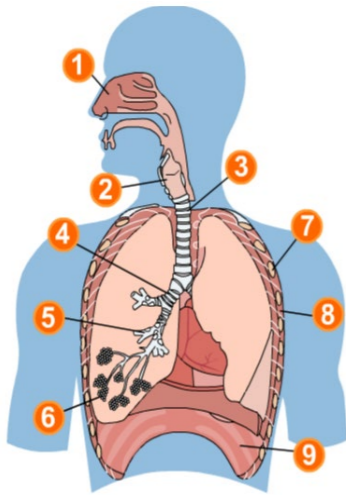


### 1.2.3: Respiratory System

What are the functions of the respiratory system?

- 1.
- 2.

Label it and state what happens at each point?



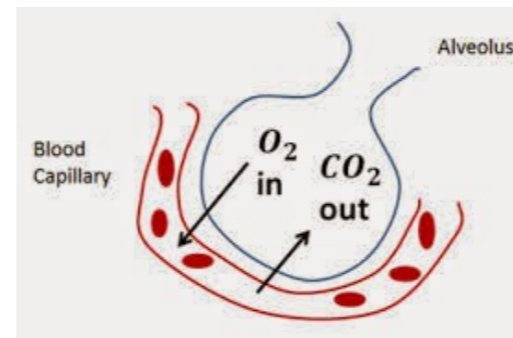
Immediate effects

Long term effects

Describe the link between the cardiovascular and respiratory system is?

What is the job of the Alveoli?

Describe what Gaseous Exchange is?



Tidal Volume is

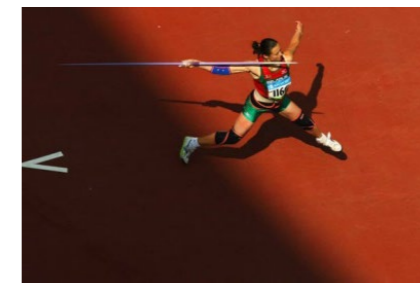
Vital Capacity is

Aerobic respiration is

Anaerobic respiration is

Explain what Oxygen Debt is, and provide an example

Explain which respiration system each athlete is using and provide examples



C/D

B

A/A\*

# Apply your knowledge to exam questions....

(h) Identify a benefit of long-term participation in physical activity to the respiratory system. (1)

- A Muscle atrophy.
- B Vital capacity.
- C Faster recovery rate.
- D Stroke volume.

(i) One long-term benefit of weight training is stronger bones. Which mineral is deposited to strengthen the bones: (1)

- A Sulphur.
- B Calcium.
- C Potassium.
- D Folic acid.

(j) Which of the following is **not** an immediate effect that exercise and physical activity can have on the respiratory system? (1)

- A Increased breathing rate.
- B Increased depth of breathing.
- C Increased lung capacity.
- D Oxygen debt.

(Total for Question 1 = 10 marks)

14 Lucy is a fast runner and enjoys playing rounders.

(a) **Figure 6** shows Lucy playing rounders, and preparing to hit the ball.



(Source: The Cochran Group, [www.roundersusa.com](http://www.roundersusa.com))

**Figure 6**

In order to hit the ball as far as possible, Lucy needs to rotate her arm back at the shoulder in order to get a good swing.

Which aspect of health-related exercise is this? (1)

(b) In the game, Lucy has to sprint between posts. If she sprints round all four posts she will build up an oxygen debt.

(i) What does the term 'oxygen debt' mean? (2)

(ii) How does Lucy repay this oxygen debt? (1)