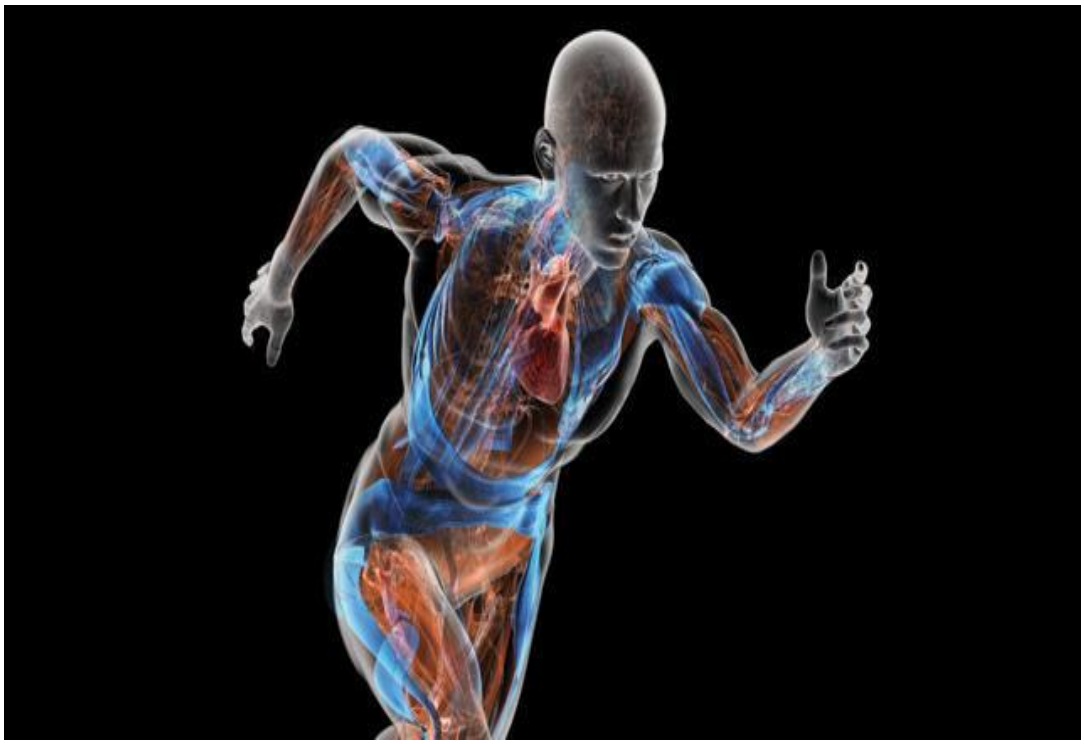
newcollaborative Learning Trust

Opening doors to a brighter future

BTEC Sport (Double Y11-Y12)

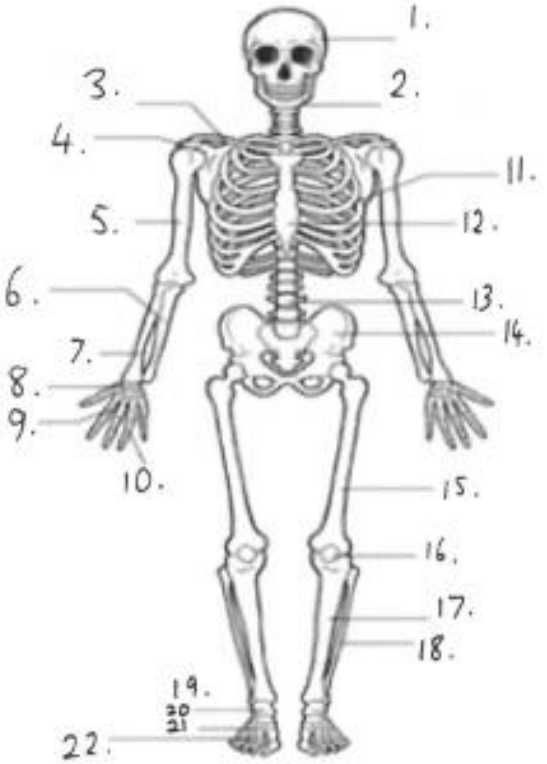
SIL



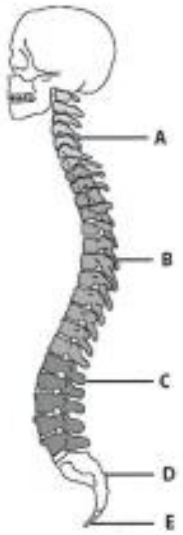
Click On the following playlist to help you complete these tasks:

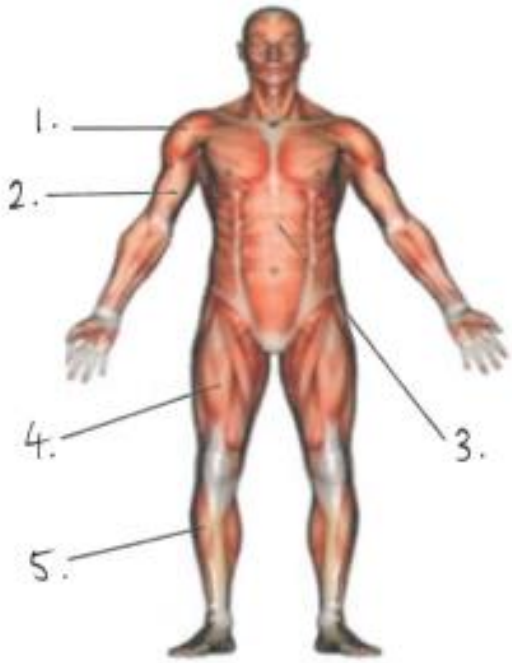
James Morris PE

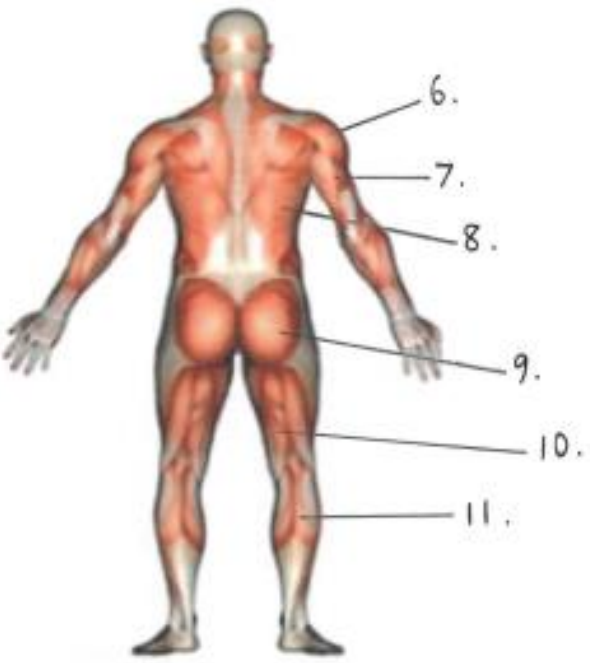
Task 1: **Research the answers to label the components for the 4 body systems on the following diagrams.**

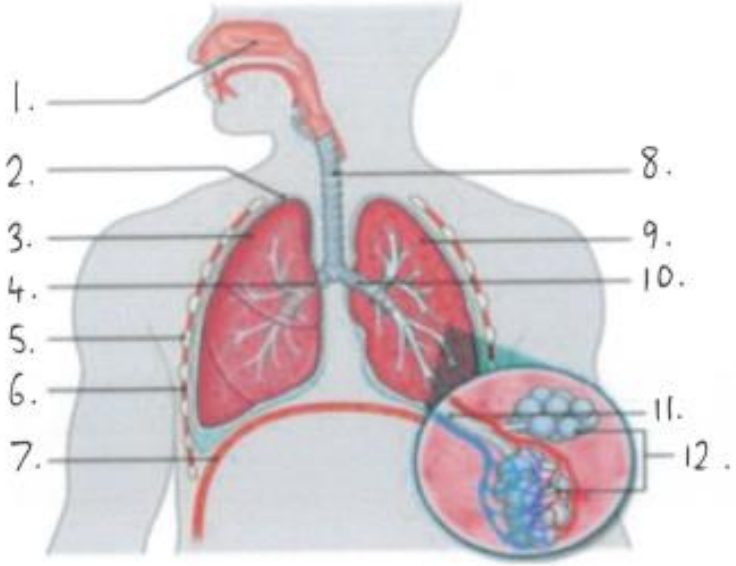


Can you label the 5 regions of the spine...?





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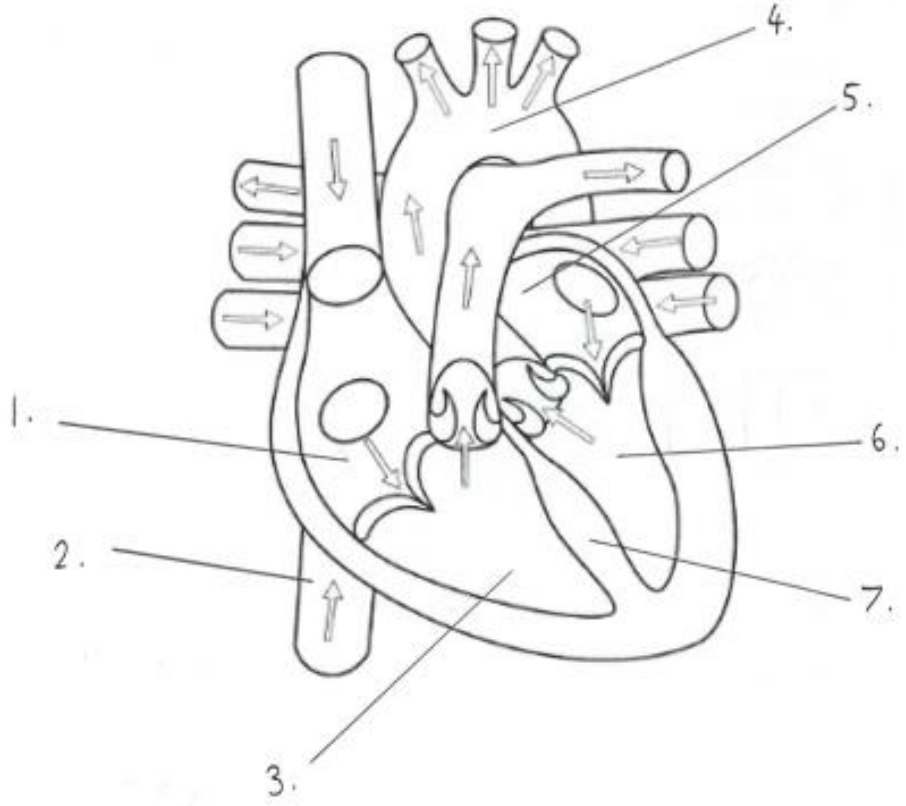
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Sesamoid Bone		
Ball & Socket Joint		
Hinge Joint		
Long Bone		
Patella		
Rib Cage		
Ossification		
Epiphyseal Plate		
Cartilage		
Synovial Fluid		
Tidal Volume		
Mechanics of Breathing		
Breathing Rate		
Residual Volume		
Gas Exchange		
Diffusion		

Partial Pressure		
Medulla		
Phrenic Nerve		
Diaphragm		
Heart Rate		
Stroke Volume		
Chemoreceptors		
Cardiac Control Centre		
Vascular Shunt		
Venous Return		
Systole		
Cardiac Cycle		
Sudden Arrhythmic Death Syndrome		

Task 3: Research short- and long-term effects of exercise on the following 4 body systems;

- Muscular
- Skeletal
- Respiratory
- Cardiovascular

Short Term Effects: Means what happens to this system as soon as we start exercising.

Long Term Effects: Means what happens to this system after long term exercise.

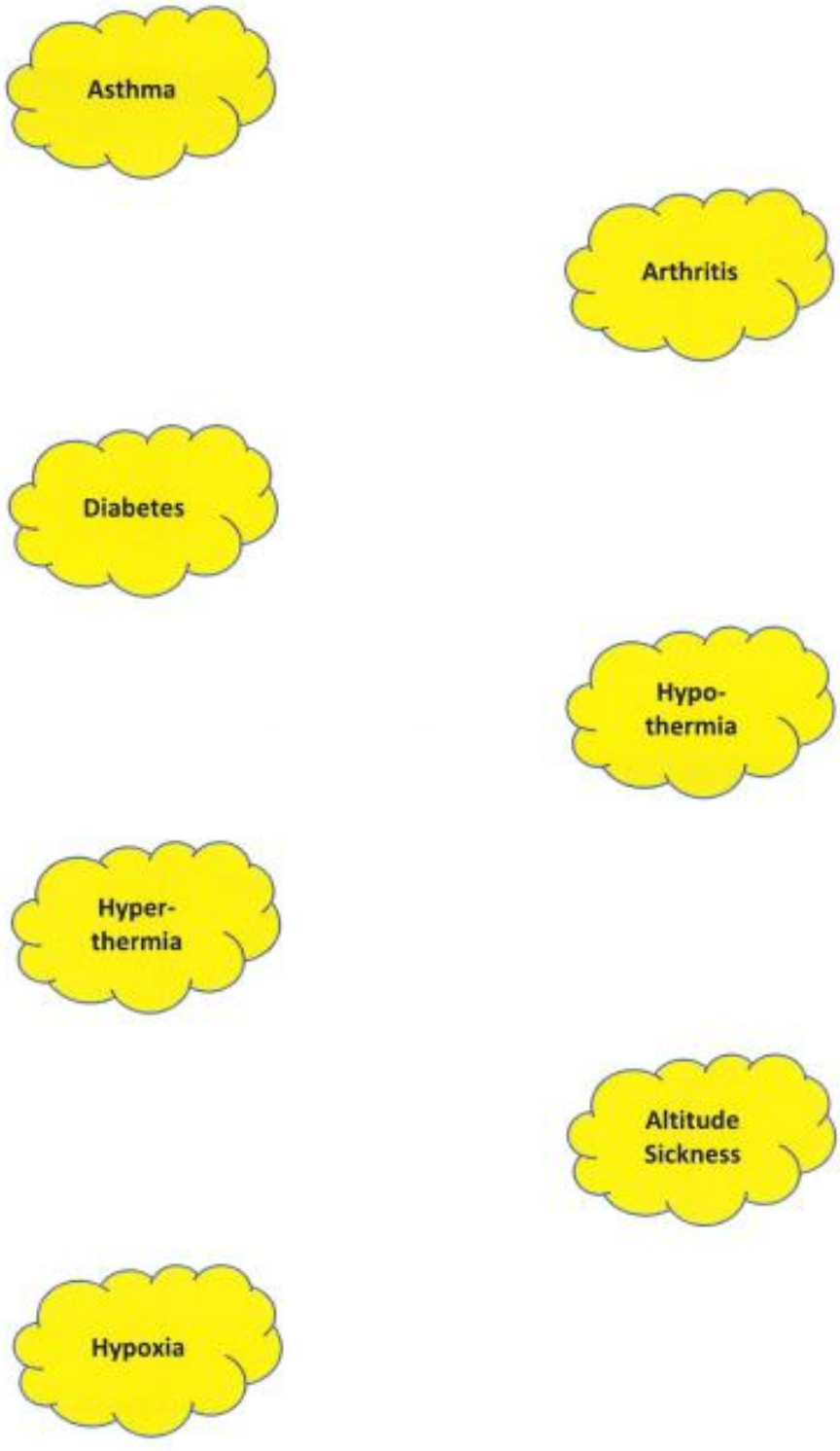
Muscular	
Short Term Effects	Long Term Effects
• E.g. Increased muscle pliability.	•

Skeletal	
Short Term Effects	Long Term Effects
•	• E.g. Increased bone density.

Respiratory	
Short Term Effects	Long Term Effects
•	• E.g. Increased lung volume.

Cardiovascular	
Short Term Effects	Long Term Effects
• E.g. Increased stroke volume.	•

Task 4: In a spider diagram format, explain the following conditions below. You will need to know all of these for your new course.



Unit 2 SIL

1. **Produce an A4 or A3 poster either handwritten or on computer describing the following 6 lifestyle factors:**
    - Physical activity
    - Sedentary lifestyle
    - Stress
    - Smoking
    - Sleep
    - Alcohol

***Include:**

- Recommended Government guidelines to any of the above factors that are relevant

- Positive effects of any of the above (there aren't positives for all of them)

- Negative impacts of any of the above (there aren't negatives for all of them)

2. **Design a blank PARQ (Physical Activity Readiness Questionnaire) or a Health Screening Questionnaire. Please do not fill this in!**

***Include a minimum of 5 questions on the following sections:**

- Personal Details

- Current Activity Levels

- Nutritional Status

- Lifestyle Factors

- Sporting Goal (only need 1 question)

- Consent Section (only need name, signature and date)

3. **Produce a PPT presentation outlining how to perform the following 5 health screening tests:**

    - Resting Blood Pressure
    - Resting Heart Rate
    - BMI
    - Waist to Hip Ratio
    - Lung Function (Peak Flow)

    ***Include:**
    - Diagram of each test
    - Description of how to administer each test and list of equipment
    - Normative data table for expected results of males and females for each test

    If you are struggling for ideas then use: www.brianmac.co.uk to help you

4. **EXAM QUESTION CASE STUDY:**
    Ross is a 35 year old male. He does no exercise each week, smokes 5 cigarettes a day, drinks 15 units of alcohol per week, has a stressful job and is only getting 5 hours of sleep per night.

    Suggest **one different lifestyle modification technique** that Ross could do to improve each lifestyle factor mentioned in the case study. You will be awarded 1 mark for **identifying the name of the strategy** and 1 mark for **explaining how Ross will apply it to his lifestyle**
    (10 marks)