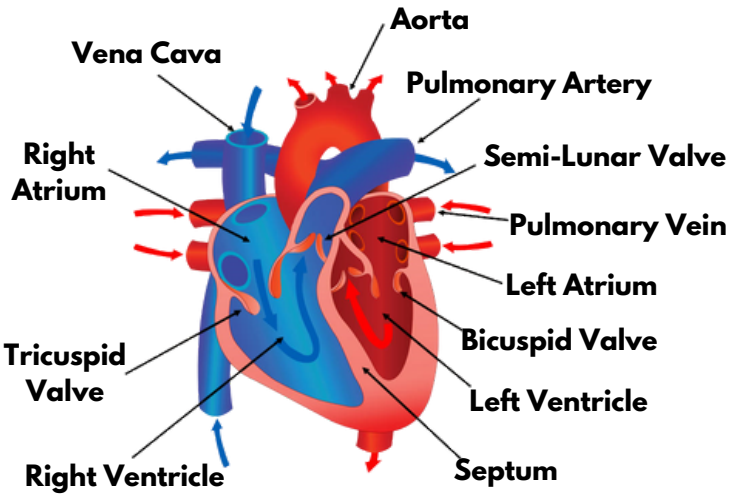

Regulation of Body Temperature

Vasodilation

Blood vessels move closer to the surface of the skin, allowing more heat to be lost and the body will cool down

Dilate = Diameter Increases

Vasoconstriction

Blood vessels become narrower, moving further away from the surface of the skin, therefore less heat is lost

Constrict = Diameter Decreases

Arteries	→	Carry blood away from the heart	→ Thick & muscular walls
Veins	→	Carry blood towards the heart	→ Thin walls
Capillaries	→	Connect artries & veins Allows diffusion to take place	→ Very thin walls

PE COMPONENT 1 - CV SYSTEM

Functions of CV System:

- Transport of oxygen, CO2 & nutrients
- Clotting of open wounds
- Regulation of body temperature

- Arteries carry blood at high pressure
- Veins carry blood at low pressure

Red Blood Cells → Responsible for the circulation of the blood and transporting blood cells around the body
Also known as Erythrocytes

White Blood Cells → Destroy pathogens, which can cause illness
Sometimes fights bad bacteria with chemicals called antibodies
Also known as leukocytes

Platelets → Clots blood following an injury, rushes to the site & swells to irregular shapes
If it cannot cope will send a signal for the blood vessels to slow down the flow of blood

Plasma → A pale, straw-coloured liquid made up of 90% water
Contains water, salts, enzymes, antibodies and other proteins

Average Blood Pressure

This number refers to systolic blood pressure; The pressure of the blood as the heart contracts

130/85

This number refers to diastolic blood pressure; The pressure of the blood as the heart relaxes