Qualification

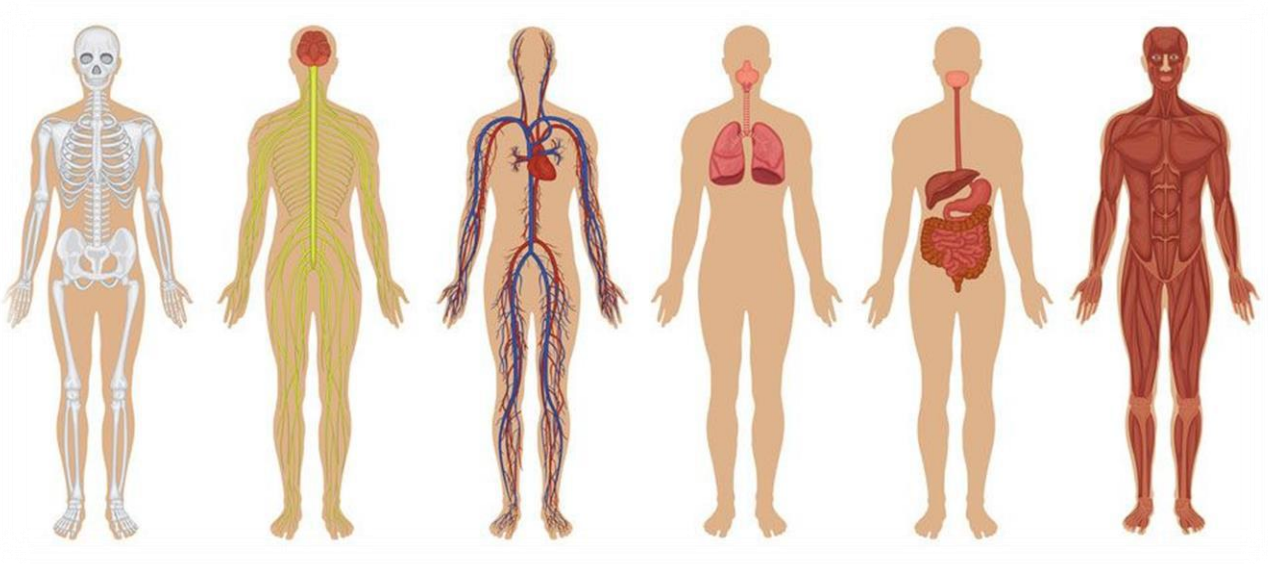
OCR Cambridge Technical Level 3

Unit

Pre-Year 12 Workbook

Staff Member

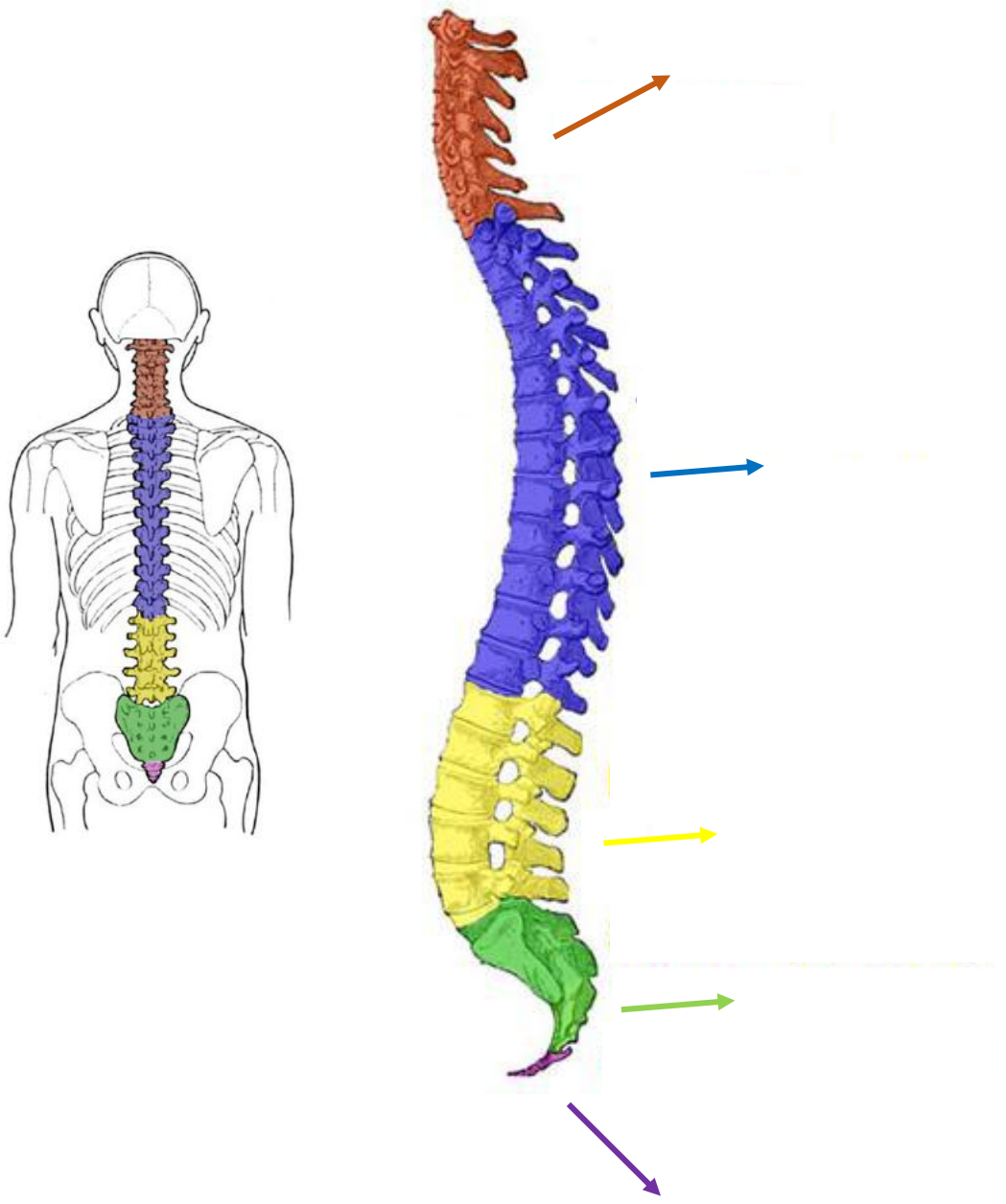
Mr Soszynski



Body Systems and the Effects of Physical Activity

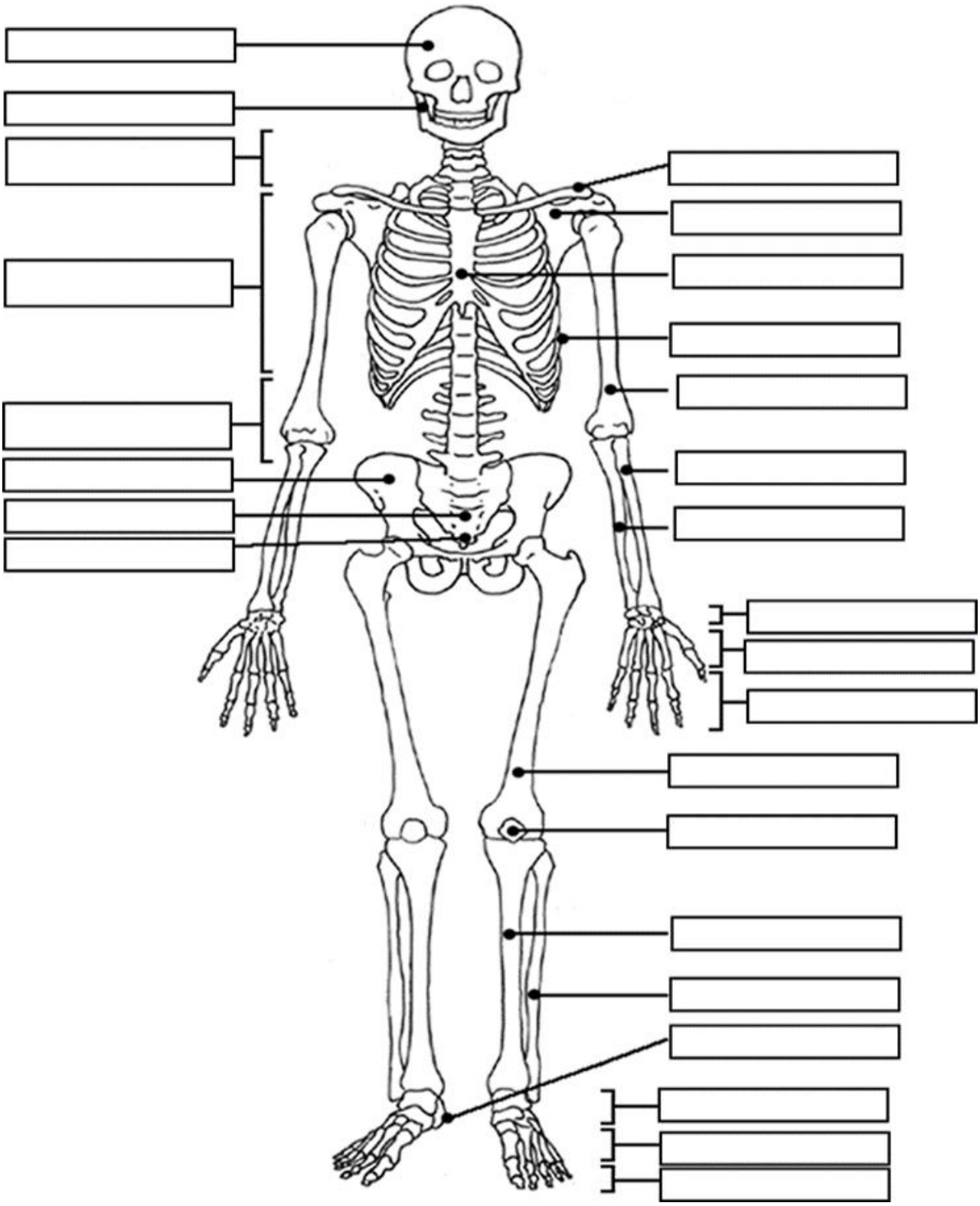
NAME: _____

LO1: The Skeletal System



Thoracic Vertebrae, Lumbar Vertebrae, Coccyx, Sacrum, Cervical Vertebrae.

Location of Bones



Cranium, Vertebrae/Cervical Region, Scapula, Humerus, Ulna, Radius, Vertebrae/Lumbar Region, Pelvis, Sacrum, Coccyx, Femur, Fibula, Calcaneous, Tarsals, Metatarsals, Phalanges, Patella, Tibia, Ribs, Sternum, Carpals, Metacarpals, Phalanges, Mandible, Clavicle, Talus, Vertebrae/Thoracic Region.

Functions of the Skeleton

M	Y	N	O	I	T	C	E	T	O	R	P	R	V
I	E	D	E	N	E	M	E	T	O	P	M	A	O
N	L	P	U	W	H	W	O	R	A	R	R	L	W
E	L	R	N	P	I	R	M	V	M	A	L	U	P
R	O	U	E	N	N	E	M	S	E	P	A	C	E
A	W	S	T	R	O	P	P	U	S	M	A	I	A
L	M	A	S	R	T	O	E	N	R	C	E	D	P
S	A	R	E	E	S	H	A	P	E	S	N	N	L
T	R	R	A	Y	L	A	P	E	X	S	A	E	T
O	R	O	I	O	X	A	L	M	L	P	S	P	A
R	O	L	L	I	P	Y	A	O	W	N	V	P	E
A	W	M	A	R	U	E	A	A	T	R	H	A	Y
G	T	L	R	E	D	M	A	R	R	O	W	H	I
E	R	A	T	N	V	C	E	R	P	A	R	R	A

Movement
Shape
Support
Protection
Blood Production
Mineral Storage
Axial
Appendicular
Red Marrow
Yellow Marrow

Extension Task!

Research what occurs in the red and yellow bone marrow.

9. Describe the following functions of the skeleton. Give an example of each.

Protection

Movement

Blood cell production

---

[9]

1(Protection) The skeleton provides a barrier / protects (vital) organs (from damage due to impact).

2(Example) Cranium protects brain or ribs protect heart / lungs or vertebral column protects spinal cord.

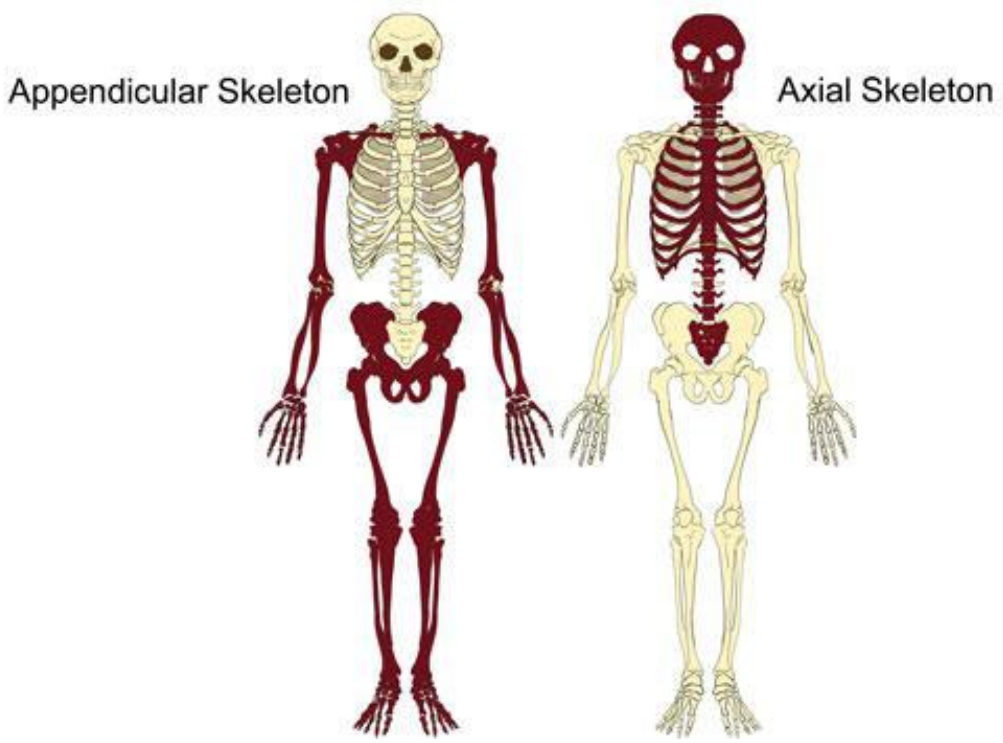
3(Movement) the skeleton is **jointed** (to allow movement) **or attachment to muscles** (allows movement) **or** the skeleton provides a **lever system** (for muscles to pull on)

4(Example) named bone/joint linked to movement of correct part of body e.g. Femur for jumping movements/moving leg

5(Blood cell production) (red/white) blood cells are formed in (bone) **marrow**

6(Example) accept any named **long** bone

Axial and Appendicular Skeleton



What is the role of the Axial and Appendicular Skeleton?

1. Which **one** of the following bones is **not** part of the axial skeleton?

(a) Cranium ☐

(b) Sternum ☐

(c) Scapula ☐

(d) Ribs ☐

[1]

Extension Task!

8. **Fig. 11** shows a diagram of the skeleton.

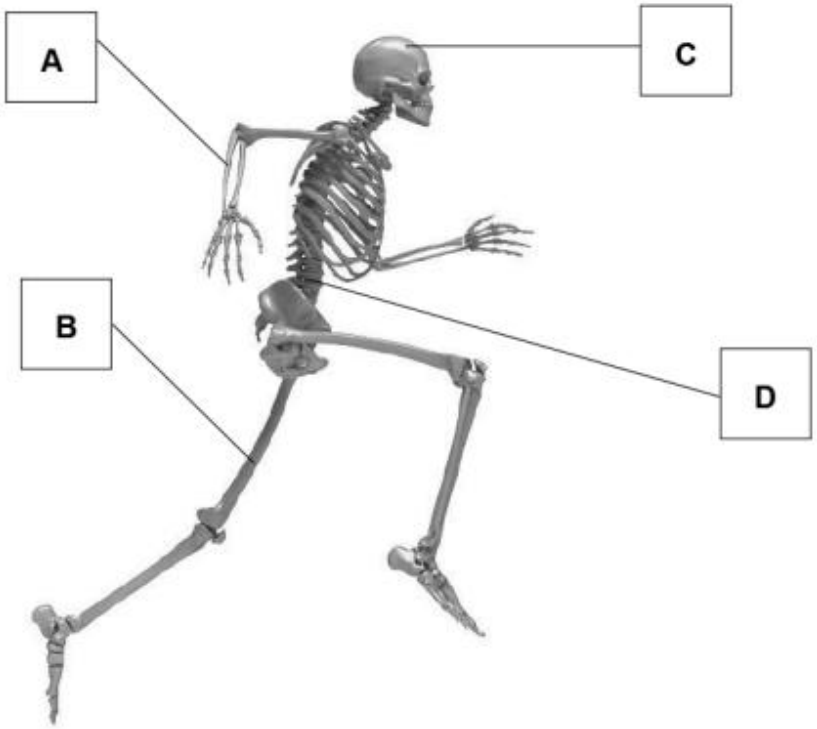


Fig. 11

Identify the bones labelled A, B, C and D.

A ----------

B ----------

C ----------

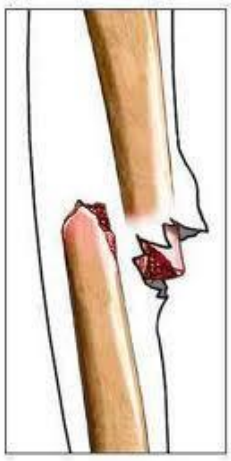
D ----------

[4]

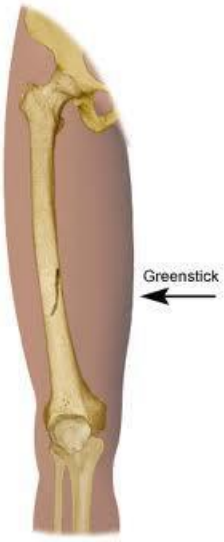
Types of Fracture

Simple

Stress



Compound



Greenstick

LO2: The Muscular System

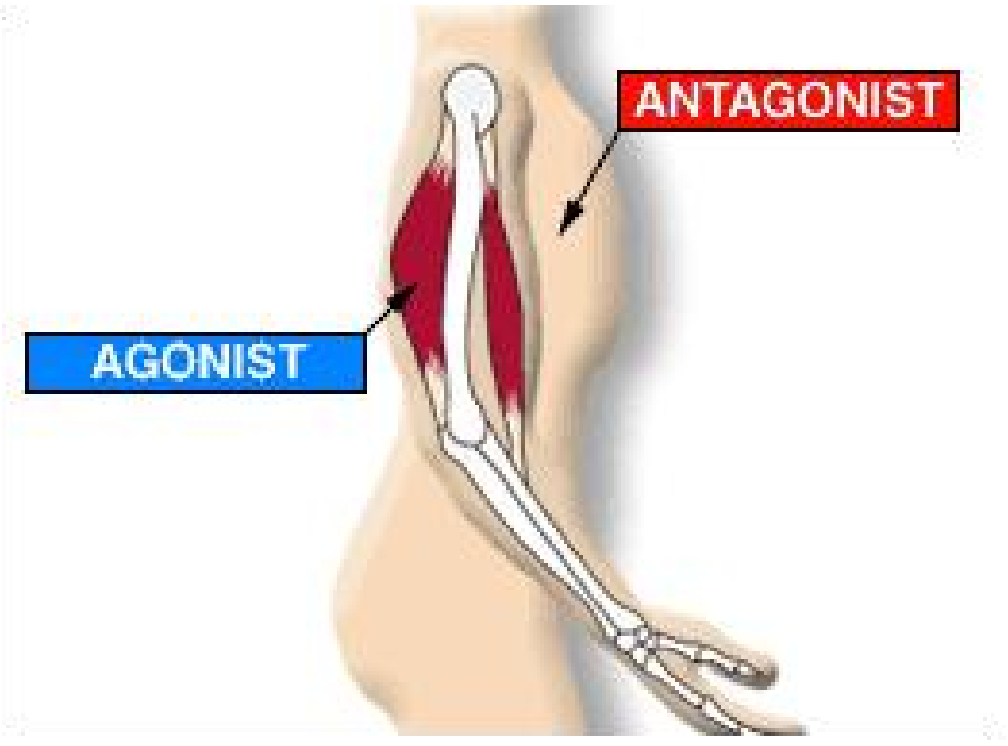
Tibialis Anterior, Supinator/Pronator Teres, External Obliques, Rectus Abdominis, Pectoralis Major, Bicep Brachii, Deltoid, Iliopsoas, Gastrocnemius, Sternocleidomastoid and Latissimus Dorsi.

What do the following key terms mean?

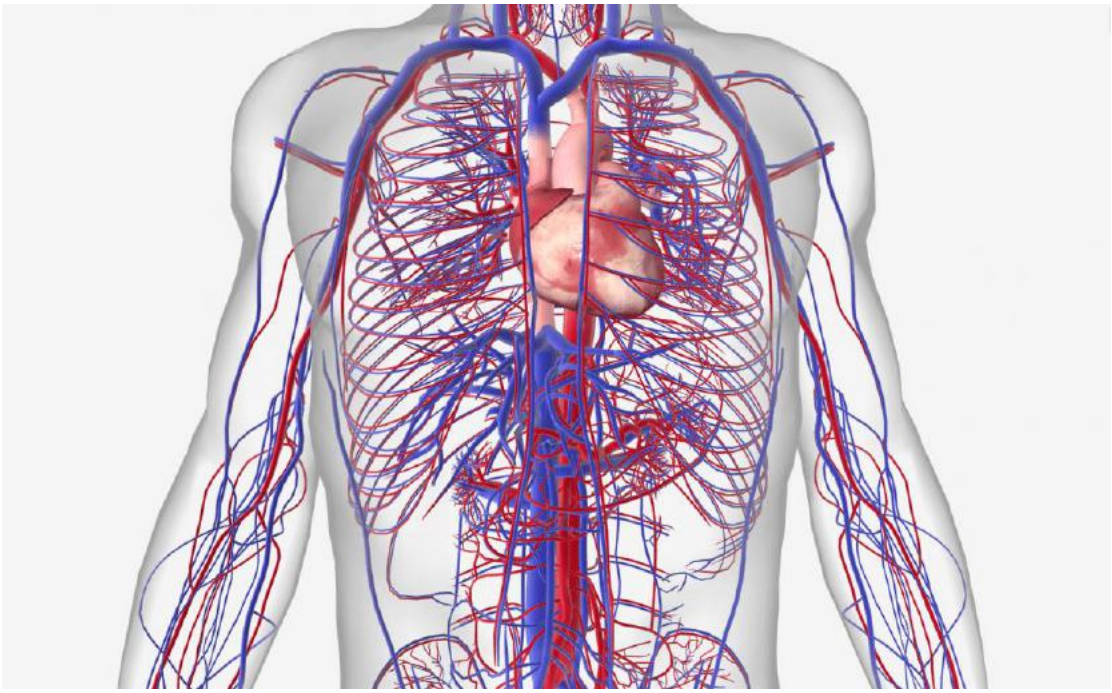
1. **Agonist Muscle**

2. **Antagonist Muscle**

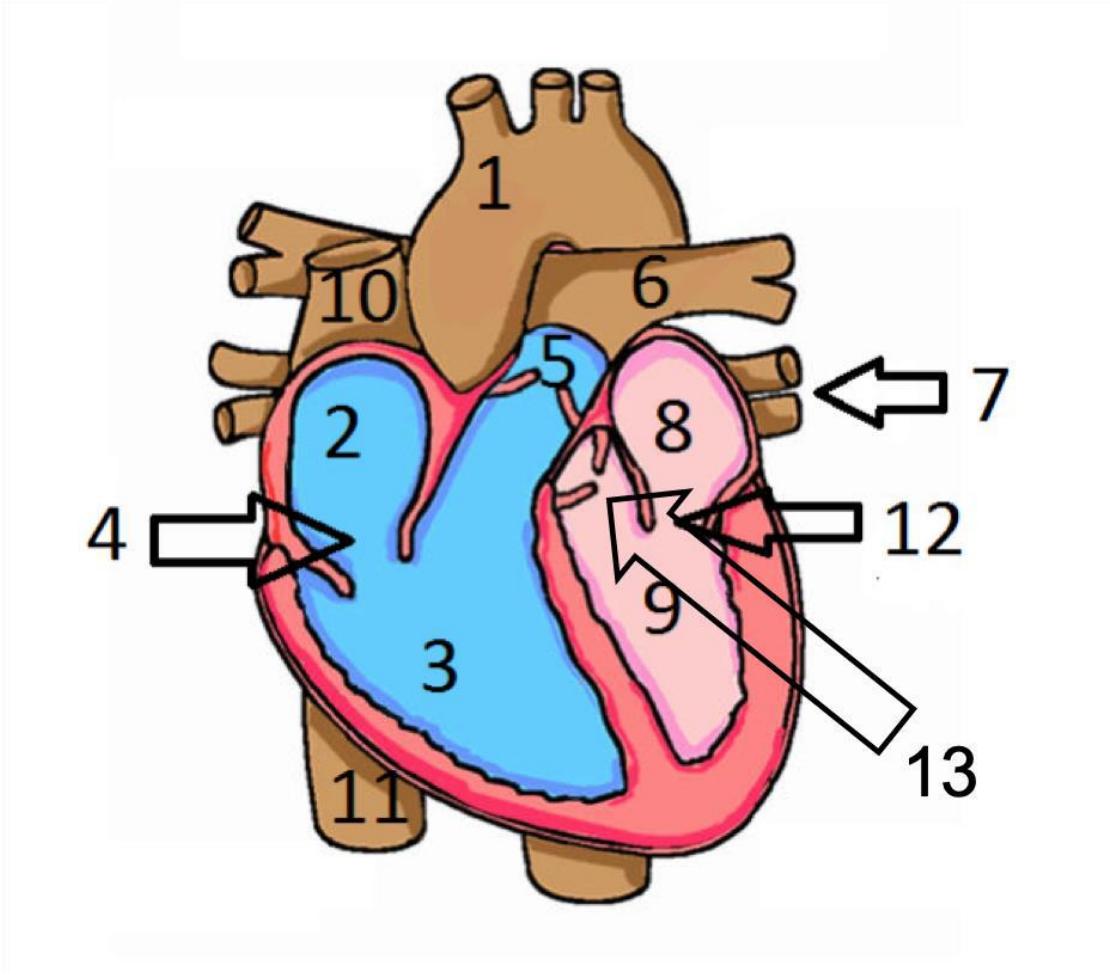
3. **Fixator Muscle**



LO3: The Cardiovascular System



Structure of the Heart



1 -
2 -
3 -
4 -
5 –
6 -
7 -

8 -
9 -
10 -
11 -
12 -
13 -

Extension Task!

15. Complete the table below to show the functions of various structures of the heart.

Structure of heart	Function
	Deoxygenated blood enters here from the venae cavae
Tricuspid valve	
Left ventricle	
	Blood vessel that carries deoxygenated blood towards the lungs
	This valve prevents blood flowing back into the left ventricle

[5]

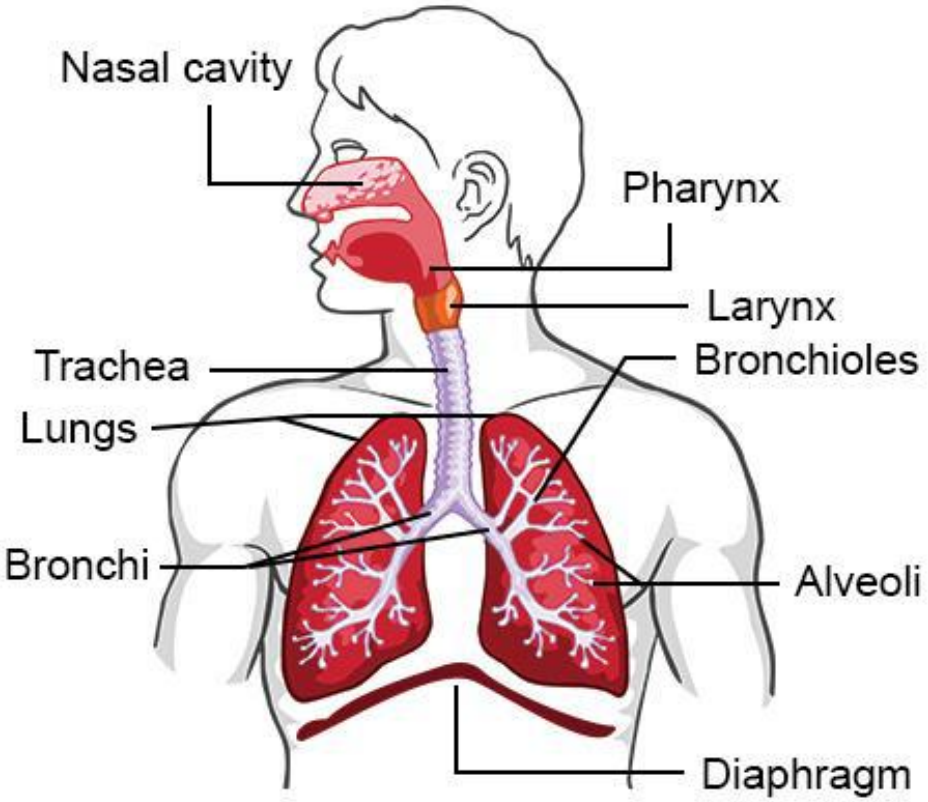
Define the following terms:

1. **Stroke Volume**

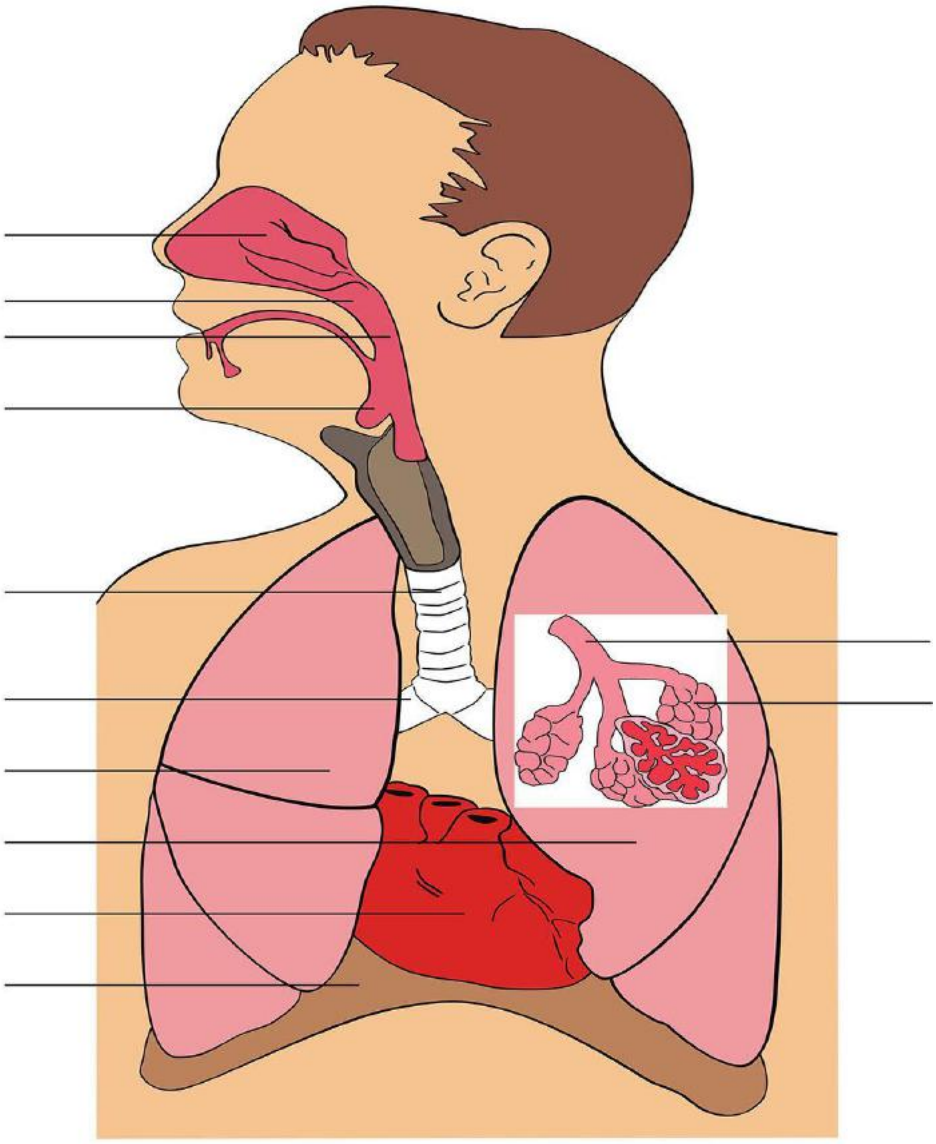
2. **Heart Rate**

3. **Cardiac Output**

LO4: The Respiratory System



The Structure of the Respiratory System



Extension Task

6. **Fig. 19** shows a diagram of the lungs.

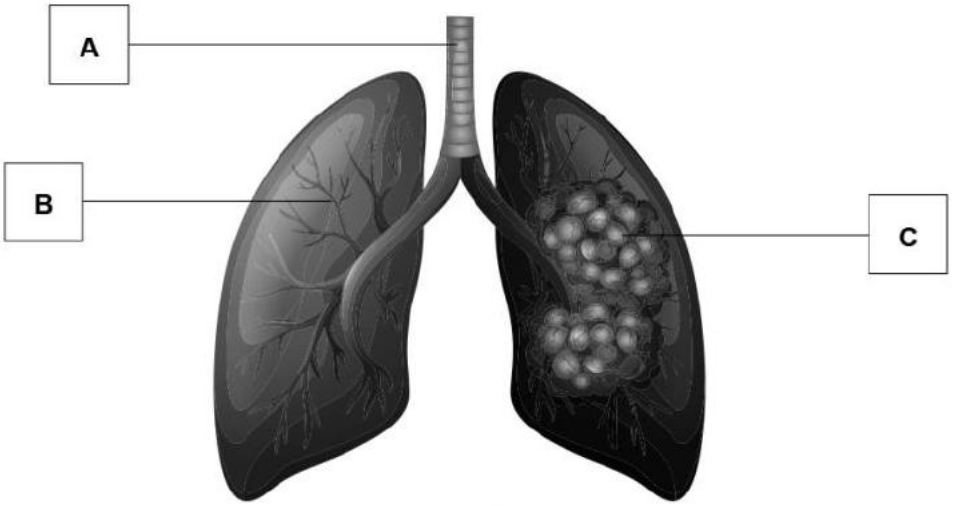


Fig. 19

Identify the structures labelled A, B and C.

A ----------

B ----------

C ----------

14. **Fig. 18.1** shows a diagram of the respiratory system.

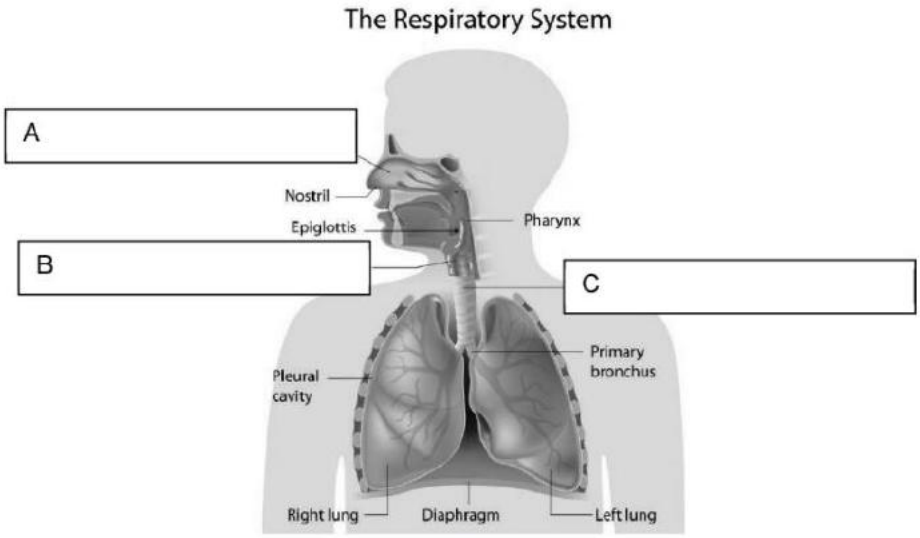


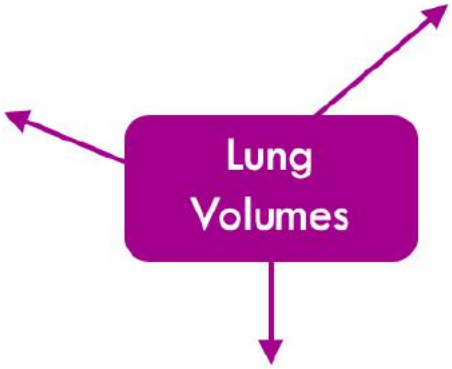
Fig. 18.1

Label structures A-C in the boxes provided on the diagram. [3]

Respiratory System
Key Terms

Breathing Frequency (F)

Tidal Volume (TV)



Minute Ventilation (VE)

3(a). Describe the roles of the following respiratory structures.

Nasal cavity ----------

Epiglottis ----------

Alveoli ----------

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[3]

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Staff Member

Miss Wright

Sports Coaching and Activity Leadership

Roles and Responsibilities
of Those Involved in Delivering Sport

Favourite Athlete/Coach:

Roles and Responsibilities
of Those Involved in Delivering Sport

Summary of Coach:

Extension Task:

Leadership Styles and Personality

Leadership Style	Notes	Example
Autocratic		
Democratic		
Laissez-Faire		

Leadership Styles and Personality

https://febiassessment.com/test/eysencks-personality-inventory-epi-extroversionintroversion/

Personality Quiz Results:

Preparing a Coaching Session

What does a coach check before delivering their session?

1.
2.
3.
4.
5.
6.
7.
8.
9.

Delivering a Coaching Session

Design an Activity for Catching:

Coaching Points:

1.
2.
3.

Delivering a Coaching Session

Design a 3-Part Cool-Down: