

## IB Physics Internal Assessment Guide

The following guide has been adapted from Chris Hamper and his website at [www.inthinking.co.uk](http://www.inthinking.co.uk). Before any IA investigation, all students should examine the IB Physics assessment criteria. The IA investigation is worth 20% of the final IB Physics mark and is an opportunity for students to engage in the scientific process. The IA is evaluated using the following criteria:

Personal Engagement	Exploration	Analysis	Evaluation	Communication	Total
2 (8%)	6 (25%)	6 (25%)	6 (25%)	4 (17%)	24 (100%)

### Personal Engagement [2 marks]

Here the marker is looking for evidence that the student is engaged in their project. Such evidence could come in many forms:

- Statement of reason why the topic is interesting (not my favourite since it could appear to be insincere).
- Context of the research given.
- Using data in a new way.
- Unique research question.
- Interesting use of apparatus. (creativity!)
- Novel method.(creativity!)
- Adaption of equipment to suit requirements.
- comparison of different methods. (going beyond expectations due to interest).
- Use of simulations to compare results.

### Exploration [6 marks]

Focused research question, relevant background information with highly appropriate method all factors influencing reliability considered with full awareness for safety ethical and environmental issues. This is similar to Design in the old lab rubric except with establishing context for the project. Research which relates to the unpinning physics of the project should be summarized. The following should be part of exploration

- Research question clearly stated in introduction.
- If applicable (does not apply to mathematical modelling), variables identified.
- Theoretical background explained.
- Equations derived not just stated.
- Method is described fully showing attention to detail and consideration of controlled variables.'
- Appropriate method (if it worked it was probably appropriate).
- Adaption of method to reduce errors.
- Use of different methods to reinforce conclusion.
- Use of simulations to support theoretical background.
- Mention of factors that can not be controlled.
- Mention of safety issues (not trivialized and should be directly relevant and applicable to the investigation).

