

Skills in Biology

BIOZONE's Crossword Puzzle



Across

1. The number of times a particular data value appears in a data set
3. A numerical value that describes a characteristic of a population (e.g. the mean height of all 18 year-old females)
4. A sub-set of a whole used to estimate the values that might have been obtained if every individual or response was measured

Down

2. A contrived situation designed to test a hypothesis
5. A record of numerical values organised in a way that facilitates analysis
7. This section of a report includes the aim and hypothesis of the study as well as background information
9. A data transformation in which data are expressed as a measure per unit time

Across

6. An estimate of a parameter obtained from a sample
8. A visual representation of trends in a data set
10. Another name for qualitative data
12. The axis on a graph on which the dependent variable, the biological responses, is plotted (2 words: 1, 4)
14. A tentative explanation of an observation, capable of being tested by experimentation
16. A good measure of central tendency for a data set in which the distribution is skewed
18. A graph in which continuous data are plotted to represent a frequency distribution
19. Machines that log data over time, which can be linked to computer software to analyse results
20. A test for difference between two groups where the observed result is compared to an expected outcome (2 words: 3, 7)
21. A descriptive statistic defining the most frequently occurring value in a data set
24. The extent to which the values of a variable differ from a fixed value such as the mean
25. This type of graph is appropriate for data that are non-numerical and discrete for at least one variable (2 words: 3, 5)
27. To show differences, or set into opposition
28. The difference between the smallest and largest data value in a data set
29. Facts collected for analysis
30. A factor in an experiment that is subject to change; these may be controlled, manipulated, or represent a biological response
32. To give an account of similarities and differences between two or more items
33. A type of graphical presentation that shows species abundance across a landscape (2 words: 4, 5)
35. This term describes numerical data derived from counts or measurements
36. A graph of one variable against another where the variables are independent but usually correlated (2 words: 7, 4)
37. The process for investigating phenomena and acquiring and integrating knowledge based on observable, empirical, measurable evidence (2 words: 10, 6)
38. A list of all sources of information used in a report, but which may not necessarily appear as citations
39. This statistic provides a good measure of the central tendency of normally distributed data

Down

11. The section of a report where findings are summarised with respect to the original hypothesis
13. The axis on a graph on which the independent variable is plotted (2 words: 1, 4)
15. A statistic used to quantify the spread or dispersion in a data set (2 words: 8, 9)
17. A visual representation of a data set, in which one of the variables is categorical and in which there are usually six or fewer categories (2 words: 3, 5)
22. Often referred to as the biological response variable (2 words: 9, 8)
23. A interpretation of results in paragraph form
26. Data described in words or terms rather than by numbers
31. Used in an investigation as a standard (reference) treatment that helps to ensure that responses to other treatments can be reliably interpreted
34. Describing a frequency distribution with two peaks