

# Knowledge Organiser

## Unit 3 Applying the Principles for Personal Training

### Learning Aim A- Design a personal fitness training programme

#### Personal information to aid training programme design (SMARTER)

Specific, measurable, achievable, realistic, time-related, exciting, recorded.

**Aims** (details of what you would like to achieve for the selected **sport/activity**. **Unit 2 Sport**

**Objectives** (how you intend to meet your aims using an appropriate component of fitness and method training). E.g. aerobic endurance/fartlek, interval, continuous training Lifestyle and physical activity, medical history questionnaire, attitudes and personal motivation for training.

#### Programme design

Use personal information to aid 6 week training programme design

- Select an appropriate training method/activity for improving/maintaining the selected component of fitness e.g. aerobic endurance, speed, flexibility.
- Appropriate combination of activities to meet personal training needs, goals, aims and objectives.
- Use of the FITT principle.
- Selection of warm-up/cool down to prepare the body for exercise and to reduce heart rate and remove lactic acid.
- Creative design to prevent and avoid barriers to training to maintain motivation and commitment, and to prevent boredom.

**Personal information sheet**

When planning a training programme you need to consider lots of personal information to ensure that your programme is the effective. Complete the sections on this sheet to summarise and assess personal information about yourself. No information on this sheet can be used to plan your training programme.

Name: \_\_\_\_\_ Age: \_\_\_\_\_ Gender: \_\_\_\_\_

What are the reasons for you wanting to exercise? (write in the space below)

At the moment how often do you exercise? (write in the space below)

What are your current fitness levels? (write in the space below)

What are your current health problems? (write in the space below)

What are your current training goals? (write in the space below)

What are your current training methods? (write in the space below)

What are your current training times? (write in the space below)

What are your current training locations? (write in the space below)

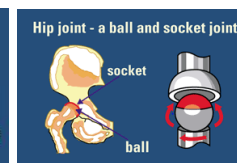
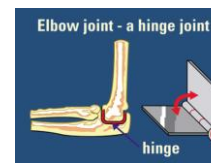
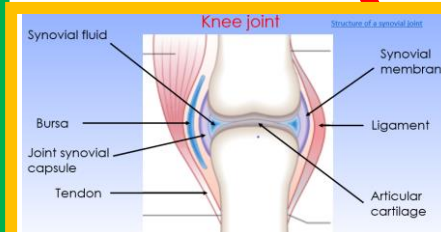
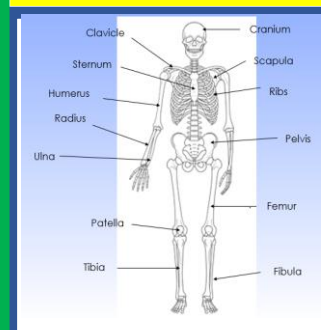
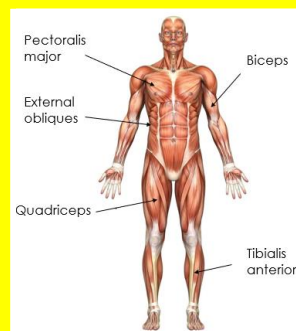
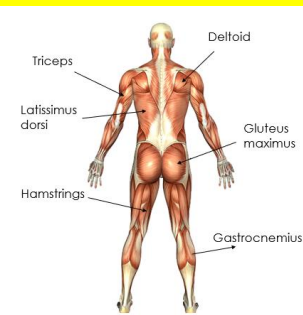
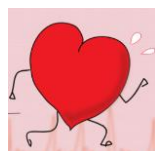
What are your current training equipment? (write in the space below)

What are your current training progress? (write in the space below)

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Monday						
Date						
Time						
Location						
Aim						
Objective						
Frequency						
Intensity (RHR)						
Borg scale:						
Time						
Type						
Equipment needed						
Progressive overload						

#### Intensity

Target zones HR max=220- AGE  
60-85% to improve aerobic endurance  
Borg rating of perceived exertion RPE  
to measure exercise intensity  
 $RPE \times 10 = HR \text{ (bpm)}$



### Learning Aim B- Know about the musculoskeletal and cardiorespiratory system and the effects on the body during fitness training

#### Musculoskeletal system

**Label the major muscles:** deltoid, biceps, triceps, pectoralis major, latissimus dorsi, external obliques, gluteus maximus, quadriceps, hamstrings, gastrocnemius

**Label the major bones:** cranium, clavicle, scapula, ribs, sternum, humerus, radius, ulna, pelvis, femur, patella, tibia, fibula.

**Structure and function of the synovial joints (label)** at the hip, shoulder (ball and socket) knee, elbow (hinge joint)

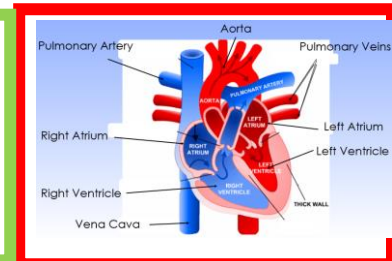
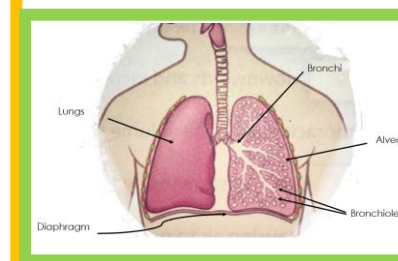
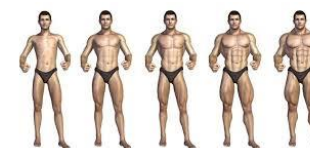
#### Cardiorespiratory system

**Structure of the cardiorespiratory system (label):** atria, ventricles, aorta, vena cava, pulmonary artery, pulmonary vein

**Structure of the respiratory system (label):** lungs, bronchi, bronchioles, alveoli, diaphragm.

#### Short term effects of fitness training (MERIT)

**Explain the effects of:** Lactic acid, warm-up, progressive overload, heart rate and breathing rate.



**Learning Aim C- Implement a self-designed personal fitness training programme to achieve own goals and objectives**

- Wear correct training gear, safe and correct use of equipment, implementation of correct technique, awareness of wider safety issues e.g. personal safety if training outdoors.



**Training diary for each session recording**

- Date, time location of training undertaken
- Aims and objectives for each session
- Session duration
- Types of training undertaken- selected method/activity
- Programme details (FITT)
- Log of personal performances and achievements
- Resources required e.g. equipment
- Principles of progressive overload and how this has been achieved over the course of the programme
- Details of programme intensity using % HR max and RPE

**Measure for success**

- Types of motivation (intrinsic and extrinsic)
- Motivation for training, including details in the diary of personal feelings before, during and after each training session
- Details of how the programme has been adapted to ensure continued commitment to training, e.g. using variation of activities/training methods
- Achievement against personal aims, goals and objectives, e.g. how performance has been taken to a higher level



**Training Diary Example**

Week 1			
Training Diary			
Date: 28/11/18	Time: 3.00pm	Location: School fitness gym	Duration: 45 mins
Aims/objectives: To improve my aerobic endurance. <ul style="list-style-type: none"><li>• Take part in interval training</li><li>• Stick to the plan I have made or make it harder</li><li>• Try my best in every session</li></ul>			
Training activities undertaken (including FITT): Warm up of: Pulse raiser – 2 mins jogging, 2 mins sidesteps, 1 minute of high knees. SAQ Ladders. Joint mobilization - 1 minute of walking lunges, 1 minute of shoulder rotation, 1 minute of hamstring walks Stretching - 1 minute of lunges and hold it for 2 seconds, 30 secs static stretch both quadriceps, 1 minute of side Lunges hold it for 2 seconds.  Main session: Exercise bike- 2 minute at 50% MHR and then 1 min at 75% MHR X 6  Cool down: Pulse lowering activity - 2 minute of jogging, 2 minutes of sidesteps, 2 minutes of walking to lower pulse rate Stretching - Lunges 1 minute, Calf stretch, Quadriceps stretch			
Resources required for training activities: stopwatch, SAQ Ladders, exercise bike, kit, trainers			
What are your personal performances and achievements? (Comment on goals, aims and objectives) I couldn't do most of my warm up because we were in the fitness suite so I had to change it to 5 minutes jogging on the treadmill at RPE 10 and 5 minutes on the cross trainer at RPE 12. I completed all of the stretches though before I started the main bit. I met all of my objectives as I did interval training and I tried really hard. I completed all 6 repetitions of the interval training and managed to do a cool down in the time we had.			
Training intensity (% HR Max): 50% and then Approx 75% in the sprint		RPE during session: 15	
Comments on progressive overload and how you may need to change the next session: Next week I am going to ask Sir if I can add some SAQ ladders at the start of the session to make the session more interesting. The main bit of the session was pretty boring and I think I could work harder. I will decrease the rest (50% MHR) to 90 seconds rather than 2 minutes to make it harder next week.			
How did you feel before, during and after this session? I felt a bit nervous before starting the training session because I didn't know if I could manage to cycle for 18 minutes without stopping. I think this affected by intrinsic motivation in a good way because it made me want to try harder to finish the session. I was really tired at the end. Sir was really good when I was getting tired because he encouraged me to push myself. During the session I felt quite hot because I was indoors but I managed to keep going for the whole session. After a rest and a drink, I started cycling and after a minute or so I found a good rhythm, for the last minute I really found my legs hurting which I think was lactic acid.			



**WWW**  
What went well

**EBI**  
Even better if

**Learning Aim D- Review a personal fitness training programme**

**Review programme**

This should include short term physiological effects, improvements as a result of the programme to meet the activity/sport goal. **(Physiological effects should link back to learning aim B)**

- After each training session
- Evidence of modifying the programme to achieve planned personal goals

**Strengths:**

- Areas of the programme where and **how** personal aims and objectives have been achieved with **reference to measure of success.**

**Areas for improvement:**

- Where outcomes do not meet planned goals

**Recommendations for improving future training and performances**

for example personal training needs, use of different training methods/activities or strategies, use of psychological training techniques to improving performance.

**Comparison to previous test results**

Test	Result	Component Tested	Rating
12 Min Cooper Run			
1 Minute Press Up Test			
1 Minute Sit Up Test			
Sit & Reach Test			
Vertical Jump Test			
BMI			

**Video/Photographs Evidence**

You need to show evidence that you have completed training sessions. This can be through the use of video evidence by recording short clips of the activity you are performing whilst introducing yourself at the start.  
Annotated photographs can also be used as evidence showing you complete exercises