

Physical Training

Components of fitness

Agility - the ability to change direction at speed

Speed - how quickly an individual can move

Power - also known as explosive strength or anaerobic power. It is speed and strength combined (speed x strength = power)



Types of training

Weight training - involves the use of free weights, resistance machines or any object which can be safely lifted. Allows performers to target specific muscles/muscle groups to suit their individual needs.

Advantages:

- Relevant to all sports
- Can be easily adapted for different fitness aims e.g. muscular strength or muscular endurance

Disadvantages:

- Heavy weights can increase blood pressure
- Injury can occur

Interval training - periods of high-intensity effort with periods of low-intensity effort.

Advantages:

- Can mix aerobic and anaerobic exercise which replicates team games

Disadvantages:

- Can become boring

Principles of training

Progressive Overload - gradually increase the amount of exercise and keep overloading the body.

Use F.I.T. (Frequency, Intensity, Time) to overload the body



Principles of overload:

Frequency - how often you train

Intensity - how hard you train

Time - how long to train for

Fitness Testing

Standing Broad Jump Test (Power) - Stand behind the line with feet shoulder width apart. Take-off on two feet, jump as far as possible landing on two feet and measure the distance jumped.

Illinois Agility Test (Agility) - Start face down on the floor, run around the cones as fast as possible recording your time in seconds.



CALCULATIONS

Maximum Heart Rate (Max HR) = 220 - age

Aerobic (with oxygen) training zone - 60-80% of Max HR

Anaerobic (without oxygen) training zone - 80-90% of Max HR

