IB MATH HL **CHECKLIST FOR WRITING YOUR DRAFT EXPLORATION Name: \_\_\_\_\_\_\_\_\_\_\_**

**Communication & Mathematical presentation**

1⎕ Did you start with an introduction?

2⎕ Do you have a clearly written aim and rationale?

3⎕ Does the entire paper focus on the aim and avoiding irrelevance? Don’t go off on a tangent.

4⎕ Does the writing flow nicely?

5⎕ Is your exploration coherent? (logically organized, understandable, having clarity)

6⎕ Did you include graphs, tables and diagrams at appropriate places and not attach them all at the end?

7⎕ Have you had your peer edit your paper? (done in class or done outside of class if you are absent on the due date)

8⎕ Did you cite all references in your bibliography and acknowledge direct quotes appropriately?

9⎕ Did you use appropriate mathematical language and representation? (No computer notation \*, ^, etc)

10⎕ Did you define key terms where necessary?

11⎕ Did you use appropriate technology?

12⎕ Did you think about the degree of accuracy? And explained why you chose it (For your topic, how many decimal places are relevant?)

13⎕ Did you end with a conclusion and relate it back to your aim and rationale?

14⎕ Do you have page numbers?

**Use of mathematics**

15⎕ Did you explore unfamiliar math, or apply familiar math to a new situation?

16⎕ Did you create mathematical models for real-world situations, if this applied to your topic?

17⎕ Did you apply problem-solving techniques?

18⎕ Did you look for and explain patterns, if this applied to your topic?

19⎕ Did you show at least one sample work for each type of calculation?

20⎕ Is your use of math rigorous and/or sophisticated higher level?

21⎕ Did you review/validate your results if reasonable?

22⎕ Is the use of math correct? How do you know?

23⎕ Is your use of math accurate relevant to the topic?

**Reflection**

24⎕ Did you ask questions, make conjectures and investigate mathematical ideas?

25⎕ Did you consider the historical and global perspectives of your topic?

26⎕ Did you discuss the implications of your results? (What do they mean? Why are they important?...)

27⎕ Did you consider the significance of your paper?

28⎕ Did you look for possible limitations and/or extensions of your topic?

29⎕ Did you make links between your topic and different fields and/or areas of mathematics?

**Personal engagement**

30⎕ Did you ask and answer personal questions (“I wonder if…, What if…)?

31⎕ Did you try to think independently, creatively, and originally?

32⎕ Did you address why you think your topic is interesting or why it appealed to you?

33⎕ Did you present mathematical ideas in your own way (as opposed to copy someone else’ theory)?

34⎕ Did you try to add “your voice” to the work?

35⎕ Did you relate the results to your own life?