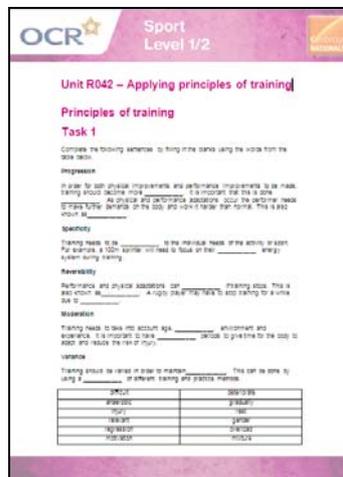


Unit R042 – Applying principles of training

Principles of training

Instructions and answers for Teachers

These instructions should accompany the OCR resource 'Principles of training', which supports the Cambridge Nationals in Sport Science Level 1/2 Unit R042 – Applying principles of training.



Associated Files:
Principles of training

Expected Duration:
Task 1 - approx 10 minutes
Task 2 - approx 30 minutes
Task 3 - approx 30 minutes

This resource comprises of three tasks.

It is important you know the principles of training and components of fitness in a sporting context along with the different training methods and fitness tests. These tasks will help identify and describe the principles of training, training methods and fitness tests.

Task 1

Complete the following sentences by filling in the blanks using the words from the table below.

Progression

In order for both physical improvements and performance improvements to be made, training should become more difficult. It is important that this is done gradually. As physical and performance adaptations occur the performer needs to make further demands on the body and work it harder than normal. This is also known as overload.

Specificity

Training needs to be relevant to the individual needs of the activity or sport. For example, a 100m sprinter will need to focus on their anaerobic energy system during training.

Reversibility

Performance and physical adaptations can deteriorate if training stops. This is also known as regression. A rugby player may have to stop training for a while due to injury.

Moderation

Training needs to take into account age, gender, environment and experience. It is important to have rest periods to give time for the body to adapt and reduce the risk of injury.

Variance

Training should be varied in order to maintain motivation. This can be done by using a mixture of different training and practice methods.

difficult	deteriorate
anaerobic	gradually
injury	rest
relevant	gender
regression	overload
motivation	mixture

Task 2

Match each keyword with the best definition/description from the table below.

Definition/Description
How often you train
Taking into account age, gender, environment and experience
Sticking to a training plan
How long you train
Meeting specific needs
Frequency, Intensity, Time, Type, Adherence
How hard you train
Relevant to the needs of the activity
Gradual overload
Performance will deteriorate if training stops (Use it or lose it)
Variety of training to prevent boredom

Keyword	Definition/Description
Progression	Gradual overload
Specificity	Relevant to the needs of the activity
Reversibility	Performance will deteriorate if training stops (Use it or lose it)
Moderation	Taking into account age, gender, environment and experience
Variance	Variety of training to prevent boredom
FITTA	Frequency, Intensity, Time, Type, Adherence
Frequency	How often you train
Intensity	How hard you train
Time	How long you train
Type	Meeting specific needs
Adherence	Sticking to a training plan

Task 3

A coach needs to be aware of performance-related matters including fitness components, specific training methods and fitness tests.

In the table below, list as many fitness components as you can.

Identify a method of training that may be used to develop that particular fitness component and identify a fitness test that may be used to measure that particular fitness component. Apply each fitness component to a relevant practical activity/example.

Fitness Component	Method of Training	Fitness Test	Practical Example
Strength	Free weights	Burpee test	Rugby scrum
Power	Plyometrics	Vertical jump test	Sprint start
Agility	Ladder/hurdles/SAQ	Illinois test	Side step in rugby
Balance	Exercise ball/wobble board	Stork stand test	Handstand
Flexibility	Static and dynamic	Sit and reach test	Splits in gymnastics
Muscular Endurance	Swimming/Cycling/Running (Repeated exercise with no rest)	Sit up test	Continuous cycling
Cardiovascular Endurance	Fartlek/Interval/Continuous	Cooper/Harvard test	Swimming

Extension Task

For each of the fitness components and fitness tests identified write a definition/description for each. This task may also be photocopied and the grid cut up into separate pieces. Students then have to place answers under the correct heading.



These activities offer an opportunity for English skills development