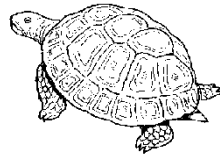
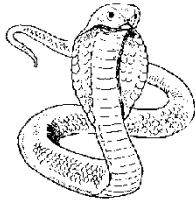
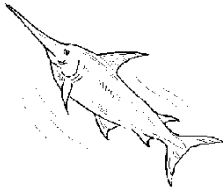
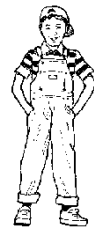
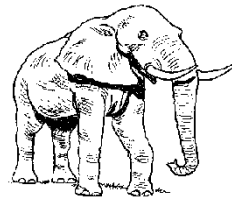


# Task 2 - Grow Some Backbone



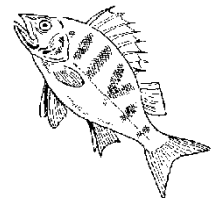
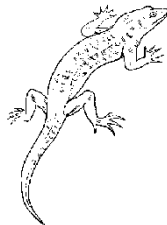
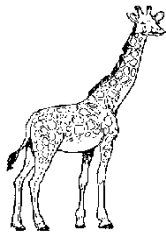
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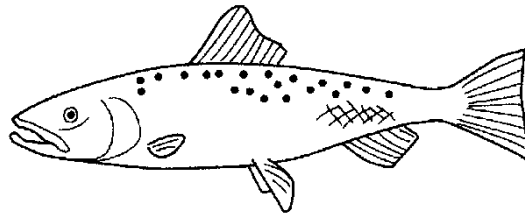
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1 On the lines underneath each drawing write the name of the animal and the name of the vertebrate group it is in. Use the words in the box for the animal names.

cobra	elephant	field mouse	frog	giraffe	human
lizard	magpie	parrot	perch	swordfish	tortoise

- 2 On this drawing of a fish, label the features that show it is a fish.
- 3 List two differences between this fish and the fish on the first page.



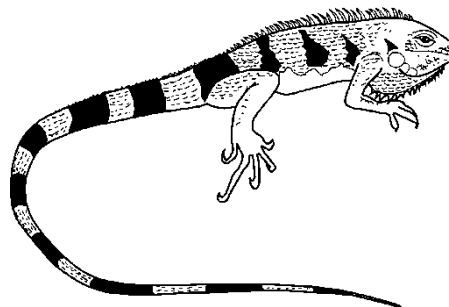
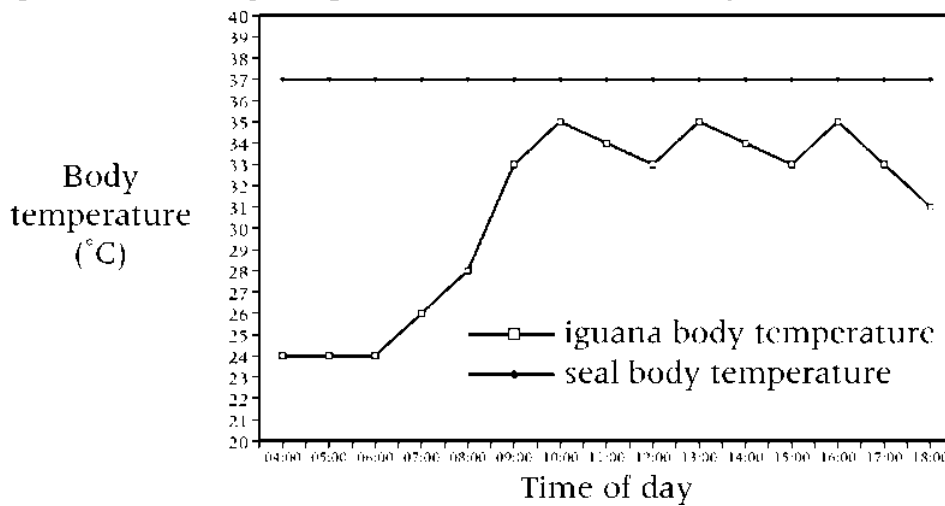
i. \_\_\_\_\_

ii. \_\_\_\_\_

## Cold blooded

Iguanas can often be seen basking in the Sun on rocky shores. Unlike mammals they cannot produce their own body heat. Instead they have to rely on the heat of the Sun and the heat from the hot rocks to warm themselves up. In the mornings they cannot move very fast because they are cold. Mammals like seals, on the other hand, can produce their own body heat and so can keep themselves at a constant temperature.

Graph to show body temperatures of a seal and an iguana over the course of a day



At the start of the day, seals can go into the sea and catch fish straight away. The iguanas need to warm up before going into the sea to eat seaweed. However, seals use up food in making body heat and therefore the seals have to eat more.

Iguanas are often described as being **cold blooded** and seals as **warm blooded**. These terms are widely used and people know what they mean. However, the blood of an iguana often reaches a temperature of 37°C or above – which is hardly cold. Scientists, therefore, describe cold blooded animals as **ectotherms** – they rely on heat from their surroundings.

- 1    **a**    To which group of vertebrates do iguanas belong?
- b**    Why do you think this?
- 2    Look at the graph carefully.
  - a**    What temperature does a seal keep its body at?
  - b**    What do you think was the outside temperature on the shore overnight?
  - c**    At about what time do you think the iguana crawled onto the rocks?
  - d**    The iguana went into the sea twice during the day. At what times?
  - e**    At the end of the day the iguana's body temperature drops. Why do you think this is?
- 3    What name do scientists give to animals that cannot make their own body heat?
- 4    See if you can find out the name that scientists give to animals that make their own body heat. *Hint:* it's not 'warm-blooded'!
- 5    Name the five vertebrate groups and say whether each is warm blooded or cold blooded.