

Subject	Medical Science
Context	<p>The human body is made up of a number of inter-related systems that work together to maintain a stable internal environment. In this course you will study the structure and function of these systems.</p> <p>Taking accurate and precise physiological measurements is a critical skill of a medical practitioner. In your coursework you will learn how to take these readings and how they be used in the diagnosis of a patient.</p> <p>Lifestyle has a massive impact on the overall health of individuals and the population. This can put strain on health services and increases the budget required by the NHS. During this course you will study the effect of various lifestyle choices.</p>
Securing	<p>You will be studying the detailed structure of human cells and will be expected to identify and describe the function of a range of organelles. In your GCSE course you will have come across some of these.</p> <p>Produce a summary of the following organelles found in cells: Nucleus, Nucleolus, Ribosome, Mitochondrion, Golgi apparatus, Rough Endoplasmic Reticulum, Smooth Endoplasmic Reticulum and Nuclear Envelope The following websites will give you information about the organelles found in cells.</p> <p>http://www.a-levelnotes.co.uk/biology-aqa-as-notes-cells-structure-of-eukaryotic-cells.html</p> <p>https://www.savemyexams.co.uk/a-level/biology/cie/22/revision-notes/1-cell-structure/1-2-cells-as-the-basic-units-of-living-organisms/1-2-1-eukaryotic-cell-structures--functions/</p> <p>For each organelle you need a diagram showing the structure as seen with an electron microscope and give a brief (no more than 10 words) outline of its function.</p>
Processing	<p>Understanding the structure and function of human body systems is essential for you to analyse and diagnose systems that might be malfunctioning.</p> <p>Produce a piece of work looking at the Integumentary System. You will need to include the following:</p> <ol style="list-style-type: none"> (a) State the overall function(s) of the Integumentary system (b) Draw and label a diagram to show the structure of the skin. You need to include the following – hair, hair follicle, sweat gland, sweat duct, erector muscle, sebaceous glands, sensory nerve endings, subcutaneous fat and capillaries (c) State the function of each structure (d) List the resources/websites you used in producing this piece of work
Exploring	<p>There are many causes of disease in humans. Diseases can be caused by a variety of agents – Pathogens, proteins, environmental and lifestyle factors Research the following diseases. HIV, HPV, Chlamydia, TB, Flu, Toxoplasmosis, Athletes foot and CJD.</p>

Summarise your findings in a table. Use a trusted website for your information e.g. <https://www.nhs.uk/conditions/>

Disease	Pathogen/cause	Entry into body	Effect on the body/symptoms

2. External factors can have a massive impact on the body and affect a person's health.

Choose one lifestyle factor from this list; diet, smoking, vaping, alcohol misuse or recreational drug use.

- (a) Research and describe the detrimental effects on an individual's health.
- (b) List the resources/websites you used in producing this piece of work.

The type of employment undertaken can also affect the health of a person. Watch this video about lung disease.

<https://www.youtube.com/watch?v=znR053vQtYs>

- (c) Write a brief description of the detrimental effects on an individual's health.

Reviewing

Test your knowledge of the cell organelles by answering the questions on the Socrative quiz. Please put in your full name when asked. Follow the link below to access the quiz.

