Stats

Binomial Distribution	Be able to work out the probability of X=x… or X<x… or X<=x… or X>x, etc. etc. Be able to work out the probability of x1 < X <x2, etc. Be able to carry out a hypothesis test, stating a conclusion in context Be able to state a p-value
Box Plots	Be able to construct a box plot, but where key values may be missing (to be inferred from the question)
Discrete Random Variables	Be able to solve discrete random variable problems by applying standard rules of probability (e.g. sum to 1)
Histograms	Be able to complete a histogram / data table combination with missing items and an unknown Frequency Density scale Be aware that at A Level, the area of a histogram is proportional to, not equal to, frequency
Large Data Set	General knowledge of the data set, including units of measure for the various items of data, maxima and minima How to treat outliers, erroneous readings and "tr" Difference in treatment between a reading of zero and a null reading

Mechanics

F = ma	Be able to solve 2-dimensional problems by working with I and j unit vectors Be able to calculate a resultant force Be able to solev 1-dimensional problems by resolving forces Be able to work with combined particles where particles may be considered as a whole system or as individual entities
Speed time graphs and dis	Be able to interpret slope / area beneath Be able to complete a partially completed graph based on a supplied scenario
SUVAT	Be able to apply the SUVAT equations in a defined scenario Be able to explain modelling simplifications and their effect
Variable acceleration	Be able to differentiate and integrate a function with respect to time Be able to find missing constants by equating to a known or implied gradient or area

IN ALL QUESTIONS…
Standard techniques from pure maths may be needed, e.g.

* Forming and solving simultaneous equations
* Solving a quadratic (factorising, CTS, formula)
* Calculus (differentiation and integration)
* Pythagoras for magnitude of vectors / trig to find a bearing of a vector
* Algebraic manipulation
* Laws of indices
* Real basics such as knowing that x is the same as 3x/3… but that the latter might aid collecting like terms
* Area of a trapezium (resist the urge of breaking into trinagles and rectangles)
* Proof / Show questions… don't use the result you are being asked to prove. Your final line of working must end up being equal to that result, but without ever using it in a prior line of working