

B2 – Organisms Quiz

1. How do you use a quadrat?

Place the quadrat randomly and count each species inside the quadrat. Repeat 10x and find the average number of organisms.

2. How do you use a tape measure for sampling?

Produce a line transect by stretching the tape measure between two points. Sample the organisms along the line transect. Repeat at different location.

3. How do you estimate the population of a species in a whole field?

Mean number of species per quadrat x number of quadrats that fit into the field

4. Why is it difficult to find an accurate number of animals in an area?

Because animals move and might be counted several times or missed altogether

5. List the physical factors that affect living organisms.

Temperature, availability of light, food, nutrients, water, oxygen, carbon dioxide, space

6. What is the difference between mean, median, mode and range?

Range is difference between minimum and maximum values; mean is the average; median is the middle value when all values are put in order; mode is the most frequent value

7. How do you produce valid data?

The investigation must answer the question you ask. Only change the independent variable and control all others

8. How do you get reproducible data?

Other people repeat the experiment keeping the variables the same and get the same patterns and similar results

9. How do you make sampling results more accurate?

Accurate means closer to the true value. Use a larger sample size, bigger quadrats or more quadrats, repeat in different areas