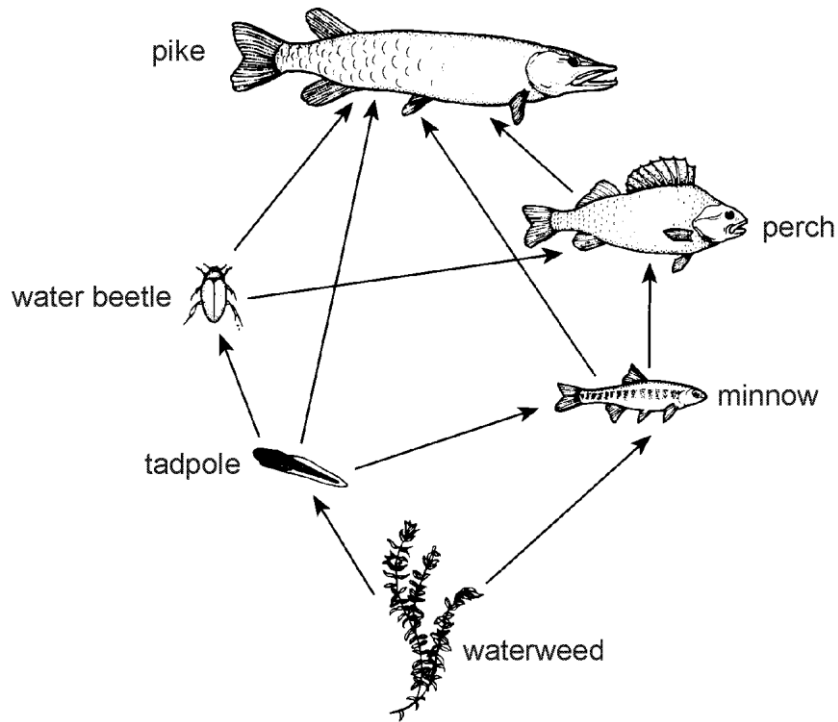
because

.....

2 marks

Maximum 4 marks

- (c) The drawing shows part of a food web in a pond. Use the information in the drawing to answer the questions.



- (i) Write **three** names from the food web to make a food chain which ends with pike.

..... → → →
pike

1 mark

- (ii) Write the name of **one** predator in the food web and the name of **one** of its prey.

Predator:

Prey:

2 marks

- (d) Fish have gills and fins. How do these help the fish to live in water?

Gills are for

.....

Fins are for

.....

2 marks

Maximum 7 marks