

Student:

Carre's Grammar School

Physical Education



BTEC Nationals in Sport

Principles of Anatomy and Physiology (Unit 1)

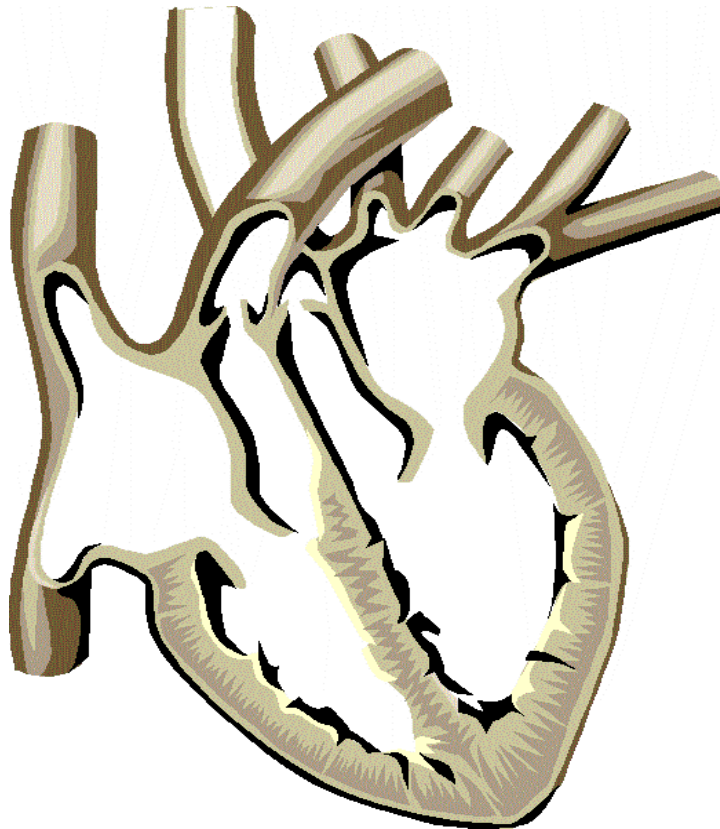
Transition work to be completed and handed in to

Mr Wilson in the first week back in September

The Cardiovascular System

Label the following structures on the diagram below:

Right atrium, left atrium, right ventricle, left ventricle, bicuspid valve, tricuspid valve, aortic valve, pulmonary valve, aorta, superior vena cava, inferior vena cava, pulmonary vein, pulmonary artery



Functions of the cardiovascular system:

- Delivery of oxygen and nutrients
- Removal of waste products
- Thermoregulation (vasodilation and vasoconstriction of vessels)
- Function of blood (oxygen transport, clotting, fighting infection)

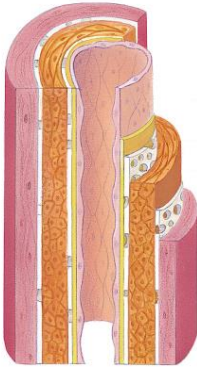
Research each of the functions listed above and make summarising notes in the table below.

Function from unit content	Summarising notes
Delivery of oxygen and nutrients
Removal of waste products

Blood vessels

Research and make notes on the characteristics of arteries, veins and capillaries

Arteries



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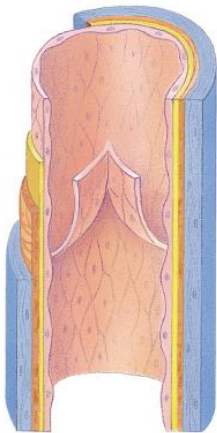
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Veins



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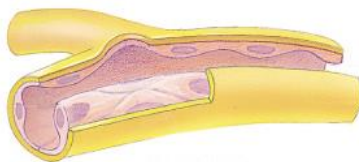
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Capillaries



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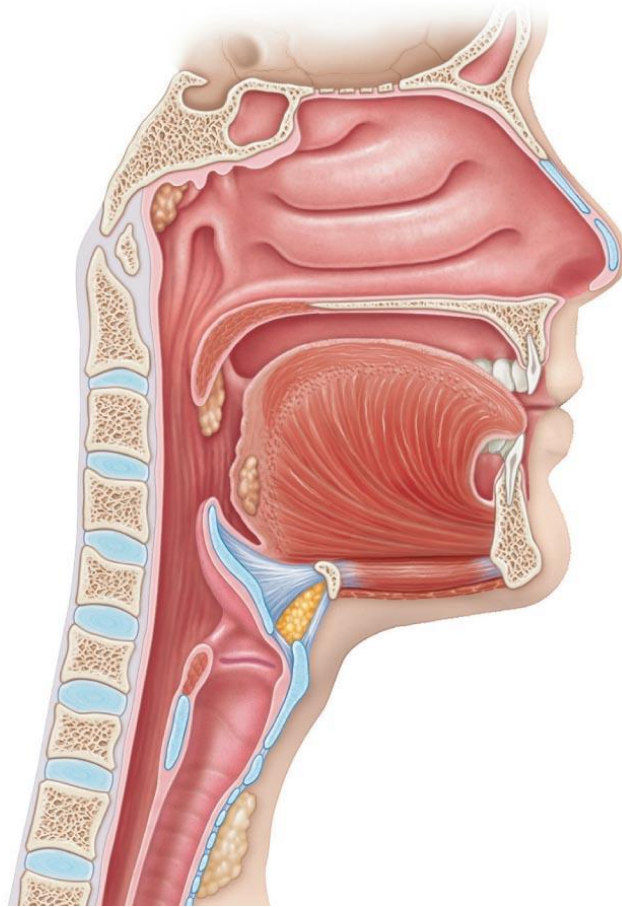
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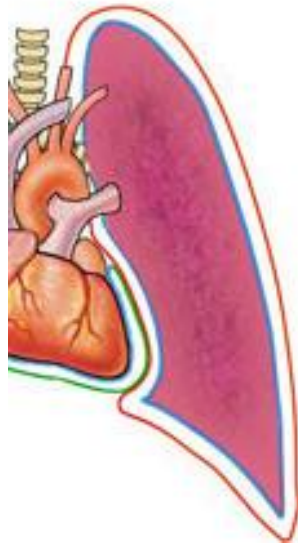
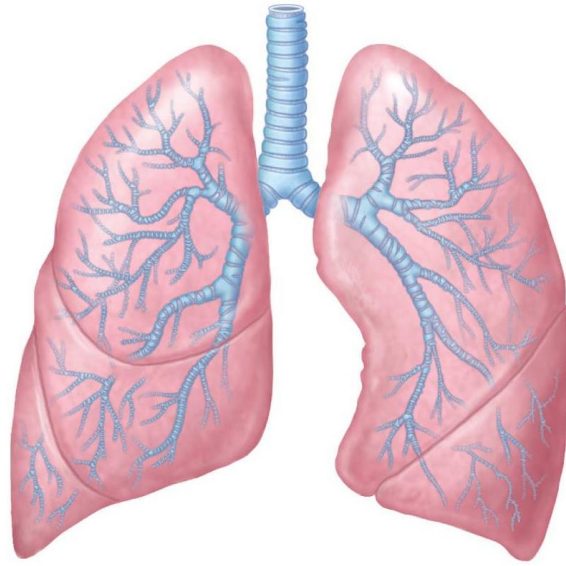
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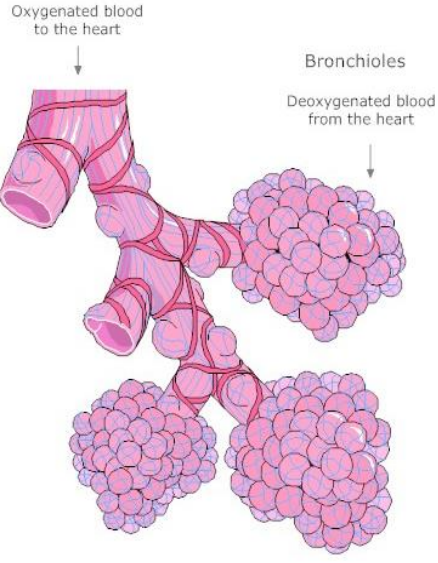
The Respiratory System

Label the following structures on the diagrams below:

nasal cavity; epiglottis; pharynx; larynx; trachea; bronchus; bronchioles; lungs (lobes, pleural membrane, visceral pleura, pleural fluid, alveoli);







The skeletal system

Label the following bones on the diagram below:

Cranium, clavicle, ribs, sternum, humerus, radius, ulna, scapula, ilium, pubis, ischium, carpals, metacarpals, phalanges, femur, patella, tibia, fibula, tarsals, metatarsals



The vertebral column

Identify the following regions/bones of the vertebral column on the diagram below:

cervical, thoracic, lumbar, sacrum, coccyx

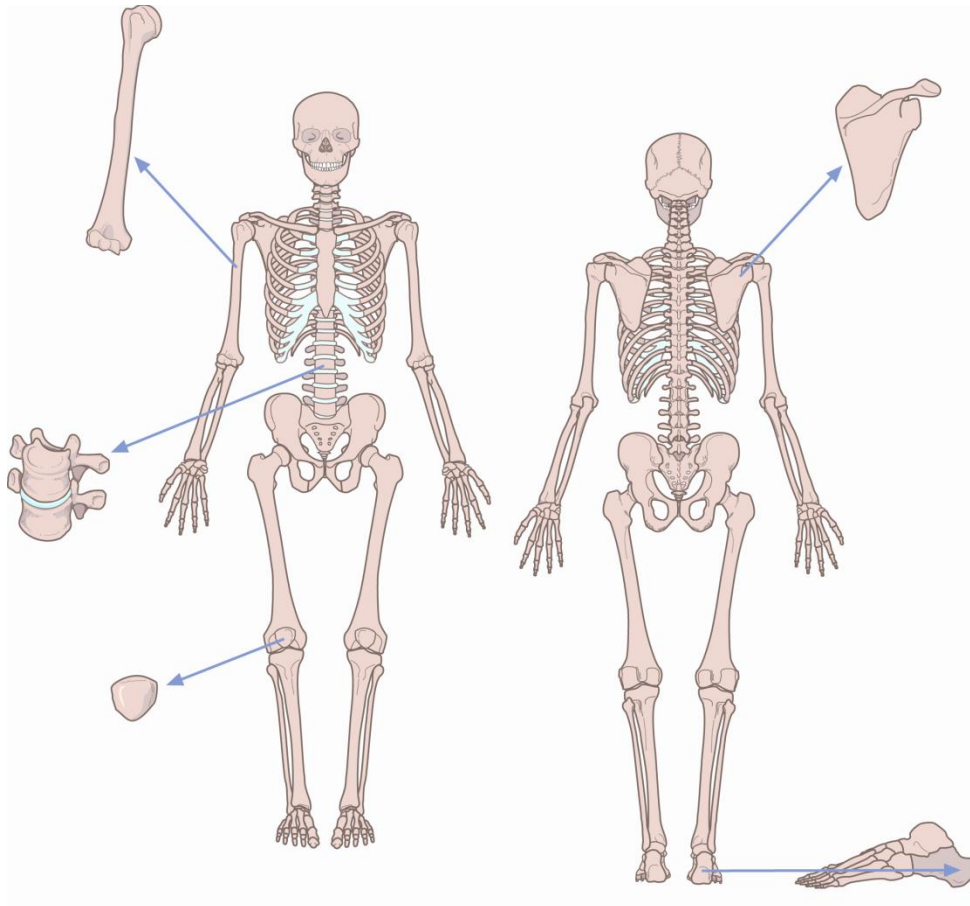


The different types of bone in the skeleton

You need to be able to describe (using an example of each) the following types of bones:

long bones, short bones, flat bones, irregular bones, sesamoid bones

Name the bones used as examples in the diagram below and identify which category of bone they belong to.



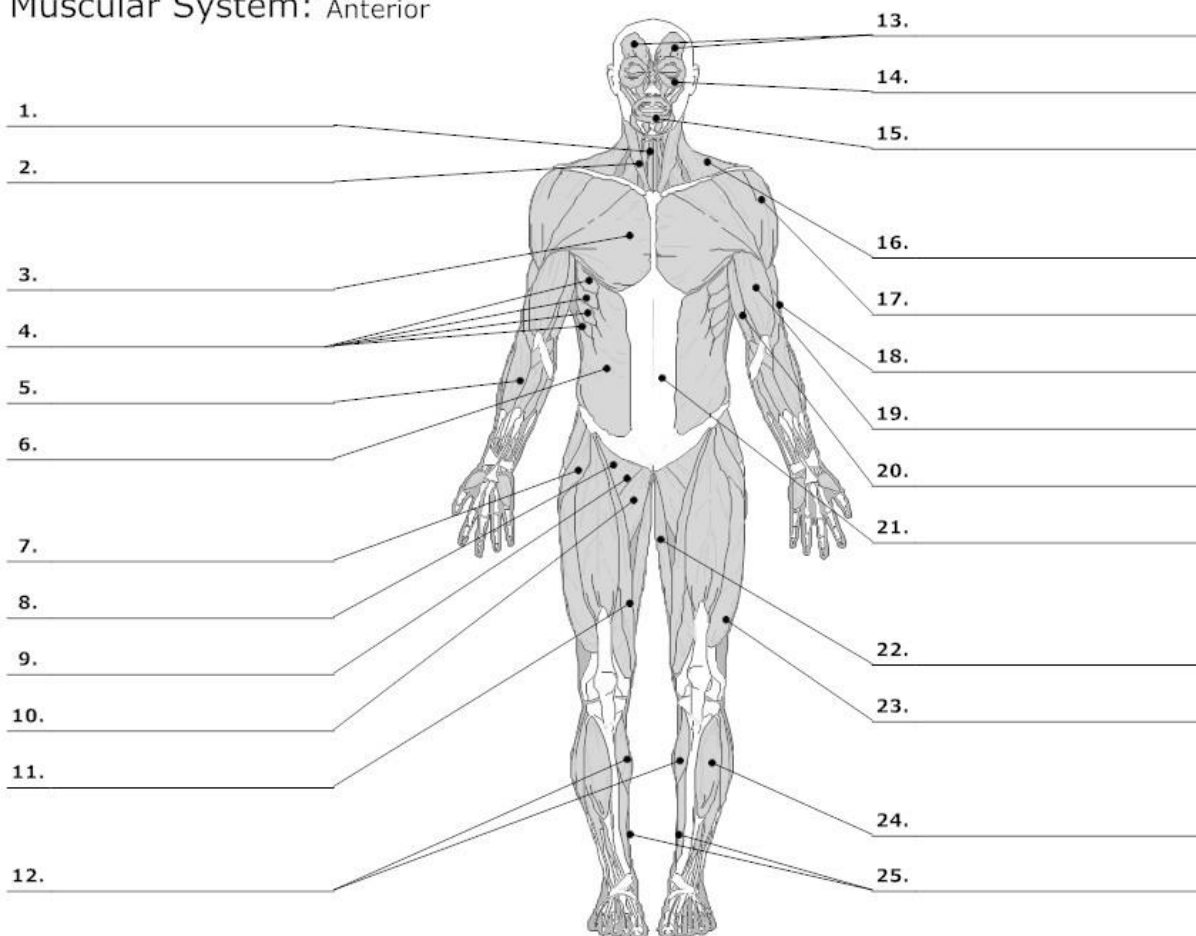
The muscular system

Label the following muscles on the diagrams below (you can draw some of the labels on yourself):

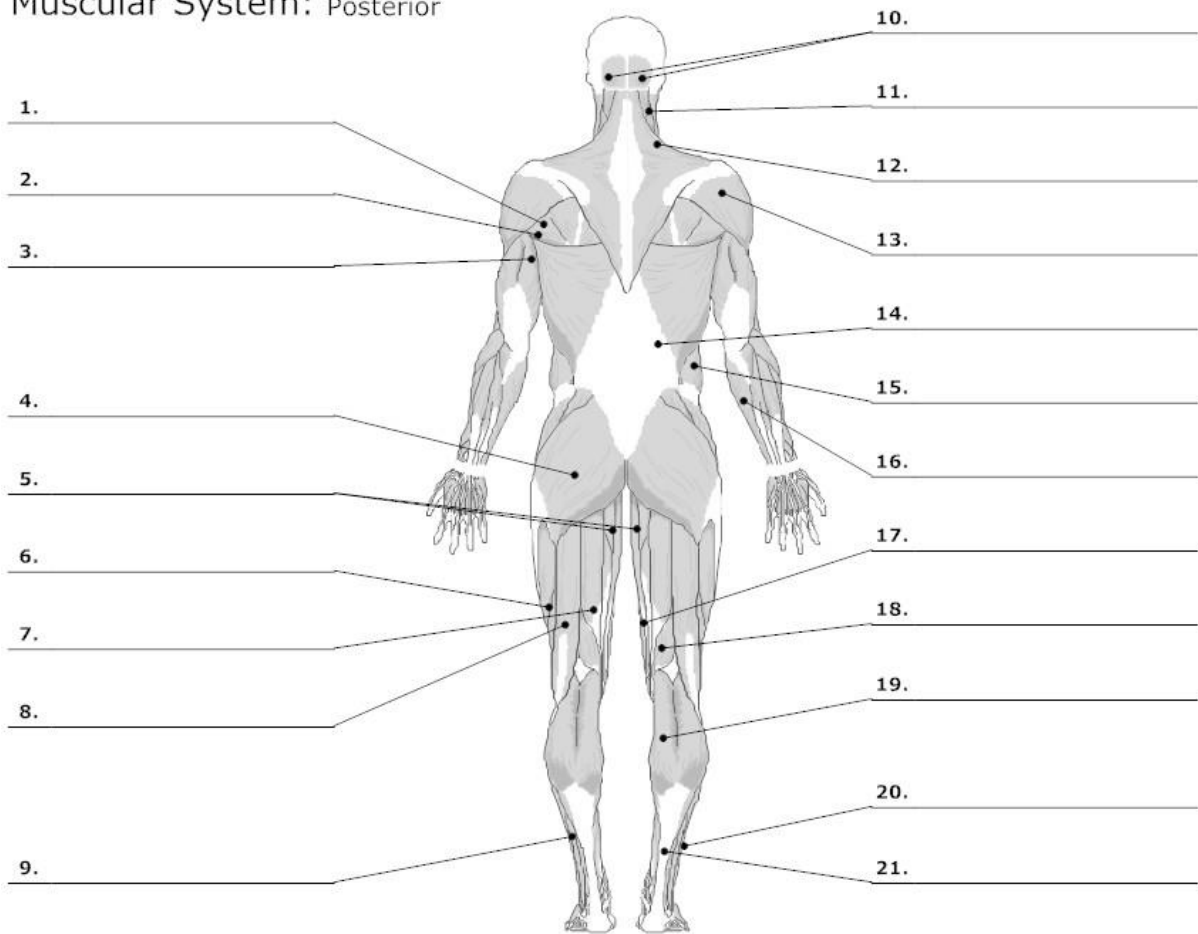
biceps, triceps, deltoids, pectoralis major, rectus abdominis, rectus femoris, vastus lateralis, vastus medialis, vastus intermedius*, semimembranosus, semitendinosus, biceps femoris, gastrocnemius, soleus, tibialis anterior, erector spinae, teres major, trapezius, latissimus dorsi, obliques, gluteus maximus.

*The vastus intermedius lies underneath the rectus femoris and can't be seen on the diagrams

Muscular System: Anterior



Muscular System: Posterior



The different types of muscle found in the human body

You need to be able to describe the three different types of muscle that exist in the human body.

You will need to explain where in the body each type of muscle can be found, what characteristics each type possesses, and what specific function or functions each type enables the body to perform.

Complete the table below:

Type of muscle	Where in the body is it found?	Voluntary or involuntary control? Striated or non-striated?	What specific functions does it enable the body to perform?
Cardiac
Skeletal
Smooth