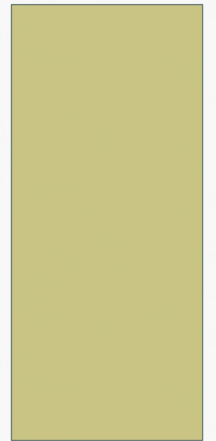




THE COMPONENTS OF FITNESS

PHYSICAL EDUCATION



1. STRENGTH

- **STRENGTH** is the ability of a muscle or group of muscles to apply force and overcome resistance. It is improved by doing low repetitions of heavy weights.



1. STRENGTH

There are three types of strength:

- ❑ **DINAMIC STRENGTH**
- ❑ **EXPLOSIVE STRENGTH**
- ❑ **STATIC STRENGTH**



1. STRENGTH

DINAMIC STRENGTH is the strength you need to support your own body weight, or move a heavy load over a long period of time, for example swimming or rowing. It is closely linked to endurance because the muscles need to work continuously



1. STRENGTH

EXPLOSIVE STRENGTH is the strength needed for a single explosive action. It involves power, which is the combination of speed and strength. The action is over in a matter of seconds, e.g. a hit in cricket or a discus throw



1. STRENGTH

STATIC STRENGTH is the greatest amount of force that can be applied to an immovable object. It is important in any activity where you have to brace yourself against another performer.



2. FLEXIBILITY

FLEXIBILITY is also known as suppleness. It is defined as the range of movement possible at a joints



2. FLEXIBILITY

To improve flexibility you can do:

- Static stretching**
- Active stretching**
- Passive stretching**



2. FLEXIBILITY

Static stretching occurs when a muscle is held in a stretched position and stay still for at least 10 seconds



2. FLEXIBILITY

Active stretching involves movement to stretch a muscle and is repeated gently and rhythmically for about 30 seconds



2. FLEXIBILITY

Passive stretching involves your coach moving you into the position and gently holding you there for several seconds. It means some kind of external force is applied



2. FLEXIBILITY

Current research suggest that active stretching is the most beneficial form for warming up before sport to prepare the muscles for exercise and help to prevent injury.



3. ENDURANCE

Types of endurance:

- ❑ **MUSCULAR ENDURANCE** is the ability of a group of muscles to work against a resistance or keep moving for a long period of time without tiring
- ❑ **STAMINA** is the ability of the body to withstand the onset of fatigue and carry on working
- ❑ **CARDIOVASCULAR ENDURANCE** is the ability of the heart and circulatory system to supply oxygen to the muscles



4. SPEED

SPEED is the ability to move the body or part of it quickly.



4. SPEED

There are two factors that contribute to speed:

- ❑ **Reaction time**
- ❑ **Movement time**



4. SPEED

Factors restricting speed include:

- ❑ **Inherited factors**, such as the number of fast twitch muscles fibres.
- ❑ **A person's body shape, size, weight, muscle size and bone structure**, which may prevent them from increasing speed
- ❑ The **duration** and **distance** of the event as it is not possible to maintain speed indefinitely and each person has an optimum distance.

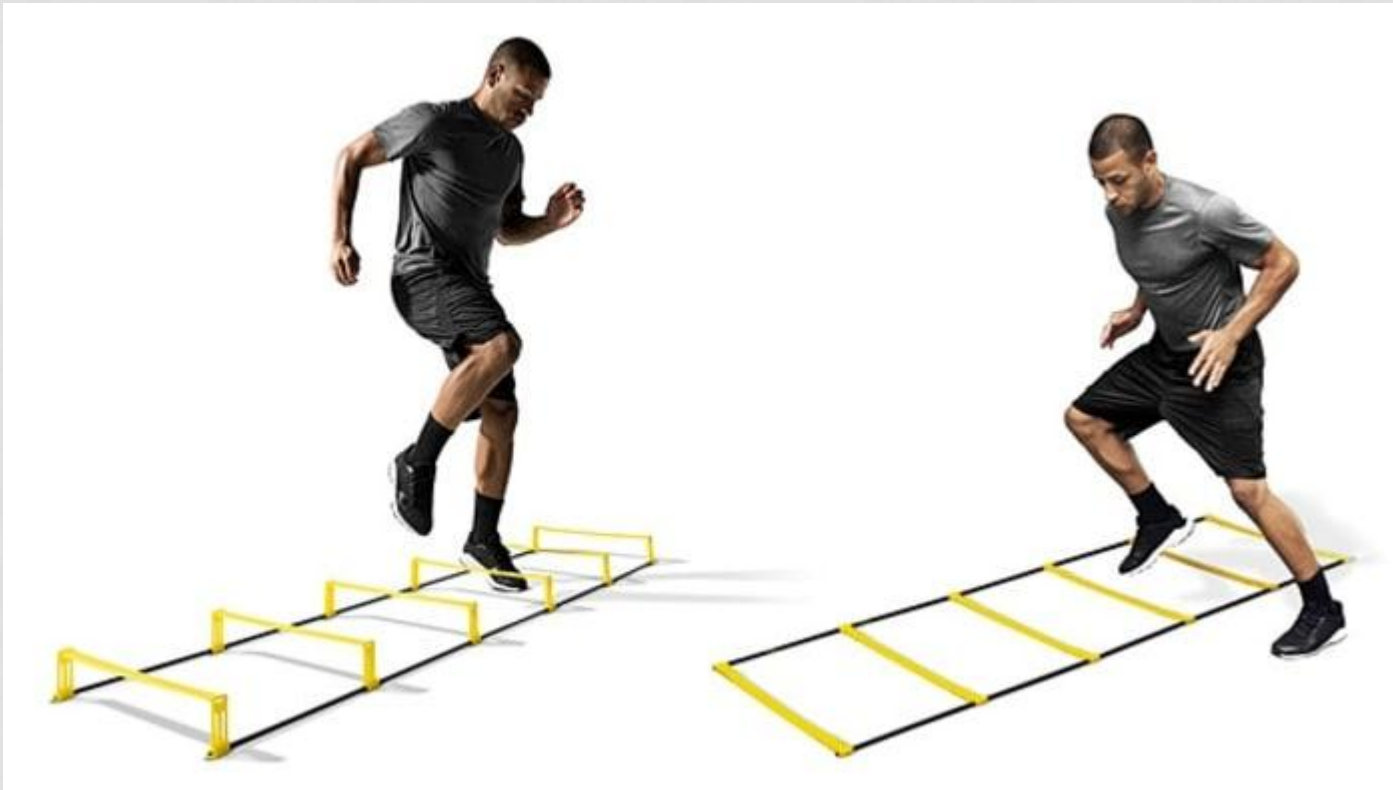
5. SKILLS

To perform well in sport you need to have a high level of skill and this will depend to a certain extent on some of the following aspects of specific or skills-related fitness.

- Agility**
- Balance**
- Co-ordination**
- Power**
- Reaction time**
- Timing**

5. SKILLS

- ❑ **Agility** is the ability to change speed and or direction quickly.



5. SKILLS

- ❑ **Balance** is when we are able to control the body in movement and stillness



5. SKILLS

- ❑ **Co-ordination** is the ability to link all the parts of a movement into one efficient smooth movement



5. SKILLS

- ❑ **Power** is a combination of the maximum amount of speed with the maximum amount of strength; it is linked to explosive strength. Power cannot be sustained for long.



5. SKILLS

- ❑ **Reaction time** is how quickly a performer responds to something like a starting gun or a ball coming towards them.



5. SKILLS

- ❑ **Timing** is the ability to act at the right moment



6. BODY COMPOSITION

- Body composition is the percentage of body weight that is fat, muscle and bone.

