Experimental programme

International Baccalaureate · IB Diploma · Environmental Systems and Societies · SL · Vocabulary in context

Word	Example
research question /rɪˈsɜːtʃ ˈkwestʃn/	A good **research question** names what you change and what you measure.
independent variable /ˌɪndɪˈpendənt ˈveərɪəbl/	The **independent variable** is the one you change.
dependent variable /dɪˈpendənt ˈveərɪəbl/	The **dependent variable** is the one you measure.
controlled variable /kənˈtrəʊld ˈveərɪəbl/	pH is a **controlled variable**: keep it the same. pH
hypothesis /haɪˈpɒθəsɪs/	Our **hypothesis** predicts more growth in brighter light.
null hypothesis /nʌl haɪˈpɒθəsɪs/	The **null hypothesis** says there is no difference between the groups.
informed consent /ɪnˈfɔːmd kənˈsent/	Get **informed consent** before you interview people.
sample /ˈsæmpl/	The **sample** contains the people selected for this study.
representative /ˌreprɪˈzentətɪv/	A **representative** sample is like the whole population in small.
random sampling /ˈrændəm ˈsæmplɪŋ/	**Random sampling** gives every spot an equal chance of being chosen.

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systematic sampling /ˌsɪstəˈmætɪk ˈsæmplɪŋ/	In **systematic sampling**, we choose every tenth name on a list after a random start.
transect /trænˈsekt/	We put quadrats along a **transect** from the shore to the woods.
stratified sampling /ˈstrætɪfaɪd ˈsæmplɪŋ/	In **stratified sampling**, each group is sampled in proportion to its size.
quadrat /ˈkwɒdræt/	Count the daisies inside the **quadrat**.
questionnaire	A **questionnaire** asks residents about water use.
uncertainty /ʌnˈsɜːtənti/	The length is 25.0 cm with an **uncertainty** of 0.1 cm. 25.0 cm 0.1 cm
random error /ˈrændəm ˈerə/	Small changes in your reaction time cause a **random error**.
systematic error /ˌsɪstəˈmætɪk ˈerə/	A scale that reads too high gives a **systematic error**.
reliability /rɪˌlaɪəˈbɪlɪti/	Getting similar results again and again shows **reliability**.
validity /væˈlɪdɪti/	Controlling other factors improves the **validity** of the experiment.
kite diagram	A **kite diagram** shows how the number of each species changes along a line.
standard deviation /ˈstændəd ˌdiːvɪˈeɪʃn/	A larger **standard deviation** means the values are more spread out.
correlation /ˌkɒrɪˈleɪʃn/	A **correlation** links two variables without proving cause.

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spearman's rank correlation coefficient /ˈspɪəmənz ræŋk ˌkɒrɪˈleɪʃn ˌkəʊɪˈfɪʃənt/	**Spearman's rank correlation coefficient** shows how strongly two ranked sets are linked.

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