

# GCSE Physical Education – Principles of Training

Principles of training - **Guidelines** that ensure **training is effective** and results in **positive adaptations**. These principles are used in **Personal Exercise Programmes (PEP)**

## FITT Principle

<b>Frequency</b>	How often training takes place.	<i>Increase training from once a week to two</i>
<b>Intensity</b>	How hard the exercise is.	<i>Increase resistance from 10kg to 15kg or increase incline on the treadmill.</i>
<b>Time</b>	The length of the session.	<i>Increase training session from 45 minutes to 55 minutes.</i>
<b>Type</b>	The method of training used.	<i>Change to from interval training to Fartlek training.</i>

## Specificity

Training should be **matched** to the requirements of the sport or position the performer is involved in.

Training must be specifically designed to develop the right:

- Muscles
- Type of fitness
- Skills



## PAR-Q – Physical Activity Readiness Questionnaire

Conducted before fitness testing or an activity programme to examine the performer's readiness for training or any health conditions/lifestyle choices that may affect the successful completion.

## Progressive Overload

Working the body harder than normal/gradually increasing the amount of exercise you do. *i.e. bench press 50kg x 10 repetitions and increase to 55kg x 5 repetitions.*



## Reversibility

If training is not regular, adaptations will be reversed. This can happen when:

- Suffering from illness and cannot train
- Injury
- After an off-season.



## Individual needs

All PEP's would differ depending on:

- Performer's goals/targets
- Strength and weaknesses
- Age/gender
- Current health/fitness levels



## Overtraining

Occurs when you **train too hard** and do not allow the body enough **rest/recovery time**. Signs/symptoms include: extended muscle soreness, frequent illness & increase injuries.

## Calculating Training Zones/Thresholds of Training

Karvonen formula used to calculate aerobic and anaerobic target training zones.

<b>Maximum Heart Rate (MHR) = 220 – age</b>	<b>Aerobic target zone: 60–80% of MHR</b> (60% = x 0.6 / 80% = x 0.8)	<b>Anaerobic target zone: 80%–90% of MHR</b> (80% = x 0.8 / 90% = x 0.9)
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