



2° ESO: PHYSICAL FITNESS

Physical fitness is the ability to do a daily physical workout without feeling too tired. For this, you need the four "S's"



These are the components of physical fitness. In Spanish, we call them "Capacidades Físicas Básicas".

1. STAMINA:

Stamina helps your muscles to work for a long period of time.

With it, you can do exercises for a long period of time, no matter the intensity.

For example:

Cycling: In the Tour of France they ride more than 200km over a lot of days, but they also

sprint!

Marathon runners: they run for more than 2 hours at a very fast pace.

Swimmers: in the 1500m race

Footballers: they need to run for 90 minutes without being tired so they can dribble and

shoot.

Stamina is also called **Endurance**.



There are two types of Stamina or Endurance: Aerobic and Anaerobic.

Aerobic Stamina: During aerobic activity, your heart and lungs give your muscles enough oxygen, so you can do exercise for long periods of time at a medium intensity. (marathon, cycling..)

Anaerobic Stamina: During anaerobic activity, your muscles don't have enough oxygen. These exercises are shorter but have a very high intensity (100m sprint, a basketball attack). With anaerobic stamina, you can do these exercises faster and get tired later.

Aerobic Exercise is very good for your health. It develops your heart, your lungs and your circulatory system.

2. STRENGTH:

Strength is the ability to use muscles against a resistance (a force or a weight).

With it, you can move or lift weights, and you can move your body weight easier.

Some sports in which strength is important:

Weightlifting: to lift as much weight as you can.

Judo: to throw your opponent.





Climbing: you need to move your body weight up the mountain. Athletics: to jump higher or longer and to throw the javelin or hammer.

There are *three types of strength*:

- a) Maximum strength: to lift very high weights: the best example are olympic weightlifters.
- b) Explosive strength: to do a movement as fast as we can, moving a small weight (javelin throwers, for example)
- c) Resistance-Strength: to do exercises with medium weights for a long time (in judo, combats last 4 minutes; rowers must move the boat for a long time also)

3. SPEED:

Speed is the ability to one or more movements in a short period of time.

Some examples of sports where speed is important:

Fifty meters swimmers, react quickly to the horn and swim very fast. Handball goalkeepers react very fast to stop balls.

Fencers must move fast to touch the opponent with their sword.

When we talk about the speed to move from one place to another (running, biking or swimming), we call it a sprint.

Speed means reacting quickly and moving fast.



Reaction speed: moving as fast as you can after the referee shoots the gun in a 100m sprint. In team sports there is also reaction speed: chasing your opponent when he runs away from you, or reacting to a volley ball spike quickly.

Speed of an isolated movement: a movement you do only once, e.g. a karate kick or a tennis service must be very fast.

Speed of combined movements: cyclic movements, movements you repeat: any sprint in running or swimming is a series of movements of your arms and legs, a dribbling in football, etc.

4. SUPPLENESS:

Suppleness is the ability to have a wide range of movement with any part of your body. It is also called Flexibility.

Flexibility is very important in all sports, because with it, you have better performance and fewer injuries.

It is important for gymnasts, for hurdle runners or taekwondo fighters to do kicks.

There are two types of flexibility:

Dinamic Flexibility: you use it when you do wide and relaxed movements. Static Flexibility: you use it when you hold one position for some seconds. There is no movement.

Flexibility is the only physical ability that decreases as you grow older.

You need to spend a little time everyday to maintain and enhance it.







Benefits of suppleness training:

- -You have fewer injuries.
- -Your muscles are more elastic and more powerful.
- -Your movements are not limited.