CIE Biology International A-level

Collect, Record, and Present Data

Flashcards

What should be done to 'prepare the space' for recording data?

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Prepare a table with suitable headings and ruled lines.

What are the rules for biological drawings?

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- Must take up at least half the space provided.
- Continuous line (no shading).
- Ruled label lines.

What should be shown in a plan diagram?

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Show the tissues observed and their proportions.

No cells should be drawn.

What should be shown in a high power drawing?

What should be shown in a high power drawing?

Draw cells, showing the proportion.

Details: cell wall, nuclei, chloroplasts, vacuoles.

What is the function of a stage micrometer?

What is the function of a stage micrometer?

Used to calibrate eyepiece graticules.

What is the function of an eyepiece graticule?

What is the function of an eyepiece graticule?

It can be calibrated to make measurements, and can be used to draw structures proportionally.

What unit should be used when measuring length?

What unit should be used when measuring length?

Milimetres.

What unit should be used when measuring time?

What unit should be used when measuring time?

Seconds.

How should 'per' be presented in units (eg. per second)?

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Using $^-$ rather than /

Eg. s^{-1} rather than /s for per second

When should bar charts be used?

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When the independent variable is qualitative.

What are the rules to drawing bar charts?

What are the rules to drawing bar charts?

Blocks should not touch and distance between them should be equal.

Identify each block, do not shade.

When should histograms be used?

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For continuous data that is divided into classes.

How should data be organised for histograms?

How should data be organised for histograms?

Establish classes of data.

No. of classes = 5 x $\log_{10}$ total number of readings.

There should be no overlap of classes.

What are the rules to drawing a histogram?

The area of the blocks should be proportional to the size of the class.

Blocks should be touching.

Which variable is shown on the x-axis?

Which variable is shown on the x-axis?

The independent variable.

Which variable is shown on the y-axis?

Which variable is shown on the y-axis?

The dependent variable.