

IB Biology Summer Assignment
2020 Cohort (Seniors)

One of the main components of IB Biology is the IA (Internal Assessment). This project must **original** and must be **designed, carried out, reported, and analyzed** by the student.

Here is a description from IB:

Internal assessment accounts for 20% of the final assessment and this is assessed through a single individual investigation. This investigation may involve a hands-on approach, use of data-bases, simulation or a hybrid. Student work is internally assessed by the teacher and externally moderated by the IB.

The practical investigation, with generic criteria, will allow a wide range of practical activities satisfying the varying needs of biology, chemistry, and physics. The investigation addresses many of the learner profile attributes well.

The task produced should be complex and equal with the level of the course. It should require a purposeful research question and the scientific rationale for it. The marked exemplar material in the teacher support material will demonstrate that the assessment will be rigorous and of the same standard as the assessment in the previous courses.

Here's how this figures into Mrs. Roberts' IB Biology class:

Laboratory Work (Internal Assessment): All students will participate in laboratory work throughout the course. Students will complete an IA of their design that will be evaluated by the instructor and possibly submitted to IB evaluators.

Internal assessment is an integral component of IB Biology, contributing 20% of the final assessment in the course. It is recommended that at least 10 hours be dedicated to the completion of the IA.

Your IA will count as your final exam for each semester.

Semester 1 = IA Rough Draft of certain sections (50% based on meeting deadlines)

Semester 2 = IA Final Draft

Your assignment (due in class on August 19, 2019):

You need to come to class with **5 research questions** that you could POSSIBLY use as the starting point for your IA research. You just need to have the questions.

Here are some things to think about when developing a research question (from Biology for Life):

Research Question:

- The research questions is clearly stated and precisely formulated.
- Research question includes clear MV and RV.
- Research question includes scientific name of organism, if relevant (*Genus species*).
- The research question can be used to formulate a hypothesis predicting the relationship between the MV and DV.
- Hypothesis explanation is scientifically accurate (with correctly cited sources).

There should be a single sentence which clearly and specifically states the objective of the investigation. Students must do some thinking to recognize the nature of the problem that has been set, the factors (variables) that will affect the outcome, and how they affect it (the hypothesis). Make sure you select a research question that can be measured using the time, materials and techniques available to you at school!

Research Question Possibilities

1) _____

2) _____

3) _____

4) _____

5) _____

- Be sure you are **INTERESTED** in your topic - you will be spending a lot of time with this project.
- Email Mrs. Roberts with questions.
- Have a great summer - see you in August!