

Pearson BTEC Tech Award Sport					
Component 3: Learning Aim A : Explore the importance of fitness for sports performance					
A1 The importance of fitness for success in sport		A2 Fitness training principles		A3 Exercise intensity and how it can be determined	
1. Aerobic Endurance	Events /sports lasting more than 30 minutes	12. FITT training principles	Frequency, Intensity, Time, Type	24. Intensity	Can be used to measure how hard someone is working during exercise.
2. Muscular Endurance	Events / sports lasting more than 30 minutes	13. Frequency	The number of training sessions completed over a period of time.	25. Measuring heart rate (HR)	Can be used to give a measurement of the intensity of exercise.
3. Muscular Strength	Activities requiring force, e.g. throwing events	14. Intensity	How hard an individual will train	26. Training threshold	The safe and effective intensity to work at to undergo adaptation.
4. Speed	Activities requiring force, e.g. sprinting	15. Time	How long an individual will train for	27. Aerobic training zone	60-85% of your maximum heart rate
5. Flexibility	Activities requiring a wide range of movement around a joint. E.g. gymnastics, martial arts	16. Type	How an individual will train by selecting a training method to improve a specific component of fitness	28. Anaerobic training zone	85-95% of your maximum heart rate
6. Body Composition	Low body fat, e.g gymnastics High muscle mass, e.g. sprinters	17. Progressive overload	In order to progress, training needs to be demanding enough to cause the body to adapt, improving performance	29. Training zones	The correct intensity at which you should exercise to experience fitness improvement.
7. Power	Activities requiring explosive movement, e.g. gymnastics, basketball	18. Specificity	Training should meet the needs of the sport, or physical / skill-related fitness goals to be developed	30. The Borg RPE scale	Rating of perceived exertion (RPE) scale
8. Agility	Activities requiring quick changes of direction, e.g. dodging the opposition in a team game, freestyle skiing	19. Individual differences	Training should meet the needs of an individual	31. Relationship between RPE and HR	$RPE \times 10 = HR$ (bpm)
9. Reaction time	Any activity where a quick decision or response to a stimulus is needed	20. Adaptation	Changes to the body due to increased training loads	32. 1RM for strength	The maximum weight you can lift for a single repetition.
10. Balance	An activity requiring the control fo the distribution of weight or to remain upright and steady.	21. Reversibility	If training stops, or the intensity of training is lowered, fitness gains from training are lost	33. 15RM for muscular endurance	The maximum weight you can consistently lift for 15 repetitions.
11. Coordination	Any activity requiring the movement of two or more body parts and can include the use of sporting equipment, e.g. hand, eyes & tennis racquet in tennis.	22. Variation	Altering types of training to avoid boredom and maintain motivation	34. Technology to measure exercise intensity	<ul style="list-style-type: none"> - Heart rate monitors - Smart watches - Apps
		23. Rest and recovery	To allow the body to recover and adapt.		