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## Activity 4 – Using levels based mark schemes

### Purpose:

- Demonstrate method of marking using levels based mark schemes

### Task 1

Annotate (using AO1, AO2, AO3) the following responses using the relevant mark scheme.

### Example 1

18 Evaluate the extent to which the redistribution of blood flow is necessary during a hockey match?

The redistribution of blood is directing oxygenated blood to where it is needed most, especially during exercise. During exercise, blood flow and demand is increased across the body, which makes blood re-distribution extremely necessary in hockey as it entails a lot of aerobic, running, exercise. During the match, a player's leg muscles, like the quadriceps, need more oxygenated blood than the triceps, for example. Blood redistribution will then help the athlete keep at a constant rate of exercise for longer during the game. The redistribution of blood is vitally important during a hockey match because it keeps the athlete at a constant rate of exercise, for longer, which can also be helped by increased cardio-vascular endurance.

AO1  
AO2  
AO3

DO NOT WRITE IN THIS AREA  
DO NOT WRITE IN THIS AREA

|          |                               |
|----------|-------------------------------|
| Level: 2 | Mark Total: 4                 |
| AO1: 1   | AO2: 2<br>AO3: 1 (borderline) |

Borderline level 2, but placed here due to attempt at evaluation



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## Example 2

18 Evaluate the extent to which the redistribution of blood flow is necessary during a hockey match?

It's necessary in a hockey match as blood flow changes dramatically during exercise. At rest only 15-20% of cardiac output is directed to skeletal muscles (the majority of it goes to the liver and kidneys). So blood is redirected to areas where it's needed most this is known as shunting or accommodation. So when playing hockey the increase amount of carbon dioxide and lactic acid is noticed by the nerves. This makes the blood vessel size change shape so vasodilation will allow a greater amount of blood flow, bringing the oxygen around the body and to the muscles and flushing away the harmful waste products. So the hockey player can carry on running around and playing without becoming as much short of breath. Some muscle layers remain in a state of contraction and when vasoconstriction occurs and blood flow is restricted it's redirected to other body parts that much greater need it.

|          |                  |
|----------|------------------|
| Level: 2 | Mark Total: 6    |
| AO1: 3   | AO2: 1<br>AO3: 1 |

**EXAMPLE 2** - Level 2 response – several knowledge points – on reflection could be 2 for AO1 as some inaccuracies, however, given desired length of essay no need to say everything about redistribution – what they have said is relevant and is logically developed, application also has errors/omissions and similar attempt to evaluate. Response is better than previous but lacking in accurate detail and impact for level 3.



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## EXAMPLE 3 (different question – two pages)

19 Evaluate whether a 50 m front crawl competitive swimmer should use a combination of interval training and weight training to improve their performance.

A 50m swimmer should use a interval training because it improves the swimmers aerobic & speed as interval training is a <sup>fitness training</sup> test for different speeds. A01

A 50m swimmer would only need to swim for a short distance therefore they need a bit to train more anaerobically as they don't need as much oxygen supplied. A02

Interval training is focused on anaerobic endurance/speed, the swimmer would need to finish the swim in the quickest time possible, therefore she needs to train anaerobically to get her speed quicker. If she didn't do ~~weigh~~ interval training then her anaerobic speed wouldn't be as quick so they are more likely to lose the race if there not as quick. So ~~no~~ interval training would improve their performance. A03

However weight training wouldn't really be important improve their performance, as much as interval.

(Total for Question 19 = 9 marks)





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19. Weight training is usually for weightlifters or people that needs more muscles specific to their sport. Weight training would improve muscular endurance/strength. This could help the 50m swimmer because at the start of the race they need to get a powerful start. Without a powerful start the performer may be behind so they would need to catch them up by speed not muscular endurance. ~~the~~ Although power = strength x speed which means the swimmer would get a better start due to weight training improving strength. In conclusion interval training and weight training would be a good combination to improve their performance because interval training increases speed and weight training improves strength. If the swimmer does both of the training then they would have more power which would lead to the swimmer being quicker and having the best start so they have an advantage.

A03

7

|          |               |
|----------|---------------|
| Level: 3 | Mark Total: 7 |
| AO1: 2   | AO2: 2        |
|          | AO3: 3        |