Experiment= involves the manipulation of an IV to see what effect it has on the DV, whilst attempting to control the influence of all other extraneous variables  
  
Lab experiment= researcher deliberately manipulates the IV while maintaining strict CONTROL over extraneous variables through STANDARDISED procedures in a controlled (artificial) environment to establish cause and effect

Field experiment= researcher deliberately manipulates the IV, but in the ps NATURAL environment and attempts to control some variables

Quasi experiment= the IV is changed by NATURAL OCCURRENCE, the researcher just records the effect it has on the DV

IV= the factor manipulated (change) by the researcher  
  
DV= the factor measured (result) by the researcher  
  
Extraneous variable= all other factors other than the IV that could affect the DV and influence the result  
  
Confounding variables= extraneous variables which DO influence the DV and affect the results

* Ps variables- characteristics of the individual ps that may affect the outcome (age, gender, mood, IQ, personality)
* Situational variables- features of the situation that may affect the ps (time of day, noise, DCs, boredom)
* Investigator variables- ways the researcher can influence the outcome of the research (cues/prompts, bias, design, time constraint, leading Qs)

Controls= ways to minimise the effect of extraneous variables on the DV in order to establish cause & effect

Hypothesis= a prediction/testable statement  
  
Alternate hypothesis= a statement of difference. E.g 'there will be a SIGNIFICANT DIFFERENCE between the time it takes boys and girls to do 10 star jumps'  
  
Null hypothesis= a statement of NO DIFFERENCE. E.g 'there will be no difference between the time it takes boys and girls to do 10 star jumps'  
  
Operationalised hypothesis= to precisely define ALL variables (define the IV & precisely measure the DV)  
  
One-tailed hypothesis= a directional statement of difference. E.g 'males will do 10 star jumps in a faster time than females'  
(remember that this fishy has ONE  tail so knows which direction it is going)  
  
Two-tailed hypothesis= a non-directional statement of difference. E.g 'there will be no difference between the time it takes boys and girls to do 10 star jumps' (remember this fishy has TWO tails so it doesn't know what direction it is going in)  
  
Independent measures design= ps take part in ONE condition  
  
Repeated measures design= ps take part in ALL conditions  
  
Matched pairs/grps design= ps take part in ONE condition, but are MATCHED on a relevant criteria to a ps(s) in another condition  
  
Conditions= experimental grps created by the manipulation of the IV  
  
DC= where ps answer or act in a way they feel the researcher wants them to  
  
Order effects= something that the ps can have (boredom and fatigue) which influences the results and is caused by taking part in MORE THAN ONE condition/task   
  
Counterbalancing= mixing the order of tasks to reduce order effects influencing the result of the same task  
  
Individual differences= ps variables, characteristics each ps brings to the exp (experience, age, gender, emotions, intelligence)   
  
Ecological validity= the extent to which the experiment reflects real life  
  
Reliability= consistency, getting the same results again and again  
  
Replicable= ability to repeat the study EXACTLY again by another researcher and obtain similar results

Quantitative data= data that gives numerical values which are easily compared

Qualitative data= gives meaningful rich data as they have the reasons behind ps answers

Generalisable= when results are from a large enough sample to be representative of the target population

Demand characteristics= ps act/respond in a way that they think the researcher wants them to

Validity= when a study measures what it is supposed to, truthful/objective

Social desirability bias= ps respond in a way that they think will make them look better

Descriptive statistics= used to summarise and describe findings from quant data to identify patterns and trends

Measures of central tendency= ways of measuring averages (mean, median, mode)   
  
Measures of dispersion= ways of measuring how spread out results are (range, interquartile range, standard deviation)  
  
Graphical representations= ways of presenting data (bar chart, scatter graph)   
  
Quantitative data= numerical results

**SELF REPORT**= involves asking ps about their feelings, beliefs & attitudes  
  
QUESTIONNAIRE= pre-set list of Qs  
  
Open Q= ps can respond in any way they want, the Q doesn't restrict them. E.g 'Why did you decide to study psychology?'

Closed Q= ps must respond by selecting an answer from a set of pre-determined responses chosen by the researcher. E.g 'Do you like psychology?'

Rating-scale Q= ps rate what they think by selecting a number/word from a sequence arranged in a logical order. E.g 'How much do you like Psychology on a scale from 1 to 5, where 1 is you love it and 5 is you hate it'

Interview= researcher asks ps Q face to face and the ps gives a response  
  
Structured Interview= contain fixed pre-determined Qs and ways of replying, e.g Y/N - closed Qs or 'fixed response' Qs (formal, pre-set list of Q that is not deviated from)

Semi-structured Interview= contain guidelines for Qs to be asked, phrasing and timing are left up to the interviewer, answers may be open ended (framework for Q to be asked, Q may be omitted(left out)

Unstructured Interview= may contain a topic area for discussion but NO FIXED Qs for ways of answering, interviewer helps and clarifies interview (informal like a conversation, list of prompts to guide questioning) and added)

Clinical Interview= semi-structured guidelines but further questioning to elaborate upon answers. Open Q provide more qual data (Piaget and Freud used this method of interviewing children)

Case study= a unique, in-depth, detailed investigation of one or few ps using a range of different methods to gather rich data

Sampling technique= way of selecting ps  
You have to do this as it isn't practical or possible to include everyone the target population, so you have to study a sample of the ps in your target population by using one of the sampling techniques

Random= all of target population are put into a database and required ps are chosen randomly

Volunteer=people actively volunteer in response to an advert and the researcher chooses who takes part

Opportunity= the researcher samples whoever is available and willing to be studied

Observations= researcher observe without manipulation the behaviours of ps and attempts to record. It is a non-experimental technique (no IV or DV, so can't establish cause and effect)

Structured Observation= researcher impose structure on their observation by deciding what behaviours they are interested in recording.

Time Sampling= researcher observes EVERYTHING that occurs within a certain time period, but only records behaviour that occurs at pre-determined time intervals (e.g record behaviour every 30 secs for 10 mins)

Event Sampling= researcher decides on behaviour categories they are interested in and tally every time the event occurs. E.g when someone uses their phone

Unstructured Observation= observer continuously records and reports on behaviour, noting everything that happens

Naturalistic Observation-=observer records spontaneous behaviour in ps own natural environment. Video equipment can be used (researcher doesn't have to be present). E.g looking at shopping behaviour in a super market

Ps Observation= researcher becomes involved in the everyday life of the group/individual they wish to observe, with or without their knowledge

Overt= ps aware researcher is observing their behaviour (remember O is a full circle-ps knows the full story)

Covert= ps UNAWARE their behaviour is being observed for research (remember C is a half circle so they are missing some info)

Controlled Observation= observes spontaneous behaviour, but researcher HAS manipulates the situation. ps can be observed in lab/natural setting

Correlation= data analysis technique measuring the RELATIONSHIP between 2 variables to see if a trend exists between them (can't establish cause and effect)

Positive correlation=as one variable increases, so does the other

Negative correlation=as one variable increases, the other decreases. Variables are INVERSELY related to each other.

No correlation=no relationship between the 2 variables

Correlational hypothesis= predict the relationship between variables

Null correlational hypothesis= suggests there will not be a relationship between the variables. E.g 'There will be NO RELATIONSHIP between the number of hours spent revising and score out of 20 on the Psychology test'

Co-variables= the 2 variables used to investigate whether there is a relationship with them in a correlation. E.g score out of 20 on a test and number of hours spent revising.

Correlation coefficient= shows how closely linked variables are, by a number ranging from -1 to 1; which indicates what type of correlation it is (positive or negative). They allow a quantification of the STRENGTH of a relationship. For e.g we know a correlation with a coefficient value of 0.9 is stronger than 0.3.

Reliability= how CONSISTENT and DEPENDABLE a test and its results are  
  
Internal reliability= how consistently a method measures within itself (different parts of test should give consistent results)  
  
External reliability= how CONSISTENTLY a method measures over time when repeated (extent to which the results from a test can be generalised)  
  
Inter-rater reliability= test gives consistent results regardless of who does the test

Validity= whether a test measures what it claims to  
  
Internal validity= extent to which the results of the test are caused by the variable being measured (DV), rather than extraneous variables (whether the results are really due to variables the researcher tested)  
  
External validity= test should produce consistent results regardless of when it is used (whether the results can be generalised; if conducted in different environments or using ps)  
  
Ecological validity= extent to which the results reflect real life (representative of naturally occurring behaviour)

Ethical= adhering to moral principals

Ethics= concerned with what is right or acceptable in pursuit of a given goal

Ethical Guidelines= concrete, legal documents established to ensure psychologists conduct their experiment adhering to principles for standard practice and conductance. It informs psychologists of what behaviours are unacceptable and how to overcome ethical dilemmas.

(Informed) Consent= where ps know the objective of the study, so they can agree to take part.   
Consent is especially an issue where children are being studied or people who are unable to give their own consent (e.g someone with serious brain damage)

Deception= when researcher withholds info/misleads ps

Debriefing= ps informed of the real aim of the study at the end, in an attempt to restore ps to the state they entered the study in

Right to Withdraw= ps need to know from the start that they can withdraw from the experiment at any time and have their data destroyed (unless already published), regardless of any payment given to the ps for doing the study

Confidentiality= ps and the data they provide must be kept anomalous unless the ps has given their full consent. If the ps is dissatisfied after debriefing, they can demand to have their data destroyed

Protection of ps= the primary responsibility of the experiment is to protect the ps from mental and physical harm. The risk should be no more than ordinary life. This issue is raised when we research behaviours of interest.

Observational research (Privacy)= must respect the privacy and psychological well-being of the ps studied. This means observing ps where they would expect to be observed in a public place, like in a park or shopping center; not in their homes.