

Principles of Training

There are two types of 'principles of training'. BASIC and ADDITIONAL.

Subject: BTEC PE
Year: 9 - 11
Term: 2a
Topic: UNIT 1

Knowledge Sequence
FITT principles
Progressive overload
Specificity
Individual needs
Adaptation
Reversibility
Variation
Rest and recovery

Key Assessments

Core Texts
GCSE PE Revision text book
Pearson BTEC online
GCSE Bitesize
Brianmac Online

Basic 'Principles of Training'	Sporting Example
Frequency – <i>the number of training of sessions you complete over a period of time.</i>	An athlete might train twice or three times a week.
Intensity – <i>How hard you train. You can use HR, RPE,% or reps.</i>	An athlete might complete a run at 60% intensity or complete a 2 sets of 5 reps at 5kg.
Time – <i>how long you train for each session.</i>	An athlete's training session might last 30 minutes or an hour.
Type – <i>How you train. Circuit, free weights, fartlek, Interval.</i>	An athlete might decide to complete a session using weights or a running based session.

Additional 'Principles of Training'	Sporting Example
Progressive overload – <i>in order to improve you need to gradually increase your training workload. Increasing the workload too quickly can cause injury or illness. This will have a negative impact on training.</i>	An athlete might train with 5kg in week 1 and 7kg in week 2. They would not go from 5kg to 100kg.
Specificity – <i>training should be specific to your sport/needs/goals.</i>	If you're a marathon runner you would train to improve aerobic endurance. You would not train to improve your reaction time.
Individual differences/needs – <i>your training needs to be designed to meet your training goals.</i>	A novice runner would not start their training with a 10 mile jog but instead a 1 mile jog as this is more appropriate for their needs.
Adaptation – <i>this occurs during the recovery period after a training session. Adaptation is how your body changes to cope with training demands.</i>	When an athlete trains appropriately with free weights they will improve their muscle mass to cope with the weights being used.
Reversibility – <i>if you stop training, or you don't train as hard then the initial training effects are reversed.</i>	If an athlete was to train hard and then gain a score of 14 on the MSFT and then did not train for the subsequent next few weeks their next score on the MSFT would be lower than 14.
Variation – <i>being able to change your programme keeps it from becoming boring and in turn helps you to maintain your training.</i>	An athlete might train their aerobic endurance by switching between a treadmill, road running and x-country.
Rest and recovery – <i>allows the body to repair and adapt for the renewal of body tissue. If your body doesn't get a chance to recover then the rate of progression can be reduced.</i>	An athlete would need to rest between sets or between training sessions. This might mean day 1 – train, day 2 – rest, day 3 – train.