

# 2º ESO: PHYSICAL FITNESS

2ºESO-1ST TERM

Votar

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

**S**trength



**S**tamina



**S**peed



**S**uppleness

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 or Resistance.***

There are two types of Stamina: 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.

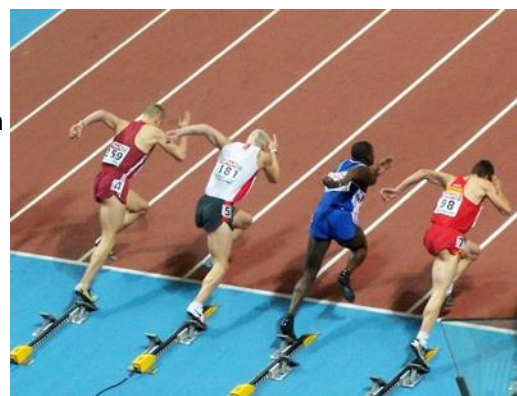
b) **Explosive strength:** to do a movement as fast as we can, moving a small weight (javelin throwers, for example)

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 do 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.*

You can find:

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

**Single movement Speed:** a movement you do only once, that has a beginning and an end. e.g. a karate kick or a tennis service must be very fast.

**Cyclical speed:** 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 do ample movements 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 less injuries.

It is important for gymnasts, for hurdle runners or tae-kwondo fighters to do kicks.

There are two types of flexibility:

**Dynamic 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 every day to maintain and enhance it.*

#### **Benefits of suppleness training:**

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

