

Annual Examinations for Middle Schools 2023

YEAR 8

INTEGRATED SCIENCE
(Fieldwork Question)

TIME: 15 minutes

Name: _____

Class: _____

1. The group of Year 8 students on the fieldwork trip (see Question 11 of the main paper) produced this drawing of the area.

Key



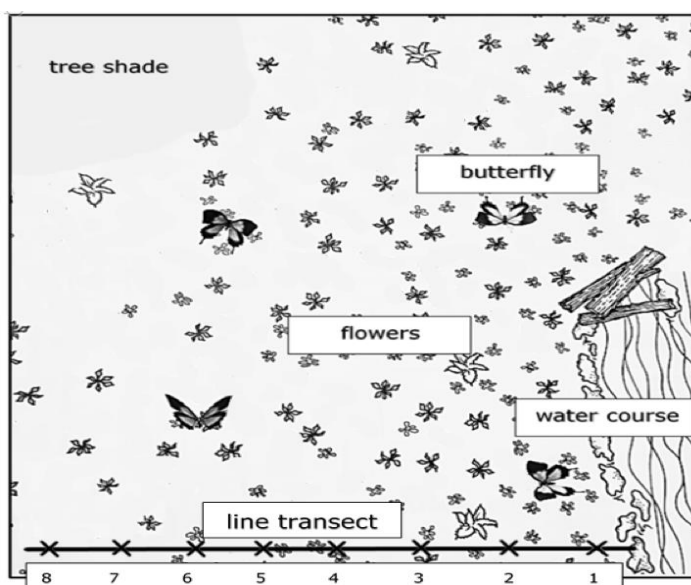
flower



butterfly



water course



- a. Suggest a possible reason why there were no flowers growing under the tree shade. _____ (1)
- b. The students noticed some butterflies. Explain why you cannot use a quadrat to study the butterfly population. _____ (1)
- c. This table shows the flower population along a line transect.

Position	1	2	3	4	5	6	7	8
Number of flowers	15	14	12	10	8	3	1	1

- i. Analyse the data collected and write down any pattern you identify. _____ (1)
- ii. Give a possible reason why there is such a pattern. _____ (1)

- d. The students met a groups of scientists collecting data at Chadwick Lakes. They were studying the red swamp crayfish population. The crayfish is an invasive alien species which is indigenous to southern America and northern Mexico and has been spreading across the world through the pet industry. Our endemic painted frog is now in danger since the crayfish is preying on its tadpoles.



Red swamp crayfish

- i. The crayfish is an alien species. Give the meaning of this term.
_____ (1)
- ii. Give one possible way this species from southern America and northern Mexico ended up in Chadwick Lakes.
_____ (1)
- iii. State one negative impact the crayfish is already leaving in Chadwick Lakes. _____ (1)
- iv. Describe what could happen if the crayfish population is not controlled. _____ (1)
- e. Write down TWO rules which you must follow during a fieldwork trip.
_____ (1)
_____ (1)
- (Total: 10 marks)**

End of paper. Check your work again.