

## Sciences glossary

Term	Definition
<b>Cultural</b>	Patterns of knowledge, behaviour, beliefs, shared attitudes, values, goals and practices that characterize groups of people.
<b>Data</b>	Measurement of a parameter that can be quantitative (volume, temperature, pH and so on) or qualitative (colour, shape, texture and so on).
<b>Dependent variable</b>	The variable in which values are measured in the experiment.
<b>Economic</b>	Production, distribution, and use of income, wealth, and commodities.
<b>Environmental</b>	Circumstances, objects, or conditions by which one is surrounded.
<b>Ethical</b>	Process of rational inquiry to decide on issues as right or wrong, as applied to the people and their actions.
<b>Extensions to the method</b>	Developments for further inquiry as related to the outcome of the investigation.
<b>Hypothesis</b>	A tentative explanation for an observation or phenomenon that requires experimental confirmation; can take the form of a question or a statement.
<b>Independent variable</b>	The variable that is selected and manipulated by the investigator in an experiment.
<b>Moral</b>	Principles of right or wrong behaviour derived from a particular society.
<b>Numerical forms</b>	May include mathematical calculations such as averaging or determining values from a graph or table.
<b>Political</b>	Relates to government or public affairs.
<b>Prediction</b>	Give an expected result of an upcoming action or event.
<b>Qualitative data</b>	Refers to non-numerical data or information that is difficult to measure in a numerical way.
<b>Quantitative data</b>	Refers to numerical measurements of the variables associated with the investigation.
<b>Social</b>	Interactions between groups of people involving issues such as welfare, safety, rights, justice or class.

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<b>Transforming data</b>	Involves processing raw data into a form suitable for visual representation. This process may involve, for example, combining and manipulating raw data (by adding, subtracting, squaring or dividing) to determine the value of a physical quantity and also taking the average of several measurements. It might be that the data collected are already in a form suitable for visual representation—in the case of the distance travelled by a woodlouse, for example. If the raw data are represented in this way and a best-fit line graph is drawn the raw data have been processed.
<b>Unfamiliar situation</b>	Refers to a problem or situation in which the context or the application is modified so that it is considered unfamiliar for the student.
<b>Validity of the method</b>	Refers to whether the method allows for the collection of sufficient valid data to answer the question. This includes factors such as whether the measuring instrument measures what it is supposed to measure, the conditions of the experiment and the manipulation of variables (fair testing).
<b>Visual forms</b>	May include drawing graphs of various types appropriate to the kind of data being displayed (for example, line graphs, bar graphs, histograms or pie charts).