Key learning outcomes:

- Describe the key anatomical features of the heart
- Describe the microanatomy of cardiac muscle and blood vessels
- Understand key physiological concepts including:
  - The cardiac cycle + cardiac output
  - Differences between blood vessels and their function in controlling blood flow and pressure

ANATOMY

The cardiovascular system encompasses internal and external features of the heart as well as vessels branching from it. This resource will highlight a selection of the most important heart anatomy specifically - you may find a lot of it is revision from your previous learning so make sure you go over your own notes on this as well!

Here is a great introduction to cardiac anatomy, which also gives an insight into chest x-rays! Here is another example as well!

Do you know the three main layers of the heart? This video will discuss these!

It is also important to get an appreciation of the anatomy from a 3D aspect which you will also have the opportunity to see in full body dissection.

This may be new to you, which is the blood supply of the heart - looking at its coronary arteries and branches.

Here is a two part tutorial - check out PART 1 and PART 2!

MICROANATOMY

Here are two microanatomy topics that you should have an understanding of regarding the cardiovascular system:

1) The heart’s cardiac muscle - here is a great summarising article which should be a recap of your knowledge from the last resource!
2) The microstructure of blood vessels - this extensive resource also includes microscopic slides!
The function of the cardiovascular system can be very complex but not to worry!

Firstly, it is **essential that you review the cardiac cycle**. Again, you may have done it at A level, but it comes up time and time again at medical school so make sure you can explain it! Here is a great video which goes through the classic graph and its relation to a basic ECG and heart sounds. Here is an article explaining this as well!

Next, the following two playlists have been chosen because they introduce such vital concepts in a great way - the contents of each is described below:

This 6-part Crash course playlist which firstly recaps blood pressure (including its control and types of vessels involved), then provides detail on the components of blood.

Here are the rest of the videos from the Khan Academy playlist introducing the cardiovascular system. This includes heart sounds, thermoregulation of the heart and similarly recaps the types of vessels and their role in controlling blood pressure. If you would like to stretch yourselves further, this article provides more advanced detail on capillary exchange.

If you like to read as well, these online resources give an overview of the topics discussed in the videos:
- Here is another great resource which will give you some brief insight into all major aspects of the cardiovascular system [READ]
- If you would like to read more in-depth detail to anatomy of the heart, check this website out [READ]

To finish off, try these quizzes to see what you have learnt!
- Cardiovascular Anatomy Quiz
- The Blood Quiz
- The Heart Quiz
- Functions of the Cardiovascular System Quiz

For more quizzes with some information on more advanced aspects of the cardiovascular system then click here.

*Hope you have found this resource useful! Once you have completed this, please give some short feedback - it will take 10 seconds to fill in! This will help me to get your opinions and check engagement! (GIVE FEEDBACK)*