

Max's Dynamic Warm-Up Sequencing Challenge

Learning objective: To understand the physiological importance of a warm-up and the correct sequence of activities to prepare the body for physical exercise.

Max the monkey has been busy calculating the most efficient way to prepare his muscles for a day of climbing and jumping. However, he has jumbled his routine! Read the descriptions provided below and place them in the correct sequence (1–8) to ensure a safe and effective warm-up. Consider which activities raise the heart rate gradually and which ones prepare specific muscle groups.

Word bank: Pulse raiser · Dynamic stretching · Joint mobilisation · Sport-specific drills · Gradual intensity · Flexibility · Circulation · Oxygen

1. 1. Jogging slowly around the perimeter of the playground to initiate the pulse raiser. Why is it vital to start with low-intensity movement rather than explosive sprinting? (2 marks)

2. 2. Ankle rotations and shoulder rolls. Explain why mobilising joints is essential before moving to more vigorous stretches. (2 marks)

3. 3. Side-stepping with arm swings (Dynamic stretching). Compare and contrast dynamic stretching with static stretching (holding a position). Which is better for a warm-up and why? (2 marks)

4. 4. High-knee skips. What might happen to a muscle if you attempt high-intensity movements without prior preparation? (2 marks)

5. 5. Short bursts of speed or agility ladder work. Justify your answer: Why do we include sport-specific movements at the end of the warm-up routine? (2 marks)

6. 6. Suppose you are leading a class warm-up. Create a 30-second sequence that incorporates both a pulse raiser and a dynamic stretch. (2 marks)

Draw: Draw a storyboard showing the progression of a warm-up, starting with a gentle walk and finishing with a high-energy sport-specific motion like a basketball jump or a football sprint.



Extension challenge: Design a 'Warm-Up Circuit' for your class that costs £0 to set up, using only body weight and natural space. Write a brief proposal explaining to your teacher why this specific sequence will improve performance during the main PE lesson. Use technical vocabulary such as 'cardiovascular', 'muscular endurance', and 'range of motion'.