

## **Biology Workshop**

Hello, I'm Michelle Aisya from Indonesia, and I'm currently a second year in the IB Diploma. I enjoy learning about biology and human health, and I'm aiming to become a med student in the near future! Through this workshop, I hope that I could make use of the knowledge I have and repackage it in a way that's efficient for students to learn on the go.

This workshop will focus on Biology, focusing on content specified by the IB Biology curriculum as that is what I'm most familiar with. However, we will also go in depth on other topics for further understanding. According to the Oxford Learner's Dictionaries, biology is defined as 'the scientific study of the life and structure of plants and animals'. For example, we will be learning the different systems in human physiology, and even the most basic components of life - genetics, cells, chemistry, you name it. Taking a biology workshop is particularly important because understanding the world around us is vital in being able to survive alongside it! We will be looking through textbook excerpts, revised notes, video materials, and we'll also have fun activities! I'll also be posting additional Quizlets for certain specific materials.

## I look forward to seeing you join our class!

You can join our Google Classroom through this link:

https://classroom.google.com/c/NTAwODU0NDc5MDc2?cjc=tdaqpzy

Alternatively, you could join using this code: tdagpzy.

## **Biology Workshop Curriculum**

**Chapter 1: Cell Biology** 

Week	Lesson
1	Cell Theory
2	Prokaryotic and Eukaryotic Cells
3	Membranes
4	Cell Division

**Chapter 2: Plant Biology** 

Week	Lesson
6	Plant Structure and Growth
7	Transport in angiospermophytes
8	Reproduction in angiospermophytes

**Chapter 3: Molecular Biology** 

Week	Lesson
9	Chemical elements and water
10	Carbohydrates, lipids, proteins, enzymes
11	DNA Structure, Replication, Transcription and Translation
12	Cell Respiration and Photosynthesis

**Chapter 4: Genetics** 

Week	Lesson
13	Chromosomes, genes, alleles and mutation
14	Meiosis
15	Theoretical Genetics
16	Genetic engineering and biotechnology

**Chapter 5: Ecology and Evolution** 

Week	Lesson
17	Communities and Ecosystems
18	The Greenhouse Effect
19	Populations
20	Evolution and Classification

**Chapter 6: Human Physiology** 

Week	Lesson
21	Digestion and Absorption
22	The Blood System
23	Defense against Infectious Diseases
24	Gas Exchange
25	Neuron Synapses
26	Hormones, Homeostasis, and Reproduction

**Chapter 7: Further Human Physiology** 

	<u> </u>
Week	Lesson
27	Human Nutrition
28	Digestion
29	Functions of the Liver
28	The Heart
29	Hormones and Metabolism
30	Transport of Respiratory Gases