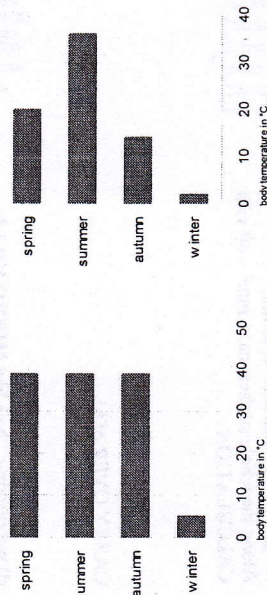


Work with your neighbour ...

Task 1

Read the text on the left.

a) Look at these bar charts. What do they describe? Which animals could be described? Explain.



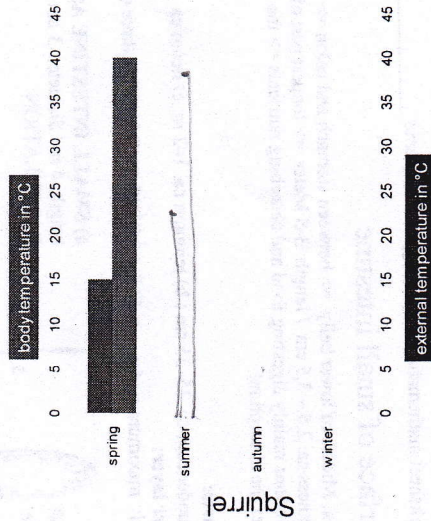
b) Put the values of the bar charts into the tables:

	body Temperature in °C
spring	
summer	
autumn	
winter	

	body Temperature in °C
spring	20
summer	20
autumn	20
winter	20

c) here you see a table which corresponds to a squirrel, who lives in a forest near Stuttgart.

Complete the given bar chart by the values given.



	External temperature in °C	body Temperature in °C
spring	15	40
summer	24	38
autumn	10	38
winter	5	42

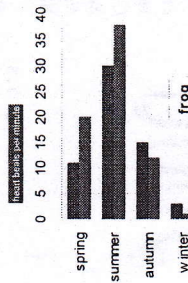
Adaptivity to different habitats

Animals have developed different ways to adapt to changing external temperatures. Mammals are *homeotherm*, i.e. their internal temperature stays constant all the time, except animals who hibernate (i.e. bats or hedgehogs). During hibernation the internal temperature drops down strongly. These animals rarely need any nutrients and don't starve because of having not enough food in winter time. Reptiles, amphibians, fish and insects are *cold-blooded*. When it is warm outside, they have a warm body, a high pulse and are active. In wintertime they get stiff and their heart beat decreases. In that way they adapt to the external temperature.

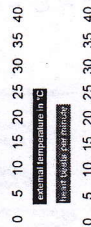
Task 2

a) Look at the bar charts below and decide, which animals are homeotherm and which ones are cold-blooded. Explain your decisions.

b) Which table corresponds to which chart?



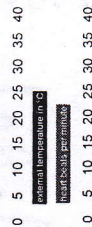
	external Temperature in °C	Heart beats (per minute)
spring	15	35
summer	25	35
autumn	5	35
winter	2	35



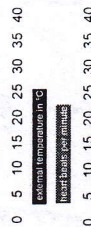
	external Temperature in °C	Heart beats (per minute)
spring	15	20
summer	25	38
autumn	5	12
winter	2	1



	external Temperature in °C	Heart beats (per minute)
spring	15	20
summer	25	20
autumn	5	18
winter	2	5



	external Temperature in °C	Heart beats (per minute)
spring	11	20
summer	30	38
autumn	15	12
winter	3	1



	external Temperature in °C	Heart beats (per minute)
spring	11	20
summer	30	20
autumn	15	19
winter	3	5



Squirrel

c) homework: One table is missing. Create a bar chart which corresponds to that table.