***Make a copy of this document so you can edit it. This will be collected on PSL the first day of school.

1. Your task is to:

Set up sealed mesocosms to try to establish sustainability (Practical 5). (20 marks total)

Mesocosm design project, more information about the project.

List your materials: (5 marks)

Draw an annotated diagram of your mesocosm. Insert a photo here: (5 marks)

Does the mesocosm fit the definition of a mesocosm? (3 marks)

"A model ecosystem set up in a closed container, allowing energy to be exchanged with the environment, but not matter."

If so how did the designer ensure that the mesocosm had a sufficient supply of oxygen? (1 mark)

What were some limiting factors in your mesocosm? If there weren't any, explain why not. (1 mark)

Which of the following does the mesocosm contain? (3 marks)

Autotrophs

Consumers

Saprotrophs

Detritivores

AND

2. Use the "inaturalist app" to identify at least 2 species. Write their scientific names using proper Binomial Nomenclature rules. (4 marks)

Insert the photos of your species here:

3. Complete Topic 4 Self Study - VERY IMPORTANT - Use Kognity and the syllabus statements I give you. (85 marks)

***We will still review Topic 4 Ecology, but it will be less time than we spend on other topics, so please do this.

Topic 4 <u>Syllabus Statements</u>. Respond to each of the bullet points under each syllabus statement.

- Examples of responses to these statements could be:
 - Real-world examples that support the bullet point
 - o Images
 - o Pieces of evidence that support the bullet point
 - Further explanation