

Max's Movement Masterclass: Designing the Perfect Warm-Up

Learning objective: To understand the physiological importance of a warm-up and to sequence a safe, effective routine for physical activity.

Max the monkey is preparing for a big day of gymnastics and athletics, but he needs your help to build the perfect warm-up! Your task is to sequence the stages of a warm-up correctly and explain why each step matters. Place the steps in order (1-4) and then complete the analytical questions to demonstrate your understanding of exercise science.

Word bank: Pulse raiser · Dynamic stretching · Mobility · Skill-based practice · Heart rate · Muscles · Temperature · Flexibility

1. Sequence these four stages in the correct order for a safe warm-up (1 being first, 4 being last): [] Dynamic Stretching, [] Pulse Raiser, [] Skill-based Practice, [] Mobility Exercises. Explain why the pulse raiser must always come before the stretches. (4 marks)

2. Max says, 'I can just start sprinting immediately to save time!' Justify why this is an unsafe approach for his muscles and heart. (3 marks)

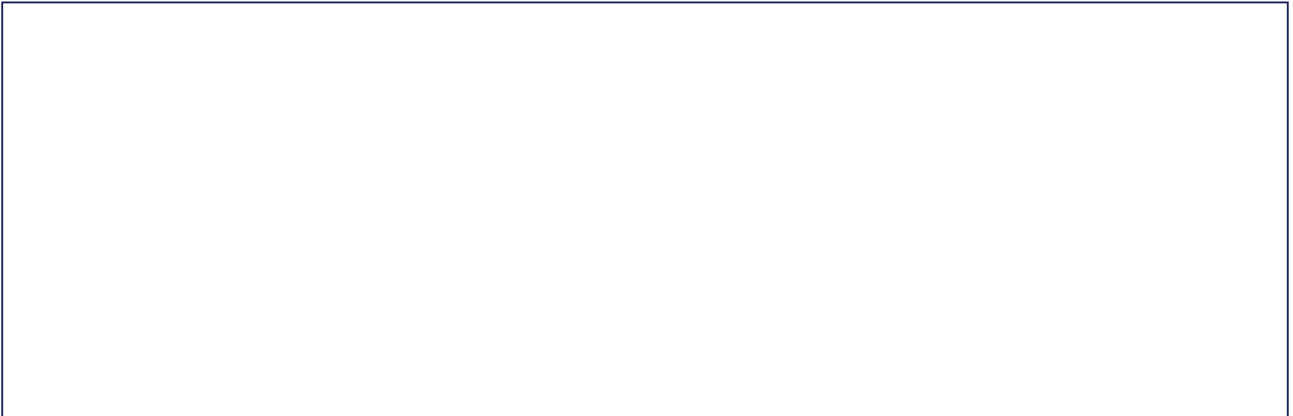
3. Compare and contrast 'dynamic stretching' with 'static stretching'. Why is dynamic stretching more effective during a warm-up? (3 marks)

4. If a child is warming up for a game of football, suggest one 'skill-based practice' activity they could include. Explain why this specific activity is relevant. (3 marks)

5. What might happen to a person's performance in a race if they skipped the warm-up entirely? Consider both physical and mental factors. (3 marks)

6. Max wants to buy some new equipment for his warm-up. If a skipping rope costs £4.50 and a set of agility cones costs £7.75, how much change would he receive from a £20 note? Show your calculation. (2 marks)

Draw: Draw a diagram showing Max the monkey performing a dynamic stretch (like a lunge or arm circle). Label the body parts that are being prepared for action and draw arrows to show the movement.



Extension challenge: Design a 'Warm-Up Poster' for your PE class. Include one exercise for each of the four stages. For each exercise, write a brief 'coaching point' explaining what the student should focus on to perform the movement safely and effectively.