


Graphing Your Data

Showing patterns & trends



A picture is worth a thousand words!

biology 2005-2006

Types of data (information)

- Variables
 - what you measure in an experiment
 - _____
 - _____ : we don't know how it will change until we do the experiment
 - _____
 - _____ : it only changes because we chose how it would change
 - _____

The effect of **INDEPENDENT** on **DEPENDENT**

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Examples of experiments 1

- How does fertilizer affect the growth rate of plants?
 - we set up an experiment testing different amounts of fertilizer on different plants & measuring the growth (height) of the plants:
 - dependent variable (Y-axis)?
 - _____
 - independent variable (X-axis)?
 - _____

The effect of _____ on _____

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Examples of experiments 2

- How does exercise affect heart rate of 10th grade student?
 - we set up an experiment testing different lengths of time of exercise (minutes) on the heart rate of students:
 - dependent variable (Y-axis)?
 - _____
 - independent variable (X-axis)?
 - _____

The effect of _____ on _____

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Examples of experiments 3

- What's the favorite drink of students?
 - we set up an experiment surveying students and asking which is their favorite drink :
 - dependent variable (Y-axis)?
 - _____
 - independent variable (X-axis)?
 - _____

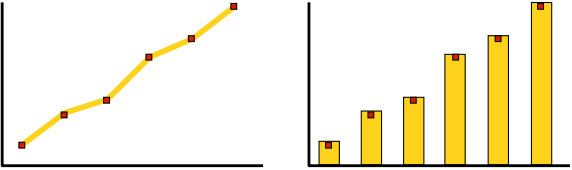
The effect of _____ on _____

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Making pictures out of data

- Graphs
 - _____
 - graphing data that shows continuous change
 - _____
 - graphing data that is in disconnected groups

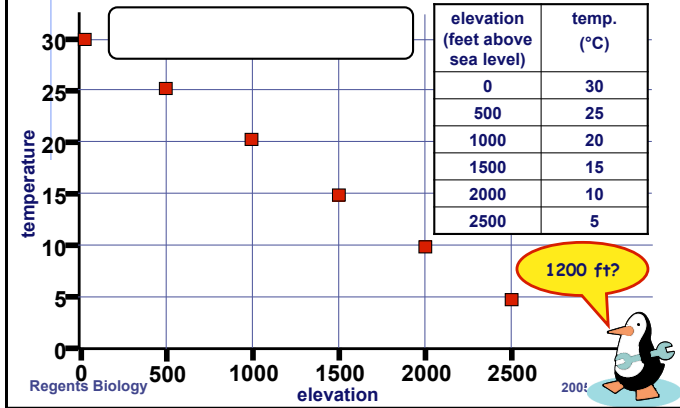
How's a critter to choose?



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How does elevation affect temperature?



Which drink do you like best?

