

THE
DUSTON
SCHOOL

TDS
4-19

Knowledge
Organisers

BTEC Sport Unit 1



Enquiry Question:

**Do you understand the concepts surrounding
Fitness for Sport and Exercise**

Big questions that will help you answer this enquiry question:

A - Do you know about the components of fitness and the principles of training

B - Can you describe and explain different fitness training methods

C - Do you know how to use fitness testing to determine fitness levels

D - Are you able to study both within lessons and independently in order to achieve your target grade in the Unit 1 examination.

Examination

The examination is an IT based Onscreen test.

This unit is externally assessed using an onscreen test. The examination board sets and marks the test. The test lasts for one hour and has 50 marks.

The test has different types of questions including objective and short-answer questions. Where appropriate, questions contain graphics, photos, animations or videos.

An onscreen calculator is available for questions requiring calculations.

Grade Boundaries—Approximate

An onscreen notepad is available for making notes.

Typical boundaries:

U grade -	0 - 15 Marks
L1 Pass -	16 - 24 Marks
L2 Pass -	25 - 33 Marks
L2 Merit -	34 - 43 marks
L2 Distinction-	44 - 50 Marks

Key Content

Topic A.1 Components of physical fitness

Topic A.2 Components of skill-related fitness

Topic A.3 Why fitness components are important for successful participation in given sports

Topic A.4 Exercise intensity

Topic A.5 The basic principles of training (FITT)

Topic A.6 Additional principles of training

Topic B.1 Requirements for fitness training methods

Topic B.2 Additional requirements for each of the fitness training methods

Topic B.3 Fitness training methods

Topic C.1 Fitness test methods for components of fitness

Topic C.2 Importance of fitness testing to sports performers and coaches

Topic C.3 Requirements for administration of each fitness test

Topic C.4 Interpretation of fitness test results

Typical Exam Questions

Each picture (A and B) shows fitness tests for different components of fitness.

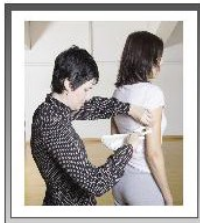
Match the component of fitness to each fitness test. (2)

Click on each picture and then the correct component of fitness.

A



B



Component of fitness

Flexibility

Strength

Muscular endurance

Anaerobic power

Body composition

Answers:

A - Flexibility

B - Body composition

Typical Exam Questions

Fitness tests are used to give athletes information about different components of their fitness.

Identify **two** tests that can be used to measure body composition. (2)

Click on **two** of the boxes.

Grip dynamometer

One-minute sit-up test

Vertical jump test

Bioelectrical Impedance Analysis (BIA)

Body Mass Index (BMI)

Answers:

A - Body Mass Index

B - Bioelectrical Impedance Analysis

Typical Exam Question

An athletics coach is deciding whether to use the forestry step test or the multi-stage fitness test to gain the best results for the aerobic endurance of her athletics group.

Discuss whether the athletics coach should use the forestry step test or the multi-stage fitness test to assess the aerobic endurance of her athletics group. (8)

Type your answer in the box.

Student Response 2:

Aerobic endurance is the ability of the cardiorespiratory system to work efficiently under sustained physical activity supplying nutrients to the muscles. The forestry step test is when you measure your heart rate before the test. Then using a metronome, step on and off the box to the beat for 5 minutes not stopping. Then once the 5 minutes are up and you have stepped off the box measure your heart rate and compare the two and see what your difference is. Then compare it to a results table/chart/graph. The higher your heart rate, the worse your aerobic endurance is. The multi-stage fitness test is when you hear the first beep, you run 20 metres in time for the second. The time between the two gets shorter and shorter each level. The higher level you finish at, the higher your aerobic endurance.

The advantages to the forestry step test is you do not need a large space to undertake the test. You just need a small room or you can do it outside. It is easy to set up and do as you do not need a lot of knowledge. A disadvantage to the forestry step test is you can cheat if you do not have the proper equipment. If you do not have the proper equipment to measure your heart rate and you are doing it with your fingers to your neck or your wrist. You could lie and say it is less than it actually is. Another disadvantage to this is it is time consuming. If you only have 1 box, and the athletics coach wants to test everyone. It will take a long time and people will get bored waiting. The advantages to the multi-stage fitness test is you can test lots of people at once. It will not take as much time as the forestry step test as everyone in the group can do it at once. Another advantage is it is a maximum test which means that you run until you cannot physically run no more. This will give the coach a clear indication of where they are at and it is accurate. A disadvantage is you need a lot of space.

If you do not have a big space available, you will have to go to the park. Organising everyone to meet at one point would be time consuming and bringing all the equipment could be difficult. Another disadvantage is you need a lot of equipment which can be expensive such as a CD player. Then you have to make sure they are all calibrated and working fine and if it isn't then you have to buy a new one. Another disadvantage is some people may get tired after 12 levels and stop but they could have done another 2 or 3 more levels so it is inaccurate when people do not try their hardest. Both tests have their own disadvantages and advantages but I would choose the multi-stage fitness test because you can test a lot of people and it is a maximum test so you can get a clear indication as to how good their aerobic endurance is even though you need a big space and you need equipment. (7 marks awarded)

Homework

Two homework Tasks per week will be set throughout work undertaken during the Unit.

Tasks will vary to include:

- Researching specific aspects of the Unit content
- Producing Revision materials such as posters/mind maps
- Practice examination questions
- Online revision tasks

Students will be expected to work independently on course specific websites such as Theeverlearner in order to extend understanding and prepare for the examination.

Wider Reading

British Association of Sport and Exercise Sciences

www.bases.org.uk

Coachwise www.1st4sport.com

Human Kinetics www.humankinetics.com

Sport Science www.sportsci.org

Sports Coach UK www.sportscoachuk.org

Top End Sports www.topendsports.com

Theeverlearner www.theeverlearner.com