

Science exam question terminology

analyse	Separate information into components and identify their characteristics. Discuss the pros and cons of a topic or argument and make reasoned comment.
calculate	Generate a numerical answer, with workings shown.
choose	Select from a list or a number of alternatives.
classify	Assign to a category or group.
compare and contrast	Identify similarities and differences.
complete	Add words, numbers, labels or plots to complete a sentence, table, diagram or graph.
conclude	Make a decision after reasoning something out.
construct	Write out or draw the requested item, e.g. '...Construct a dot and cross diagram for sodium chloride...' or '...Construct a balanced equation for a specific reaction...'
convert	Change a defined item to another defined item, e.g. '...Convert your calculated answer in g to an answer in moles...'
deduce	Use your knowledge and/or supplied data to work something out, e.g. '...Deduce the empirical formula of compound X (using supplied data)...'
define	Use your knowledge to state the meaning of a given term, e.g. '...Define the term specific heat capacity...' or '...Define the term momentum...'
describe	Set out the facts or characteristics. The description of a process should address what happens, and when and/or where it happens. (Compare with 'Explain') For example, when asked to describe the change in rate of reaction seen on a graph, the expected response might be to describe whether the rate of reaction remains constant, or decreases or increases over time.
design	Plan and present ideas to show a layout / function / workings / object / system / process.
determine	To find a solution by following a set of procedures. Obtain a numerical value by carrying out a series of calculations.
discuss	Give an account that addresses a range of ideas and arguments.
draw	Produce a diagram with sufficient detail and labels to illustrate the answer. (Compare with 'Sketch')

estimate	Assign an approximate value.
evaluate	Make a qualitative judgement taking into account different factors and using available knowledge / experience / evidence.
explain	Set out reasons and/or mechanisms to address why and/or how something happens. (Compare with 'Describe') For example, when asked to explain the change in rate of reaction seen on a graph, the expected response would suggest scientific reasons for any change seen, for example in terms of molecular collisions or enzymatic action.
give	A short answer is required without explanation (unless separately requested).
how	In what way?
identify	Recognise, list, name or otherwise characterise.
illustrate	Make clear by using examples or providing diagrams.
justify	Present a reasoned case for actions or decisions made.
label	Add names or other identifying words or symbols to a diagram.
measure	Establish a value using a suitable measuring instrument or technique.
name	Provide appropriate word(s) or term(s).
outline	Provide a description setting out the main characteristics / points.
plan	Consider, set out and communicate what is to be done.
plot	Translate data into a suitable graph or chart, with labelled axes.
predict	Make a judgement of an event or action that will or would happen in the future, as a result of knowledge, experience or evidence.
recall	Use your knowledge of the specification to remember a relevant key fact which needs to be used in the question.
select	Carefully choose as being the most suitable for a task or purpose.
show	Write down details, steps or calculations to prove a fact or answer.
sketch	Produce a simple, freehand drawing to illustrate the general point being conveyed. Detail is not required. (Compare with 'Draw') In the context of a graph, the general shape of the curve would be sufficient without plotting precise points. (Compare with 'Plot')
state or define	Express in precise terms the nature, state or meaning
suggest	Give possible alternatives, produce an idea, put forward (for example) an idea or a plan for consideration.
use / using	The answer must be based on information given in the question.