

SUPPLEMENTAL READING ACTIVITY

Exploring the New Internal Assessment -- ANSWER KEY

All handouts referenced in this assignment are posted on ManageBac in the “Internal Investigation” unit. This assignment, as well as all assignments relating to the IA, must be typed and uploaded to ManageBac.

Read the handout “Devil Physics IA Grading Form” on ManageBac and answer the following questions:

1. This is the form I will use to grade the rough draft and final draft of your IA. What are the two main sections of this form? _____

Read the handout “Effective Citing and Referencing” on ManageBac and answer the following questions:

2. What should you do if you are not sure whether material is considered basic or common knowledge within a field or subject? _____
3. “When we acknowledge the use of materials or ideas that are not ours, the reader must be able to clearly distinguish between _____
_____”
4. What are the three main types of in-text citation? _____

5. What style guide does the IB endorse? _____

6. For physics IA’s, are the list of references given on a ‘Bibliography’ page, a ‘Reference’ page, or a ‘Works Cited’ page? _____

Errors And Uncertainties In Physics handout. Read the 13-page handout and reflect on how it will personally increase your individual adherence to the IB Learner Profile in the context of world-mindedness. Do so in the form of a TOK question.

Read the handout **“Guidance on IA Length”** on ManageBac and answer the following questions:

- 7. What happens if the final report exceeds 12 pages but is relevant and concise? _____

- 8. What happens if the final report exceeds 12 pages and is NOT relevant and concise? _____

Read the handout **“How Do I Interpret R-Squared”** on ManageBac and answer the following questions:

- 9. What Is R-squared? _____

- 10. If your R-squared value is low but you have statistically significant predictors, you can still draw important conclusions about how changes in the predictor values are associated with changes in the response value. Regardless of the R-squared, the significant coefficients still represent the mean change in the response for one unit of change in the predictor while holding other predictors in the model constant. Obviously, this type of information can be extremely valuable. However, a low R-squared is most problematic when _____

Read the handout **“How to Avoid Colloquial (Informal) Writing”** on ManageBac and answer the following questions. Make sure you really read this because science types tend to not be very good writers.

- 11. From the list, write down the three types of errors you most frequently make and that you pinky-swear you will avoid on your IA:
 - a. _____

 - b. _____

 - c. _____

Read the handout “IA Guidance from IB Physics Guide” on ManageBac and answer the following questions:

12. Who marks work for external and internal assessments? _____

13. The approach to assessment used by the IB is criterion-related, not norm-referenced. What the heck does criterion-related mean? _____

14. What do assessment objectives describe? _____

15. What do assessment criteria describe? _____

16. What do markbands represent? _____

17. What are analytic markschemes prepared for? _____

18. What is the overall weighting (%) of the Internal Assessment for SL and HL? _____
19. In Paper 3, what does Section A consist of? _____

20. In Paper 3, what does Section B consist of? _____

21. In terms of the Purpose of the Internal Assessment, what does it enable students to demonstrate without the time limitations and other constraints associated with written examinations? _____

22. How do the internal assessment *requirements* differ between HL and SL? _____
23. It is the teacher’s responsibility to ensure that students are familiar with:
a. _____

- b. _____
 - c. _____
- _____
- _____

24. How many drafts of the IA are teachers allowed to read and give advice on? _____

25. What assistance *should* the teacher provide and what assistance *are they not* to provide? _____

26. All work submitted to the IB for moderation or assessment must be _____

27. Can the same piece of work be submitted for both an internal assessment and an extended essay? _____

28. What does a “best-fit approach” mean? _____

29. How do the internal assessment *criteria* differ between HL and SL? _____

30. (True or False) In order for a mark to be awarded, every single aspect of a level descriptor must be met.

31. (True or False) A student who attains a low achievement level for one criteria should be similarly marked for all criteria. _____

32. How much time should the IA take to complete? _____

33. How many pages should the IA cover? _____

34. What will happen if you exceed this length? _____

35. What drug(s) was the guy taking when he said that it will only take 10 hours? _____

36. What are the possible tasks that can be accomplished in the IA:

a. _____

b. _____

c. _____

d. _____

- e. _____
37. What are the five assessment criteria, how many points and what percentage of points are accorded to each?
- a. _____
- b. _____
- c. _____
- d. _____
- e. _____
38. (True or False) The criterion Personal Engagement can only be evaluated after you have set a wedding date. _____
39. The Personal Engagement criterion assesses the extent to which the student engages with the exploration and ***makes it their own***. What things could one have to address in order to allow the grader to recognize personal engagement through different attributes and skills? (stop whining and just copy the last two lines of the paragraph) _____

Remember, Make It Your Own

40. What does the criterion Exploration assess? _____
- _____
- _____
- _____
- _____
41. What awarenesses are also assessed under Exploration, where appropriate? _____
- _____
42. An evaluator determines the following descriptors are most appropriate for a student's Exploration:
- a. The report shows evidence of limited awareness of the significant safety, ethical or environmental issues that are **relevant to the methodology of the investigation**.
- b. The topic of the investigation is identified and a relevant but not fully focused research question is described.
- c. The background information provided for the investigation is mainly appropriate and relevant and aids the understanding of the context of the investigation.

- d. The methodology of the investigation is mainly appropriate to address the research question but has limitations since it takes into consideration only some of the significant factors that may influence the relevance, reliability and sufficiency of the collected data.

What is the most appropriate mark to award for Exploration? _____

43. What does the criterion Analysis assess? _____

44. What does the criterion Evaluation assess? _____

45. What does the criterion Communication assess? _____

Open the handout “Misc IA Guidance” on ManageBack. Skip ahead to page 7, “Guidance for the use of the internal assessment criteria”. Start reading and answering questions again

Personal Engagement

46. Read the section on Personal Engagement. Summarize the intent of this section in your own words. ____

Exploration

47. The information given must be targeted at the problem rather than _____

in order to _____

48. Why must the data be of sufficient quantity and treatable in an appropriate manner? _____

Analysis

49. What must the drawn conclusions be based on? _____

50. What happens if the variability of the data leads to a tentative conclusion? _____

51. The variability should be demonstrated and _____

Evaluation

52. In terms of a conclusion, what differentiates the Evaluation from the Analysis? _____

53. Variability of the data will also lead into an assessment of _____

Communication

54. Overall, the primary consideration in this area is that the report should be focused and clear so that the reader does not have to go back and re-read it. Nuf sed.
55. What are the expected subject-specific conventions? _____

Read the handout “*Significant Digits*” on ManageBac and answer the following questions:

56. The number of significant digits in the output should equal _____

Read the handout “*Tsokos Internal Assessment Guidance*” on ManageBac and answer the following questions:

57. Descriptively summarize the five different investigation types:
- a. Hands-on investigation: _____

b. Modeling and spreadsheet _____

c. Database investigations: _____

d. Computer-simulation investigations: _____

e. Hybrid investigations: _____

58. What is the content of the final presentation? _____

59. What does it mean when it says, “*You are also responsible for your own time management.*”? _____

60. Finally, you should have _____

Read the handout “Using Excel for Lab Reports” on ManageBac and answer the following questions:

61. List one thing you learned from reading this handout. _____

62. What does the handout have to say about ‘Saving Your Work’? _____
