

1. adenosine triphosphate (ATP)	a high energy compound that stores and transfers energy to body cells allowing for muscle contraction	21. haemoglobin	the substance in the blood that binds to oxygen and transports it around the body
2. aerobic interval training	alternating sessions of work and recovery	22. kilojoule	a unit of measure of the energy value of food
3. aerobic metabolism	the breakdown of fuel in the presence of oxygen to produce energy (ATP)	23. lactate inflection point (LIP)	a point beyond which a given power output cannot be maintained
4. aerobic threshold	a level of exercise intensity that is sufficient to cause a training effect (around 70% of maximal heart rate)	24. lactate threshold	the point at which lactic acid accumulates rapidly in the blood
5. aerobic training zone	a level of intensity that causes the heart rate to be high enough to cause significant training gains	25. lactic acid	a by-product of the incomplete breakdown of carbohydrate in the absence of oxygen
6. anaerobic	a reaction that occurs in the absence of oxygen	26. lung capacity	the amount of air that the lungs can hold
7. anaerobic glycolysis	the process where glucose is broken down in the absence of oxygen to produce energy	27. mechanical energy	motion or movement energy
8. anaerobic threshold	a level of intensity where the accumulation of lactic acid in the blood increases very quickly	28. metabolism	the sum of all chemical processes within cells that transforms substances into energy
9. atrophy	wasting away or decreasing in size	29. muscle hypertrophy	muscle growth together with an increase in the size of muscle cells
10. capillaries	tiny blood vessels that connect smallest arteries to the smallest veins	30. oxygen uptake	the ability of the working muscles to use the oxygen being delivered
11. cardiac output	the amount of blood pumped by the heart per minute	31. plyometrics	a special range of exercises in which a muscle is lengthened using an eccentric contraction, then followed by a shortening or concentric contraction
12. chemical energy	energy stored in bonds between atoms	32. PNF stretching	a progressive cycle involving a static stretch, an isometric contraction and a period of relaxation in the lengthened position
13. circuit training	activity in which participants move from one station to another performing specific exercises at each	33. respiration	the process of breathing
14. creatine phosphate (CP)	an energy-rich compound that serves as an alternate energy source for muscular contraction	34. resting heart rate	the number of heartbeats per minute while the body is at rest
15. dynamic stretching	activity using speed and momentum with movements experienced in a game to increase flexibility	35. resynthesis	the process of restoring ATP to its former state
16. fartlek training (speed play)	activity in which participants vary their speed and terrain, engaging both anaerobic and aerobic energy systems	36. slow-twitch muscle fibres	fibres that contract slowly for long periods of time and are recruited for endurance activities
17. fast-twitch muscle fibres	fibres that reach peak tension quickly and are recruited for power and explosive movements	37. static stretching	a safe form of stretching in which the stretch is held for a period of 10-30 seconds
18. flexibility	the range through which joints and body parts are able to move	38. strength	the ability of a muscle or muscle group to exert a force against a resistance
19. glycogen	the storage form of glucose, used for fuel when blood glucose levels decline	39. stretch reflex	an involuntary muscle contraction that prevents fibre damage if muscles are lengthened beyond their normal range
20. glycolysis	the process of using glycogen or glucose as fuel	40. stroke volume	the amount of blood ejected by the left ventricle of the heart during a contraction, measured in mL/beat