

BGE Science Biodiversity Homework 2

Name: _____

Mark _____ %

Comment:

1. Insert the **name** of the appropriate sampling technique in the table below. (2)

Sampling technique	Used to:
	Sample plants and slow moving animals in a grass ecosystem.
	Sample small animals living at ground level in a soil ecosystem.

2. A line transect can be used to investigate the effect of abiotic factors on the distribution of organisms. **Name 2 abiotic factors** that you could measure during the investigation and the **instruments** you would use to measure them.

Abiotic factor	Instrument used

(2)

3. Students were asked to estimate the number of daisies growing in their school lawn. They used a 1 m² quadrat to sample the daisy population.

Their results are recorded in the table below.

Quadrat number	1	2	3	4	5
Number of daisy plants	13	12	15	14	12

The lawn was 25m long and 10m wide.

(a) (i) Calculate the average number of daisy plants per m². (1)

(ii) Calculate the area of the lawn. (1)

(iii) Calculate the number of daisies growing in the lawn. (1)

(b) A quadrat was used to estimate the abundance of 4 **plant species** in a lawn. The **abundance** of dandelion was 12, daisy was 13 and plantain was 4. There were twice as many buttercups as plantain. Use the information above to complete the table below, including the headings for each column.

Dandelion	12
Daisy	13
Plantain	4

(3)