

# **Environmental Management**

**Key Terms:**

**Key Skills**

<p style="text-align: center;">Aim</p>	<p style="text-align: center;">Purpose of investigation identified</p>	<p style="text-align: center;">Alternative Hypothesis</p>	<p style="text-align: center;">A hypothesis stating that <u>THERE IS</u> a relationship between the two variables being investigated.</p>
<p style="text-align: center;">Hypothesis</p>	<p>Arising from the <b>aim</b>, it is testable prediction that suggests a relationship between <b>independent</b> and <b>dependent</b> variables. Must be: a short statement a prediction gives cause and effect states dependent/independent variables</p>	<p style="text-align: center;">Quantitative Data</p>	<p style="text-align: center;">Numerical.</p> <p>Discrete: finite number of possible values. whole numbers</p> <p>Continuous: infinite possible values can be any number, e.g. 4.777</p>
<p style="text-align: center;">Independent Variable</p>	<p>The variable that is deliberately changed in an experiment, as it does not change due to other variables.</p> <p style="text-align: center;">e.g. light on a plant</p> <p style="text-align: center;">The one you are not measuring.</p>	<p style="text-align: center;">Qualitative Data</p>	<p style="text-align: center;">All data that isn't numerical, e.g. diaries, personal testimonies</p>
<p style="text-align: center;">Dependent Variable</p>	<p>The variable that will change in line with the independent variable does.</p> <p style="text-align: center;">e.g. growth of a plant - changes as light changes</p> <p style="text-align: center;">The one you are measuring.</p>	<p style="text-align: center;">Primary Data</p>	<p style="text-align: center;">Collected by the people doing the investigation.</p>
<p style="text-align: center;">Null Hypothesis</p>	<p style="text-align: center;">A hypothesis stating that there is <u>NO</u> relationship between the two variables being investigated.</p>	<p style="text-align: center;">Secondary Data</p>	<p style="text-align: center;">Already collected by people not doing the investigation, but the information remains relevant for the investigation</p>

# Sampling

Testing out a hypothesis on a small section of the total population.  
The larger the sample size, the more reliable the results.

**Random:** avoids bias  
**Systematic:** sample population selected by patterns, e.g. every 10th person  
**Stratified:** taking cross section of population  
**Pros:** cheaper; less time consuming  
**Cons:** may give inaccurate results for the total population

# Bias

Encouraging one outcome over another.

# Pilot Survey

A trial run of a survey, which aims to bring to the fore any problems with the survey before it is conducted on a larger scale.

# Calibrated

To check and make any necessary adjustments to a piece of equipment to ensure its accuracy.

# Average

**Mean:** the total of all values divided by the total number of values - **the average average**

**Mode:** the value with the highest frequency (can be more than one answer) - **the most often**

**Median:** the value in the middle after the data has been sorted in ascending order (if the number lies between two entries, add the two entries together and divide by two) - **the middle number**