

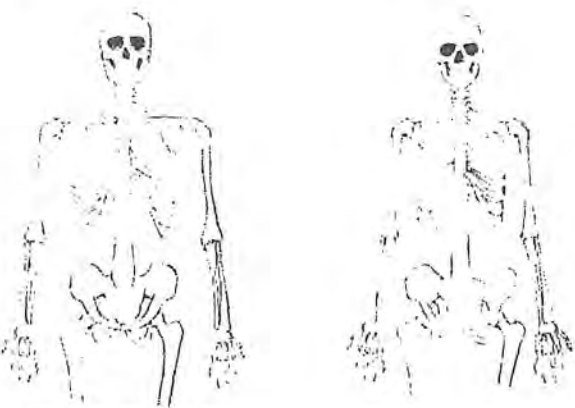
YEAR 8

KS3 PE THEORY

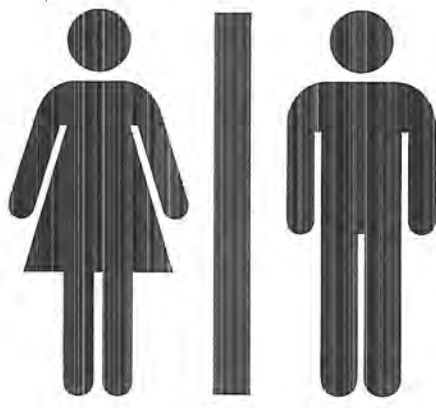
OPTIMUM WEIGHT

Identify what factor the below images represent.

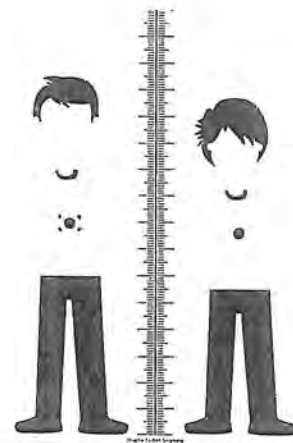
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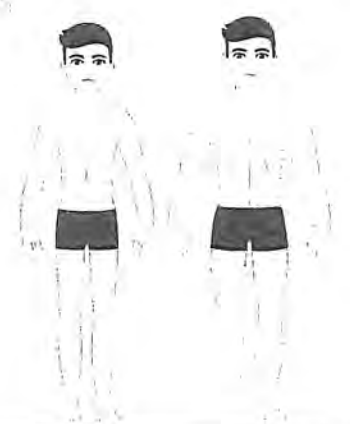
?



↑



↑



Select one factor of optimum weight from above and explain how it is relevant to two sports people of your choice.



-What sports performers may need a higher than average optimum weight and why? (Key words: power, strength, quick).

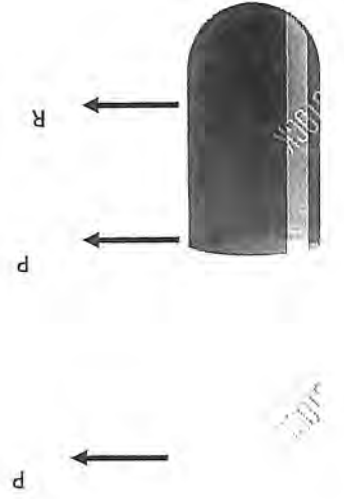
A higher than average optimum weight athlete would be....

-Why may a jockey need a lower than average optimum weight and what other sports performers would? Explain your answer.

_A jockey would need lower optimum weight because....

CARDIOVASCULAR SYSTEM

Label the components of blood (inc % shown in video)



% of blood?

Explain the purpose of blood composition in relation to a sport of your choice (i.e: long distance running/football). Tip: Remember functions of blood—'The function of WBC is....This is important because...'

Draw 4 images below to help remind you of the functions

Four horizontal lines for drawing, with an arrow pointing down to the first line.

Component of blood	1. P	
Function of component	2. P	Essential in the process of blood clotting
	3. R	
	4. W	

- 1.
- 2.
- 3.
- 4.

OPTIMUM WEIGHT

Definition of optimum weight:

Body weight affects sporting performance. Sometimes BMI can be a measure of optimum weight. $BMI = \text{weight (kg)} \div \text{height squared}$

Using the information below check whether the BMI stated is accurate.

Dan Cole Height 189cm Weight 115kg BMI 32.1

Jessica Ennis-Hill Height 165cm Weight 57kg BMI 20.9

Explain now if these athletes are at their optimum weight and why

Factor affecting optimum weight

Explanation:

Bone Structure

Gender

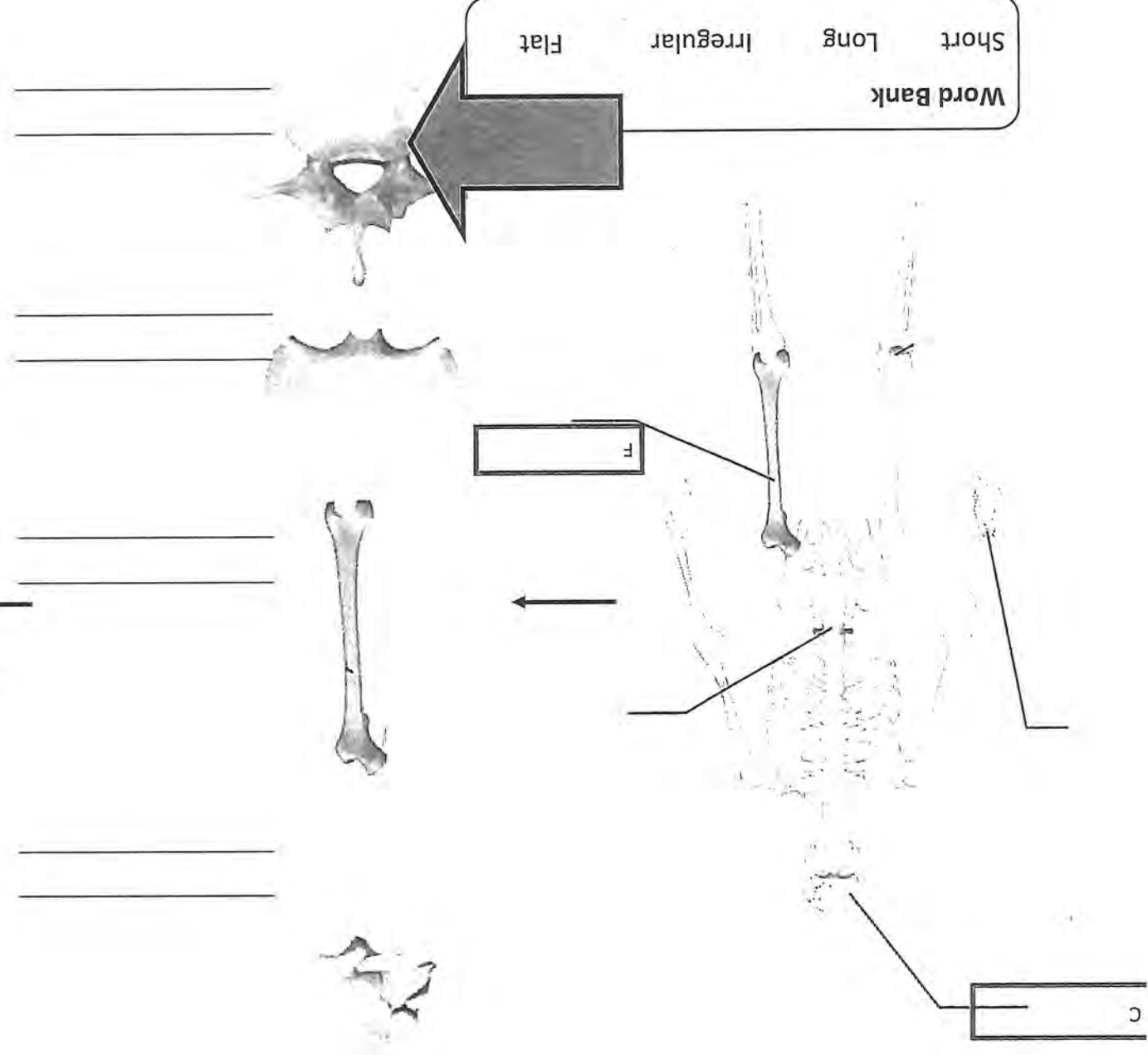
Height

Muscle Girth

SKELETAL SYSTEM

Complete using the word bank below. Insert the bones femur, cranium, vertebrae and carpals below, along with a description

Word Bank
 Short Long Irregular Flat



Classify the following according to their bone type.

Cranium
 Femur
 Tarsals
 Vertebral column
 Sternum
 Tibia
 Carpals
 Humerus
 Ribs

Can you remember how many bones are in the ADULT body?



SKELLETAL SYSTEM

What elements of our diet will aid bone growth?
 What foods is it found in?
 C

Use what you know about bone classifications to match the type of bone to a sport in which it is important or its function

Long	Useful in contact sports
Short	Generate movement, strength and speed.
Flat	Allow head to rotate
Irregular	Useful in running events



Explain the role of the classifications of bone in aiding performance in a sport of your choice—TIP—What are the functions?

Sentence starter: The role of the long bone is important forThis is important for football players because...

Task:

Why would Usain Bolt need protein in his diet? Which foods can protein be found in?

State and describe why a particular sportsperson would need more carbohydrates in their diet?

Why are fats important in your diet? Bonus question: what % should fats make up in your diet?

Key words:

- Growth
- Increase
- Recover

Key words:

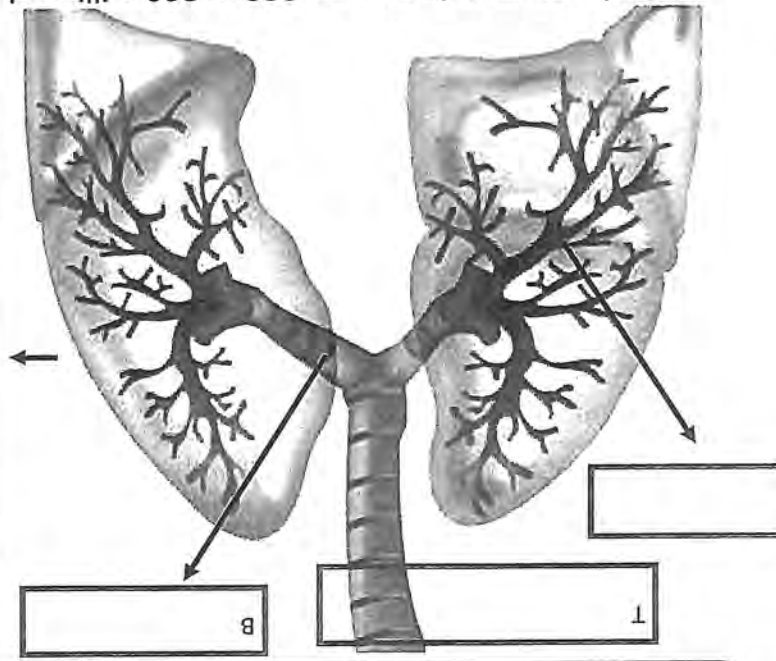
- Energy
- Simple/complex

Key words:

- Energy
- Warmth
- Protection

RESPIRATORY SYSTEM

Label where the trachea, bronchioles and bronchus are located



At the end of bronchioles can be found tiny air sacs (alveoli) which enable the process of gaseous exchange to take place.
 What are 2 key features of alveoli?

- 1.
- 2.

Do the lungs contain approx. 300 or 300 million alveoli? Circle YES/NO

Describe the process of gaseous exchange—Key words to use: CO₂, O₂, lungs, blood-stream, removed.

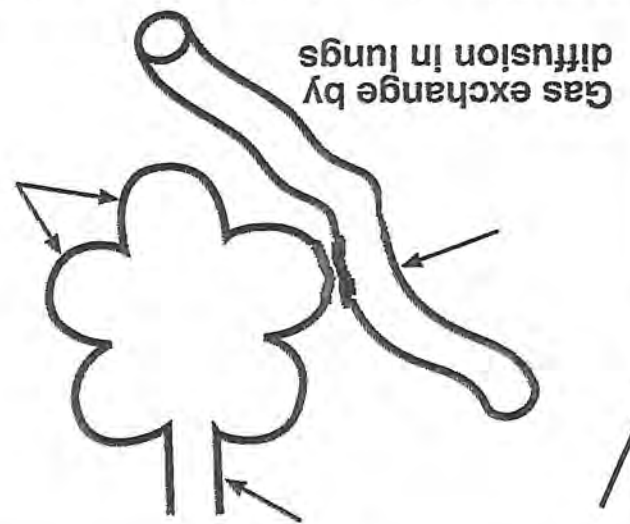
Gaseous exchange is the process...

Remember: The alveoli is the site at which gaseous exchange takes place.

Then using arrows, CO₂ and O₂ show the process of diffusion

Identify capillary, alveoli and bronchiole below

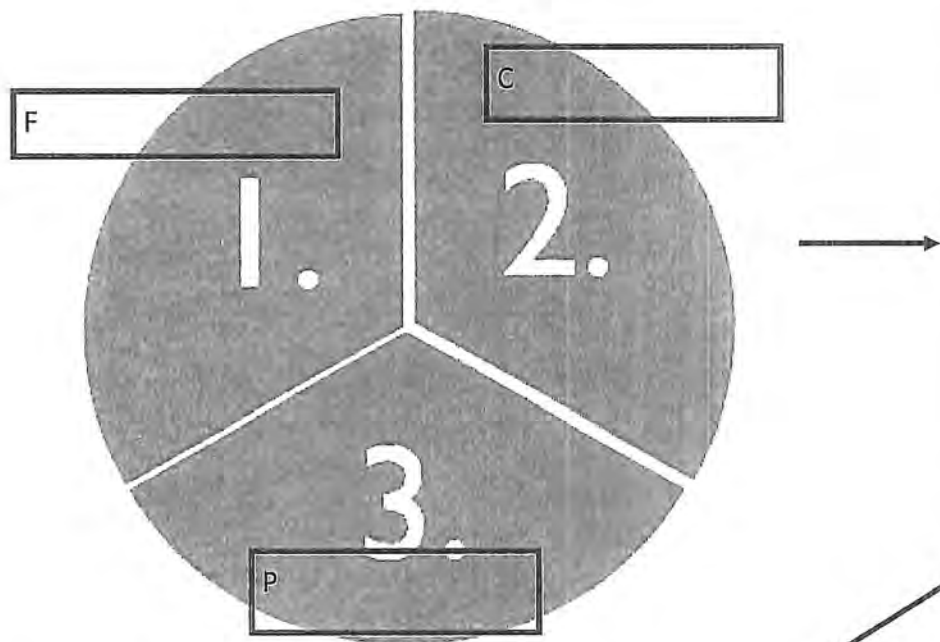
Define the term 'diffusion'



FACT: Did you know that the right lung is larger than the left? Why is this?

BALANCED DIET

A healthy balanced diet can be defined as ...



Macronutrients and their roles within physical activity

- 1.
- 2.
- 3.

Match the micronutrients to their explanation

- | | |
|----------|---|
| Fibre | Development of strong bones, muscle recovery |
| Minerals | Aids digestion and the absorption of glucose |
| Vitamins | Regulates body temperature and replenishes lost fluid |
| Water | Improves immune system and metabolism |

Water and hydration is key!

Water is expelled via;

1. S
2. P

FEEDBACK & GUIDANCE

What is the purpose of feedback?

Below can be found the 4 types of feedback along with their definitions. However these need to be matched up correctly.

Extrinsic Comes from an outside source e.g. a coach

Intrinsic Occurs after the skill has been executed

Concurrent Comes from within; received via kinaesthetic senses

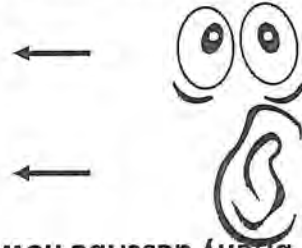
Terminal Experienced whilst completing the action

Fill the blanks

Extrinsic and intrinsic refer to _____ the feedback is received, whereas concurrent and terminal refer to _____ the feedback is received.

Scenario 1: A beginner goal shooter will receive feedback in two forms. Apply what you know and explain what these are (PTO).

State what type of guidance the below images represent and then briefly describe how this guidance may be given



Identify an advantage and disadvantage for each of the types of guidance

	+	-
Verbal		
Visual		
Mechanical		
Manual		

Using a practical example explain the use of mechanical guidance, and discuss its effectiveness (Tip: define it, then describe the positive and negatives and link it to a sport—gymnastics?)

COMPONENTS OF FITNESS: HRF



Identify the components of fitness below. The first letter has been provided. Then use arrows to match up to the correct definition.

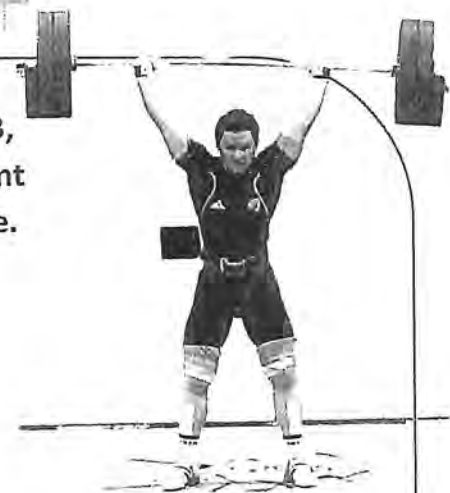


- F Percentage of body weight that is muscle, fat or bone
- B Ability to exert force
- M Ability to exercise whole body for long periods of time
- C Ability to use voluntary muscles repeatedly without tiring
- M Range of motion available at a joint

Having selected either scenario A or B, now decide upon the 3 most important components of fitness for that athlete.

Circle A or B

- 1.
- 2.
- 3.



Identify which is the most important and explain why below. (sentence starter: The most important is This is because..')



Explain the most important component(s) of fitness to a sporting example of your choice (this must be different to those in previous task)

TIP: Remember to link the component of fitness to the sport—why is it important? 'It is important because...'