



# Medical Science

## Essential Information

**Exam Board:** WJEC

**Specification Code:** 4403QX

**Teachers:** Miss McLellan, Mr Street & Miss Cox

## Reading

**Head Start to A Level Biology - CGP**

<https://www.cgpbooks.co.uk/secondary-books/as-and-a-level/science/biology/bbr72-head-start-to-a-level-biology-with> (only Sections 1 - 6 & 9)

**Essential Maths Skills for A Level Biology - CGP**

<https://www.cgpbooks.co.uk/secondary-books/as-and-a-level/science/biology/bmr71-a-level-biology-essential-maths-skills#>

## Task to be completed:

There are many disorders that can affect any one of the organ systems within the body. Medical science can help identify, manage and in some circumstances treat the disorder. The following tasks are designed for you to start to understand the intricacies of medical disorders.

**Complete the following:**

- Prepare a Google slide presentation (no more than 10 slides) for the following topics. Each topic should be on one slide and provide enough information for you to talk through whilst adding your own depth of knowledge to the information provided.
  - Multiple Sclerosis (MS) is a chronic, progressive disease that affects the brain and spinal cord, causing a range of symptoms due to damage to the protective covering of nerve fibers (myelin).
  - Provide an overview of the causes, symptoms and factors affecting MS
  - MS affect the structure of neurons. Draw and label a diagram of a synapse and explain in brief 'Synaptic Transmission'. Your drawings must be clear enough to view.
- Biological molecules play an essential part in our everyday life with glucose being one of those molecules.
  - Carbohydrates can be separated into subcategories. Provide some examples of these subcategories and how these can be found in our everyday diet.
  - Draw and label both alpha ( $\alpha$ ) glucose and beta ( $\beta$ ) glucose molecules and add these to your slides. They must be clear enough to view.

**What else could I do to prepare?**

### Read

- Bill Bryson - The Body: A Guide for Occupants
- Anatomy & Physiology for Dummies

### Watch

- Human: The World Within (Netflix)
- Inside the Human Body (Amazon Prime)
- Michael Moseley: Wonders of the Human Body (Channel 5)

### Listen

- The Sausage of Science Podcast
- Human Biology Podcast
- Boost your Biology with Lucas Aoun

**All tasks to be handed in during the first lesson of a subject in September**