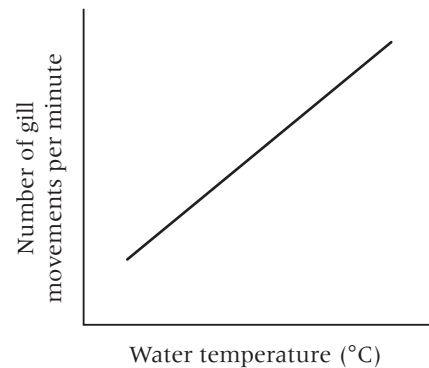
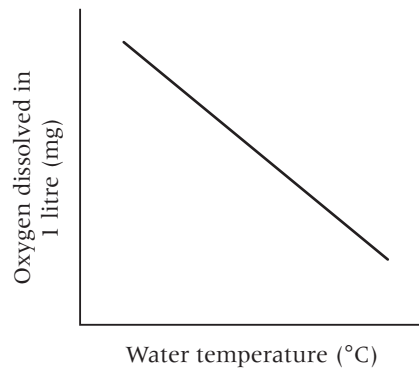


Oxygen dissolves in water. Fish absorb this dissolved oxygen using gills. If you look carefully at a fish you can see the gills moving. Look at the graphs below.



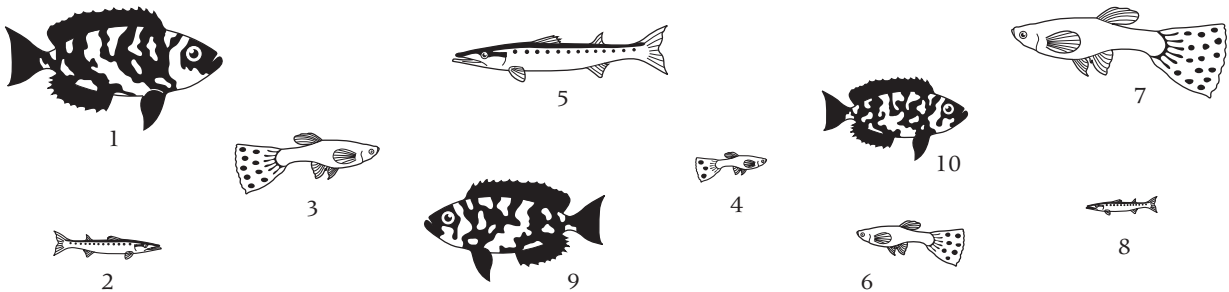
1 What relationship do each of the graphs show?

2 a What is the relationship between the amount of oxygen dissolved and the number of gill movements per minute?



b Sketch a graph for this relationship.

Look at the pictures of the fish. Some of these fish are the same species and others are different species.



3 What is a species?

4 Which fish are the same species?

5 What variations can you see between the different species?

6 What variations can you see between members of the same species?

7 a For the fish which are like Fish 3, what is the relationship between the number of spots on the tail and the length of the body?

b Measure the lengths of the bodies and plot the relationship on a suitable chart or graph.

c Do you think that you can safely say that this relationship will be true for all fish of this type? Explain your answer.

8 For each of the other two species of fish find one further relationship and one example of features that are not linked.

9 Very rarely members of different species can breed. The offspring are called **hybrids**. Draw a picture of what a hybrid of Fish 1 and Fish 3 would look like.

10 Name one other **hybrid** animal and say what its parents are.

11 What can hybrids not do that their parents can?

