

Topics Covered

Learning aim A: Know about the components of fitness and the principles of training

Topic A.1 Components of physical fitness:

- Flexibility
- Aerobic Endurance
- Muscular Endurance
- Muscular Strength
- Body composition
- Speed

Topic A.2 Components of skill-related fitness:

- Coordination
- Reaction Time
- Agility
- Balance
- Power

Topic A.3 Why fitness components are important for successful participation in given sports in terms of:

- being able to successfully meet the physical demands of the sport in order to reach optimal performance
- being able to successfully meet the skill-related demands of the sport in order to reach optimal performance
- being able to perform efficiently
- giving due consideration to the type of event/position played.

Topic A.4 Exercise intensity and how it can be determined:

- intensity – be able to measure heart rate (HR) and apply HR intensity to fitness training methods
- know about target zones and training thresholds; be able to calculate training zones and apply HR max to training: $HR\ max = 220 - age\ (years)$
- be able to calculate 60–85% HR max and know that this is the recommended training zone for cardiovascular health and fitness
- know that the Borg (1970) (6–20) Rating of Perceived Exertion (RPE) Scale can be used as a measure of exercise intensity
- know about the relationship between RPE and heart rate where: $RPE \times 10 = HR\ (bpm)$
- application of the FITT principles to training methods, regimes and given exercise situations.

Topic A.5 The basic principles of training (FITT):

- frequency: the number of training sessions completed over a period of time, usually per week
- intensity: how hard an individual will train
- time: how long an individual will train for
- type: how an individual will train by selecting a training method to improve a
- specific component of fitness and/or their sports performance.

Topic A.6 Additional principles of training:

- progressive overload
- specificity
- individual differences/needs
- adaptation
- reversibility
- variation
- rest and recovery
- application of the principles of training to training methods, regimes and given exercise settings.

Learning aim B: Explore different fitness training methods

Topic B.1 Requirements for each of the following fitness training methods:

- safe, correct use of equipment
- safe, correct use of training technique
- requirements for undertaking the fitness training method, including warm-up and cool down
- application of the basic principles of training (FITT) for each fitness training method
- linking each fitness training method to the associated health-related/skill-related component of fitness.

Topic B.2 Additional requirements for each of the fitness training methods:

- advantages/disadvantages
- application of exercise intensity to fitness training methods
- application of principles of training to fitness training methods
- appropriate application of fitness training method(s) for given situation(s)
- appropriate application of fitness training method(s) to given client needs/goals/aims/objectives.

Topic B.3 Fitness training methods for:

- Flexibility training – static, ballistic and PNF
- Strength, muscular endurance and power training – circuit training, free weights, plyometrics
- Aerobic endurance training – continuous training, fartlek training, interval training, circuit training
- Speed training – hollow sprints, acceleration sprints, interval training



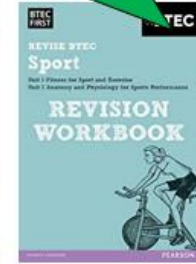
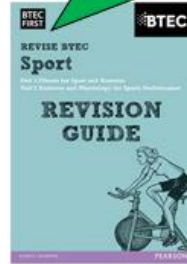
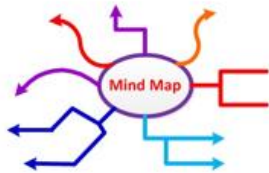
Revision Materials



Type in 'Mr B btec sport' into YouTube



www.btecpe.com



**Retired Onscreen Test
Version 2 Unit 1: Fitness
for Sport and Exercise**

BTEC Firsts Level 1/2 in Sport

