Assessment Objective 1

Skill Related Components of Fitness

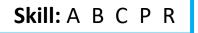
Agility	Quickly and precisely move or change
	direction

Activities requiring quick changes in direction

Balance	Maintain centre of mass over a base of support	
Activities requiring control of the distribution of weight		
Co-ordination	Smooth flow of movement	
Activities requiring the movements of two or more body parts		
Power	The product of strength and speed	
Activities requiring explosive movements		

Reaction	The time taken to respond to a stimulus
Time	

Activities requiring a quick decision or response















Physical Related Components of Fitness

Muscular Endurance	Muscular system – continue to contract at a light to moderate intensity to allow repetitive movements.	
Events/sports lasting more than 30 minutes		
Aerobic Endurance	Cardiorespiratory system – supply oxygen and nutrients to the muscles to sustain low to medium intensity work.	
Events/sports lasting more than 30 minutes		
Muscular Strength	The maximum force that can be generated by a muscle or muscle group	
Activities requiring force		
Speed	Distance divided by time	
Activities requiring fast movements.		
Flexibility	Having an adequate range of motion in all joints of the body	
Activities requiring a wide ROM around a joint		
Body Composition	The relative ratio of fat mass to fat-free mass in the body	
Activities requiring low body fat or High muscle mass depending on the activity		

Physical: M A M S F B

Fitness Training Programme

A tailored training programme will help you achieve your fitness goals.

Basic principles of training - FITT

Frequency – Number of sessions e.g. 3 per week
Intensity – How hard you work e.g. 85% of Max HR or Borg
Time – How long you train for e.g 30 minutes → 60 minutes
Type – Type of training methods e.g. interval or circuit training.

Additional principles of training – SPORIVAR

sessions are- ensures progress is made (slow to prevent injury) **Reversibility** – Progress is reversed if training stops/reduced

Individual differences – Training is related to the individual

Variation – Training must be varied to help with progression

Adaptation – Changes to the body due to increased training

Rest and recovery – required so the body can recover from

Specificity – Training and goals specific to the sport

Progressive Overload – gradually increasing how hard





Exercise Intensity

This term is used to describe how hard an individual is training; for example the relative speed, rate or level of an individual's exertion.

Measuring Heart Rate

Measured in BPM

A Neck (Carotid Artery

Wrist (Radial Artery)

RPE and HR

- Instead of using a HR monitor, you can use the RPE scale to predict the exercise HR of an individual using the relationship:
- RPE x 10 = HR (bpm).

Strength Intensity

- Muscular Strength 1 Rep Max (1RM)
- Muscular Endurance 15 reps max





Maximum Heart Rate

You measure your working heart rate during exercise. It is important you keep an eye on your heart rate so that you are in the correct training zone.

220 – Age = Maximum Heart Rate

Calculating Training Zones

- Find your maximum heart rate (MHR).
- MHR / 100 x __% = ____ bpm

Heart Rate Monitors

60% -85% Aerobic Training zone 85%-95% Anaerobic Training Zone

Technology



The BORG Scale

Rate of Perceived Exertion Scale (RPE)

training and allows adaptation to occur

e.g. age, ability, disability.

loads – improved performance

and stop boredom.

Used to rate physical exertion Scale starts at 6 and goes up to 20.

Smart Watches

Apps