

# Component 1 Health and Fitness

## Fitness, Health, Exercise & Performance

Component	Definition	Explanation
<b>Fitness</b>	'The ability to meet the demands of the environment'	Are you fit enough to do your everyday tasks in your life? e.g. compare the fitness needed to be a window cleaner to an office worker
<b>Health</b>	'A state of complete emotional, physical and social wellbeing and not merely the absence of disease and infirmity'	Not only are you free from disease and infirmity you are socially active, physically fit and have no emotional problems such as stress or anxiety
<b>Exercise</b>	'A form of activity done to maintain and improve health or physical fitness. It is not competitive sport'	Exercise can be going to the gym to improve health such as losing weight, it could also be making you physically fitter such as improving your strength
<b>Performance</b>	'How well a task is performed'	When taking a free kick did you hit the ball with fluency and accuracy, did you make mistakes?

## Health Fitness & Exercise

Exercise improves fitness, an increase in fitness will improve performance.

Exercise improves health

- **Physical** - reducing the chance of CHD
- **Social** - meet new friends
- **Emotional** - reduce stress and anxiety



12 min cooper run



12 min cooper swim



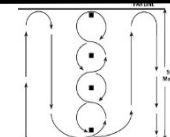
Harvard step test



30m sprint



Sit & reach



Illinois agility run



Grip dynamometer



Vertical jump

## Fitness Testing

**How**

- Start of an exercise plan
- During the plan (monitor)
- At the end of a programme (has it worked)

**Why**

- Establish current fitness levels
- Identify strengths and weakness
- Plan & set targets
- Check for improvements

**PARQ** = Physical readiness questionnaire and is designed to identify any potential health problems

Cardiovascular fitness	Muscular Endurance	Flexibility	Reaction Time	Power	Speed	Agility	Balance	Coordination	Body Composition	Strength
'The ability to exercise the entire body for long periods of time without getting tired'	'The ability to exercise the voluntary muscles many times without getting tired'	'The range of movement possible at a joint'	'The time taken to respond to a stimulus'	'Is the ability to do strength performances quickly' Power = Strength x Speed	'The amount of time it takes to perform a particular action or cover a particular distance'	'Is the ability to change position of the body quickly while maintaining control of the movement'	'Is the ability to retain the body's centre of mass above the base of support' static or dynamic	'Is the ability to use two or more body parts together'	'Is the relative ratio of fat mass to fat-free mass in the body'	'The amount of force a muscle can exert against a resistance'
Explanation	Explanation	Explanation	Explanation	Explanation	Explanation	Explanation	Explanation	Explanation	Explanation	Explanation
Performers who exercise aerobically over a long period of time and need to maintain a high quality of performance	Performers need good muscular endurance to be able to maintain a high standard of performance throughout the race/match	Performers need good flexibility to be able to get into position without getting injured and to perform complex movements	Performers need to react to a stimulus. A stimulus can include: a ball, whistle, starters gun, or an opponent	Performers need power to improve performance. Speed and strength are needed in sports where you throw jump kick and sprint	Performers need speed to get from one position to another. This may be leg speed to run or arm speed when throwing or hitting	Performers need agility to change direction quickly. This can be used to evade opponents or move around the court or pitch quickly	Performers need balance so they don't fall over. E.g. in gymnastics when performing a balance (static) or travelling across the beam (dynamic)	Performers need coordination when they are using two body parts at the same time. It can be used when aiming, or striking/hitting a ball	A performer needs to have the right body composition for their sport. E.g. a marathon runner needs to be light and would have low fat and low muscle	Performers need Strength is sports that require the need to create a large force. This can be lifting, punching, tackling, shooting
Sports	Sports	Sports	Sports	Sports	Sports	Sports	Sports	Sports	Sports	Sports
Games players Long distance runners Long distance rowers	Cyclist (legs) Boxing (punching) Swimmer (arms/legs)	Gymnasts Goal keepers Divers	Sprinters Badminton players Rugby players	Shot put Football (kicking) High jump	Sprinting Badminton Javelin thrower	Rugby side-step Tennis Badminton	Gymnastics Skiing Hammer throw	Tennis Archery Football	Marathon runner Sprinter Sumo wrestler	Weight lifting Rugby Gymnastics
Fitness Test	Fitness Test	Fitness Test	Fitness Test	Fitness Test	Fitness Test	Fitness Test	Fitness Test	Fitness Test	Fitness Test	Fitness Test
Cooper run/swim Harvard step test	1-minute press ups 1-minute sit ups	Sit and reach	N/A	Vertical jump	30m sprint	Illinois agility run	N/A	N/A	N/A	Grip dynamometer