



Revision Series January 2024

# BTEC Tech Award - Sport Component 3

◆ Notes pages ◆



The EverLearner

## How to use this revision session and notes

- Complete this document when doing the live or on-demand revision shows.
- Have the National Mock Exam to hand and, ideally, your completed, marked version of it.
- Focus on the skills that James is presenting as much as the content. In most cases, students have a knowledge of the topic but struggle to respond to the command in the question. This is a focus of our revision.
- Complete the notes spaces as extensively as possible and, if necessary, return to the show to complete it more than once in order to make the fullest notes possible.

### My ticklist:

- Notes pages
- Exam paper
- Exam mark scheme
- Exam model answers

## Performer profiles

Use these performer profiles when making examples and developing your A02 skill. The list is not exhaustive and you are encouraged to use your own examples as well as these ones.



# Lauren

**Basic details**  
Age: 16  
Sport: Boxing  
Level: Club




# Sonaya

**Basic details**  
Age: 22  
Sport: Swimming  
Level: For health



# John

**Basic details**  
Age: 16  
Sport: Volleyball  
Level: Club



# Eilish

**Basic details**  
Age: 16  
Sport: Boxing  
Level: Club

# Material covered in the National Mock Exam

→ Green denotes content to be covered in this session.

## Learning Area A

- Aerobic Endurance
- Muscular Endurance
- Agility
- Flexibility
- Reaction Time
- Body Composition
- Principles of Training
- Borg Scale
- Training Intensities
- Technology to Measure Intensities

## Learning Area B

- Reasons for Fitness Testing
- Factors Affecting Reliability
- 12-minute Cooper Run
- 30m Flying Sprint Test

- Vertical Jump Test
- Balance Tests
- Body Composition Tests

## Learning Area C

- Aerobic Interval Training
- Free Weights
- Plyometric Training
- Training Methods for Speed, Agility and Flexibility
- Provision for Taking Part
- Flexibility Adaptations

## Learning Area D

- Motivation
- SMARTER



# Learning Area A

## Section 1: (Selected) Components of Fitness

### From definitions to examples

You must be prepared to provide specific examples of the importance of components of fitness to different activities. Complete this table with the EIO model of examples James describes in the session.

| Component          | Definition (A01)  | Performer 1 (A02)  | Performer 2 (A02)               | Your level of confidence with this component |
|--------------------|---|--|---------------------------------|--|
|                    |   | Lauren / Sonaya / John / Eilish  | Lauren / Sonaya / John / Eilish |  |
| Agility            | The ability to change direction quickly and precisely without losing balance or time.   | (John)<br>Ability to move rapidly left and right on court to block shots from a range of angles and set up attacks for the team. |                                 | 😊 😐 😞  |
| Body composition   | The relative ratio of fat mass to fat-free mass.  |  |                                 | 😊 😐 😞  |
| Aerobic endurance  | The ability of the cardiorespiratory system to deliver oxygen and nutrients to the working muscles during sustained activity. |  |                                 | 😊 😐 😞  |
| Flexibility        | Adequate range of movement in all joints.   |  |                                 | 😊 😐 😞  |
| Muscular endurance | The ability of the muscular system  |  |                                 | 😊 😐 😞  |

|               |  |  |  |       |
|---------------|--|--|--|-------|
|               | to repeatedly contract over a period of time against a light to moderate fixed resistance. |  |  |       |
| Reaction time | Time taken to respond to a stimulus.   |  |  | 😊 😐 😞 |

## From examples to impact

Try completing answers to this question over and over again:

Justify the importance of ..... (insert component of fitness here) to a ..... (insert performer/activity here)

For example:

- “Justify the importance of speed to a marathon runner.”
- “Justify the importance of flexibility to a hockey goalkeeper.”

You can use the performer profiles provided to get you started or use your own examples.

|                           | CoF |    | Performer/Activity | Answer |
|---------------------------|-----|----|--------------------|--------|
| Justify the importance of |     | to |                    |        |
| Justify the importance of |     | to |                    |        |

|                           |  |    |  |  |
|---------------------------|--|----|--|--|
| Justify the importance of |  | to |  |  |
| Justify the importance of |  | to |  |  |
| Justify the importance of |  | to |  |  |

Notice that in “Justify” questions, there are typically no marks for definitions or even examples. Marks are awarded for stating the impact of the performance.

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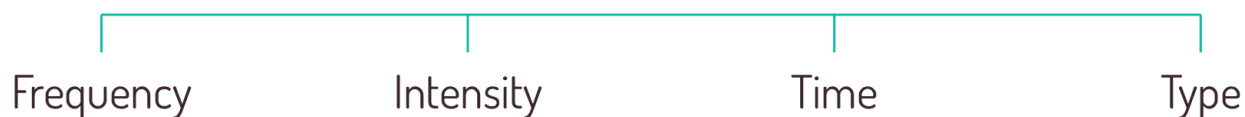
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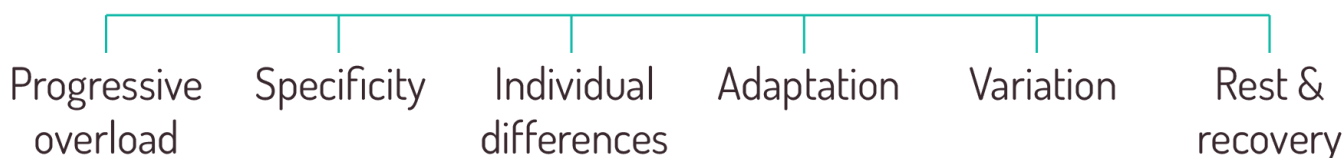
# Section 2: Principles of Training

## Basic principles of training FITT



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## Additional training principles



| Notes | Notes | Notes | Notes | Notes | Notes |
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# Section 3: Borg Scale

| Number | Perceived Exertion | Description  |
|--------|--------------------|--|
| 6      |                    | How you feel when lying in a bed or sitting in a chair relaxed. Little or no effort. |
| 7      | Very, very light   |  |
| 8      |                    |  |
| 9      | Very light         |  |
| 10     |                    |  |
| 11     | Fairly light       |  |
| 12     |                    | Target range: How you should feel with exercise or activity.                         |
| 13     | Somewhat hard      |  |
| 14     |                    |  |
| 15     | Hard               |  |
| 16     |                    |  |
| 17     | Very hard          | How you felt with the hardest work you have ever done.                               |
| 18     |                    |  |
| 19     | Very, very hard    |  |
| 20     | Maximum            | Don't work this hard.  |

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## Section 4: Training Intensities

# Jenson

Age: 18



Max heart rate =  $220 - \text{age}$

Aerobic lower threshold =  $202 \times 60\%$

Aerobic upper threshold =  $202 \times 85\%$

Jenson's aerobic zone = **121 - 172bpm**

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# Learning Area B

## Section 5: Reasons for Fitness Testing



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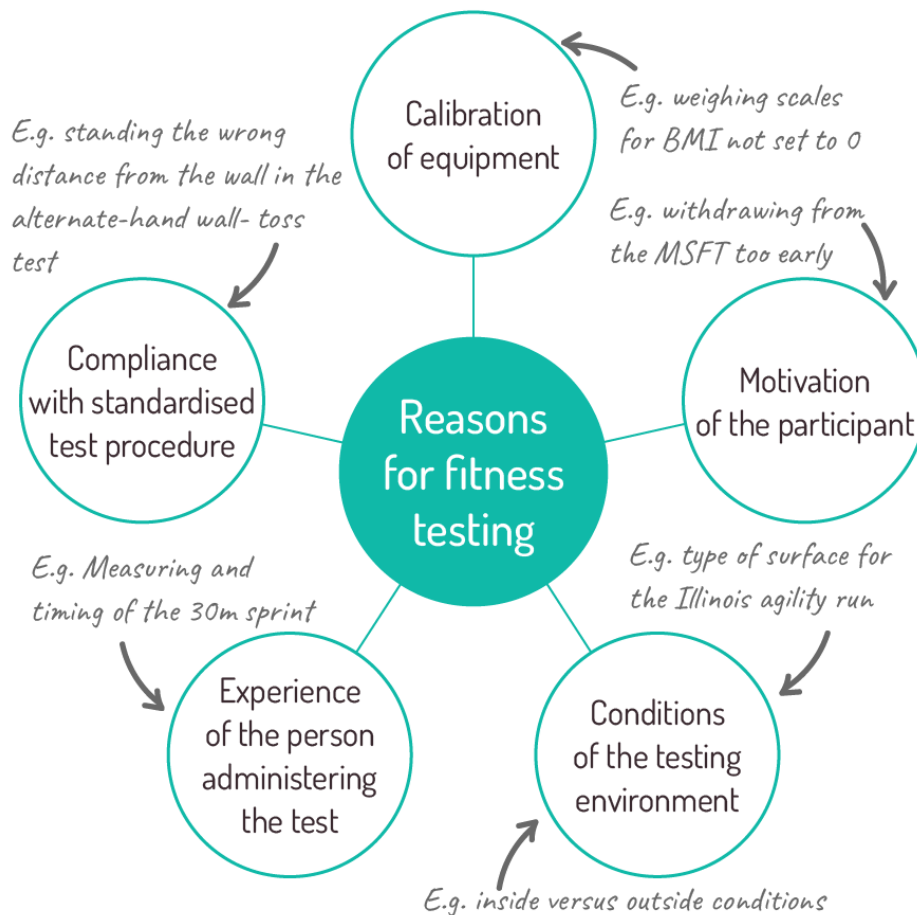
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# Section 6: Factors Affecting Reliability



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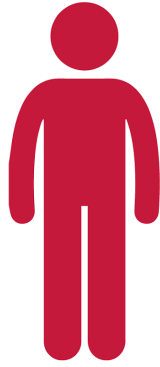






Underweight

<19



Healthy weight

19-25



Overweight

25-30



Obese

30+

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**B I A**

Bioelectrical Impedance Analysis

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Waist girth = **24cm**  
Hip girth = **34cm**



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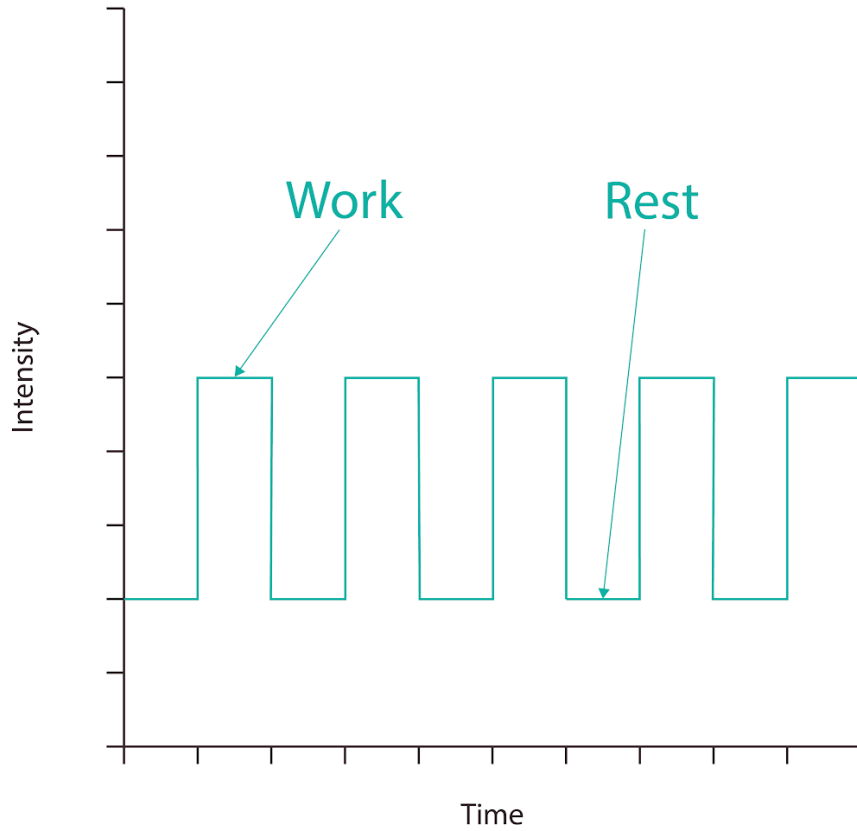
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# Learning Area A

## Section 10: Aerobic Interval Training



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# Section 11: Plyometric Training

Plyometrics is the maximum production of force at high speed.



- Increases power
- Central to many sports
- Very effective

- Can be contraindicating
- Not suitable for unfit people
- Not suitable for young people

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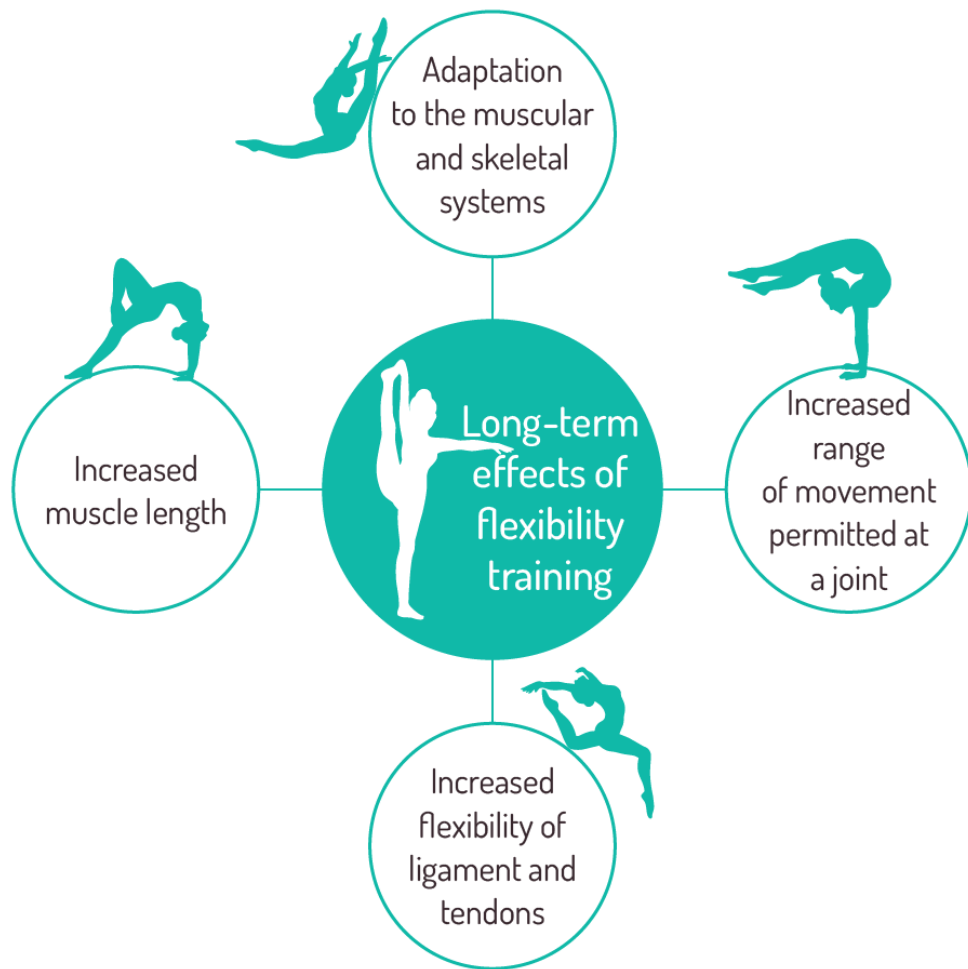








# Section 13: Flexibility Adaptations



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