

# Organisms and their Environment

## Question Paper

<b>Level</b>	IGCSE
<b>Subject</b>	Biology
<b>Exam Board</b>	CIE
<b>Topic</b>	Organisms and their environment
<b>Sub-Topic</b>	
<b>Paper Type</b>	Alternative to Practical
<b>Booklet</b>	Question Paper

**Time Allowed:** 14 minutes

**Score:** /11

**Percentage:** /100

1 Fig 3.1 shows a choice chamber.

- This apparatus can be used to study the behaviour of small invertebrates, such as woodlice, in different conditions.
- 60 woodlice were introduced through the central hole.
- The four sections of the choice chamber had different conditions as shown in Fig. 3.1.

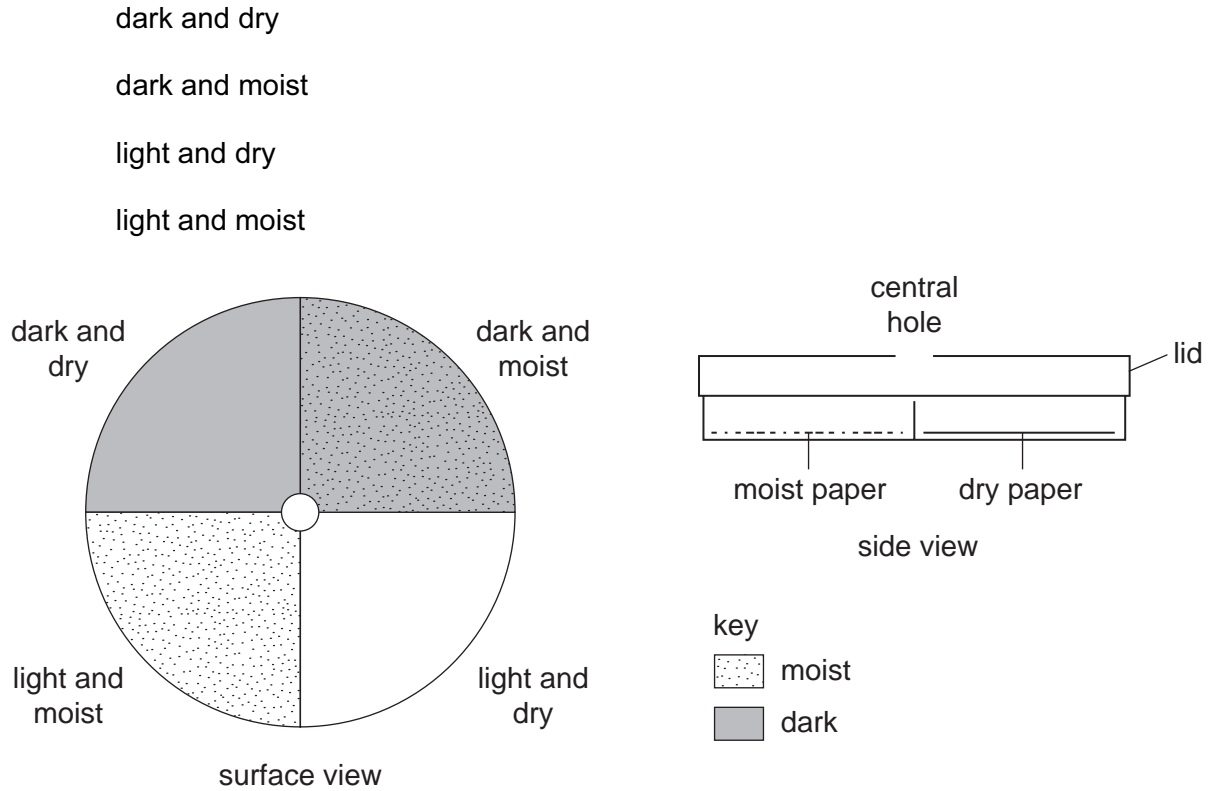


Fig. 3.1

- The choice chamber was left undisturbed for 10 minutes.
- The numbers of woodlice in each section were counted.
- The numbers were recorded in Table 3.1.
- These woodlice were released into their natural environment.
- The investigation was repeated with three more samples of woodlice.

(a) (i)

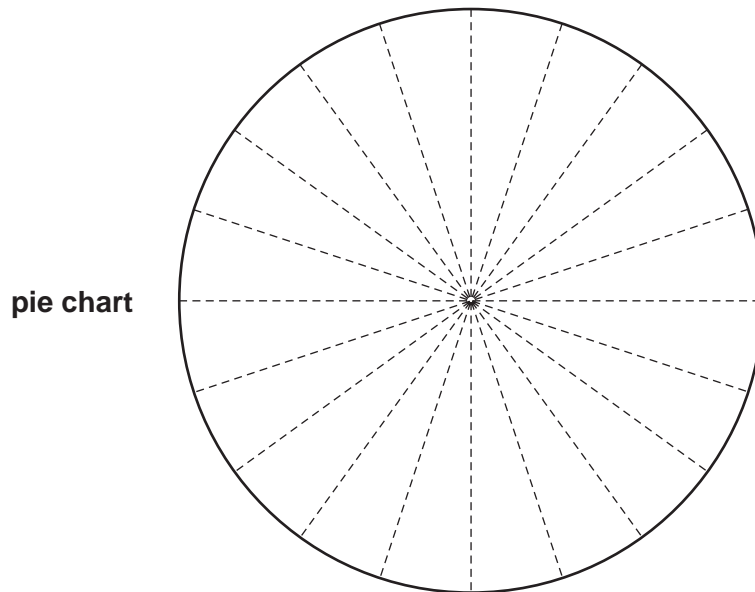
**Table 3.1**

sample of woodlice	dark and dry	dark and moist	light and dry	light and moist
1st	8	47	1	4
2nd	4	56	0	0
3rd	5	52	1	2
4th	7	49	2	2
total	.....	204	.....	8
average	.....	51	.....	2

Complete Table 3.1. The calculations for the moist sections have been completed for you.

[2]

(ii) Plot the average number of woodlice in each condition on the **pie chart** below.



[3]

**(b) (i)** State which conditions the woodlice prefer.

..... [1]

**(ii)** Suggest how this behaviour might help the woodlice to survive in their natural habitat.

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.....  
..... [2]

**(c)** Suggest how you could improve this investigation to make the results more reliable.

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..... [3]

[Total 11]