

Knowledge Organiser: PE Year 7 Fitness

Components of fitness

Key Words	Description	Examples	Useful Information
Aerobic Endurance	The ability to exercise the entire body for long periods of time.	Playing 90 minutes in football matches • Playing Cricket matches that could last for 3-5 days • Running in a marathon	Describes the efficiency of the heart, lungs + blood vessels to deliver oxygen to working muscles so physical work can be maintained.
MUSCULAR ENDURANCE	The ability to use voluntary muscles many times (over a long period) without tiring	Long distance walking • Long distance running • Long distance swimming	
STRENGTH	The ability to lift a maximum weight in one attempt	DYNAMIC – required to start and maintain movement of the body e.g. cycling or doing loads of press-ups • EXPLOSIVE – required when a high amount of force has to be applied quickly e.g. shot putting • STATIC – required when applying strength to a fixed static object e.g. pushing in a rugby scrum	Muscular strength – The amount of force a muscle can exert against a resistance
Flexibility	The range of movement possible at a joint	Hurdling in athletics • Gymnastics – performing complex sequences • Swimming -	
Speed	The differential rate at which an individual is able to perform a movement or cover a distance in a period of time	100m Sprint	
Agility	The ability to change the position of the body quickly and to control the movement of the whole body	E.g. changing direction in netball	
Reaction time	The time between the presentation of a stimulus and the onset of movement	100m sprinter starter gun	

Effects of exercise

Short term	Long term
Increased muscle contractions	Increased bone density
Increased heart rate	Heart muscle increases in size and strength
Increased rate of breathing	Increased strength of diaphragm and intercostal muscles

Warm up

What should a warm-up involve?

- ⇒ Gentle pulse-raising activity
- ⇒ Joint Mobility
- ⇒ Flexibility

Cool Down

What should a Cool-down involve?

- ⇒ May include slow exercises or passive stretching and could mirror the early part of the warm-up.
- ⇒ Breathing exercises are also useful

Pulse Rate

What is heart rate?

The amount of times your heart beats per minute. For 7-16 year olds a normal resting pulse rate is between 75 and 100. It varies according to your age, level of fitness and how active you are being.

What is your target heart rate zone?

The zone you want to reach for heart health benefits to take place.

Target Heart Rate Zone

THRZ = 70-85% of your maximum heart rate.

Maximum heart rate = 220 – age

Taking Your Own Pulse

