

# GCSE PE: COMPONENTS OF FITNESS



|                   | Component                         | Definition  | Example                         | Explanation  |
|-------------------|-----------------------------------|---|---------------------------------|--|
| A: HEALTH-RELATED | Muscular Strength                 | The maximum force a muscle/group of muscles can apply against a resistance  | Weight lifter and Shot Putt     | Weight lifting need lots of muscular strength to lift the heaviest weight. Shot Putt need muscular strength to push the putt the furthest distance.  |
|                   | Muscular Endurance                | The ability to move your body and muscles repeatedly without fatiguing  | Long distance cyclist and Rower | Long distance cyclists such as Chris Froome and rowers need muscular endurance to use the same group of muscles (e.g. hamstring & quadriceps) in the same action for a long period of time.                                |
|                   | Cardiovascular/ Aerobic Endurance | The ability to continue exertion while getting energy from the aerobic system used to supply the body with energy. Also referred to as <i>stamina</i> | Marathon Runner                 | Long distance athletes such as Mo Farah running the marathon need cardiovascular endurance to ensure their working muscles are getting sufficient oxygen and nutrients.  |
|                   | Flexibility                       | Range of movement available around a joint  | Gymnastics                      | Athletes such as gymnasts need flexibility to look aesthetically pleasing. High jump need flexibility to reach/bend over the bar.  |
|                   | Speed                             | The ability to move quickly across the ground or move limbs rapidly through movements   | Sprinter                        | Sprinters need the most speed, to complete the race in the fastest time.   |
| B: SKILL-RELATED  | Agility                           | The ability to change direction at speed  | Football, Rugby and Basketball  | Football, Rugby and Basketball need agility to dodge around defenders at speed whilst keeping possession.  |
|                   | Balance                           | The ability to maintain your centre of mass, over a base of support   | Gymnastics                      | Many gymnastic events need good balance to complete all movements effectively without falling over.  |
|                   | Co-ordination                     | The ability to move two or more body parts under control, smoothly and efficiently  | Tennis and Badminton            | Tennis and badminton need good co-ordination to see, move and strike at the same time.   |
|                   | Power                             | The ability to exert a maximal force in as short a time as possible <b>or</b> Strength x Speed  | Weight lifter                   | A weight lifter needs power to move a heavy weight quickly above their head. A sprinter need power to generate force off the ground to increase their quickness.   |
|                   | Reaction time                     | How quickly someone can respond to a stimulus   | Table tennis and Sprinter       | Sprinters at the sprint start need reaction time to set off as soon as the gun goes off. Table tennis need reaction time to change their body position to the direction of the ball quickly to be able to return the shot. |