

# A Level Biology Introductory Work:

## Cellular Structures Task

Produce a large hand drawn & labelled diagrams of:

a virus, a bacterium & a plant cell (an example of a eukaryotic cell).

**Diagrams need to be neat, accurate and have the structures drawn & labelled that are listed below. Complete diagrams on plain paper.**

Use labels to identify the following structures found in each:

<b>Virus Particle</b>	<b>Bacterial Cell</b>	<b>Plant Cell (Eukaryote)</b>
Genetic material	Cell Wall	Cell wall
Capsid	Cell Membrane	Cell membrane
Lipoprotein coat	ribosomes	nucleus
	plasmids	ribosomes
	flagella	RER
	cytoplasm	Golgi body
	DNA/nucleoid	cytoplasm
	slime capsule	vacuole
	mesosomes	mitochondria
	pili	vesicles

## Functions of Cellular Structures

**Explain the functions** of the organelles and structures in side each of the cells and the virus particle. This can be done as a list for each microbe or as tables or as annotations to the diagrams.

You will need to research these using the resources listed.

<b>Virus Particle</b>	<b>Function</b>
Genetic material	
Capsid	
Lipoprotein coat	

<b>Bacterial Cell</b>	<b>Function</b>
Cell Wall	
Cell Membrane	
ribosomes	
plasmids	
flagella	
cytoplasm	
DNA/nucleoid	
slime capsule	
mesosomes	
pili	

<b>Plant Cell (Eukaryote)</b>	<b>Function</b>
Cell wall	
Cell membrane	
nucleus	
ribosomes	
RER	
Golgi body	
cytoplasm	
vacuole	
mitochondria	
vesicles	

Useful resources:

<https://www.bbc.com/bitesize/guides/zyhrng8/revision/2>

<https://www.youtube.com/watch?v=Cqlux4fqrEw>

<https://alevelbiology.co.uk/notes/an-introduction-to-cells/>

<https://www.youtube.com/watch?v=Ld-o5mZ3Rok>

<http://www.a-levelnotes.co.uk/biology-aqa-as-notes-cells-structure-of-prokaryotic-cells-and-viruses.html>