



Topic Overview
Faculty/Subject: PE
Year Group: 10/11
Topic: Cardiovascular System



What BIG IDEAS will you cover in this topic?

- ★ In this unit you will develop an understanding of the Cardiovascular System that builds on the knowledge developed in year 7,8 & 9. You will learn to answer questions related to the final test and link them to other systems in the body.

What other key concepts, knowledge and skills will you learn in this topic?

- ★ Students will learn how to identify the Heart and the relevant blood vessels.
- ★ Students will also know the cardiac cycle & understand different blood pressures.
- ★ They will be able to make links with the Cardiovascular system and how it is involved when taking part in health and fitness activities.

What important prior knowledge will you use from your prior learning?

- ★ Making links with both previous topics (skeletal, muscular & respiratory) as well as any current knowledge of theory covered in KS3.

Where does this topic fit into the curriculum plan for this subject?

- ★ Builds on the foundations of the first three topics. Will allow better understanding of how the heart and blood vessels contribute to participation in fitness activities. Will be included in the exam.

What is the key vocabulary that you will need to know in this topic?

- ★ Blood vessels; Arteries, veins and capillaries
- ★ Structures of the heart; atrium, ventricles, pulmonary artery, pulmonary veins, aorta, vena cava, tricuspid valve, bicuspid valve, pulmonary and Aortic valve & septum
- ★ Atrial systole, Ventricular Systole, Diastole
- ★ Cardiovascular measurements; MHR, Stroke volume, cardiac output, heart rate

Assessment:

How and when will you be assessed on this topic?

- ★ You will be assessed through home learning tasks each week, during silent starters and during regular questioning within lessons.

What will the success criteria be?

- ★ To be secure in this topic you need to have a good knowledge and understanding of the subjects covered and be able to apply them to health and fitness activities; the main ones being the structure of the heart and the cardiac cycle.

What is the structure of learning/lessons in this topic?

- ★ Structure & Function of the blood vessels.
- ★ Structure of the heart
- ★ The Cardiac Cycle
- ★ Cardiac Measurements
- ★ Blood pressure and Factors affecting Blood pressure
- ★ Energy systems

- ★ Blood pressure; systolic pressure / diastolic pressure
- ★ Factors affecting blood pressure; Age, stress, diet and activity levels.
- ★ Energy systems; Aerobic and Anaerobic