

Year 5 PE: The Science of Warming Up

Learning objective: To understand the purpose of a warm-up in physical activity and identify the key components that prepare the body for exercise.

Read the front of each flashcard to test your knowledge about preparing your body for physical activity. Flip the card to check your answer.

What is the main purpose of a warm-up?

To prepare the body for physical activity, increase body temperature, and reduce the risk of injury.

Why do we use 'pulse raisers' at the start of a warm-up?

To gradually increase our heart rate and get more oxygen flowing to the working muscles.

What is 'dynamic stretching'?

Stretching while moving, such as high knees or arm circles, which helps prepare muscles for specific actions.

True or False: A warm-up helps to improve your performance in a game or activity.

True. Preparing the body helps you react faster and move more efficiently.

How does warming up help your joints?

It increases synovial fluid in the joints, making them feel smoother and more flexible for movement.

What does Nova the owl mean by 'increasing muscle temperature'?

Warmer muscles are more pliable and elastic, which prevents strains and tears during exercise.

Give an example of a pulse-raising activity.

Jogging on the spot, star jumps, or side-stepping.

Why should a warm-up be 'sport-specific'?

You should include movements that match the activity you are about to do, such as dribbling a ball if you are playing football.

How long should a typical school warm-up last?

Roughly 5 to 10 minutes to ensure the body is fully prepared without using up too much energy.

Max the monkey says: If you feel a sharp pain while warming up, what should you do?

Stop the activity, inform an adult, and rest to avoid making the injury worse.

What is the difference between static and dynamic stretching?

Static stretching is holding a position while still, dynamic stretching involves controlled movement through a full range of motion.

Name one psychological benefit of a warm-up.

It helps you focus your mind and get ready for the challenge ahead.