

Revision Series 2024

CIE IGCSE Physical Education

Notes pages •



How to use this revision session and notes

- Complete this document when doing the live or on-demand revision shows.
- The imagery contained in the notes is designed for you to be able to study the A01 knowledge prior to the live session.
- During the live session, James will guide you through how to use that knowledge in your exam.
- 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 and James will address both A01 and A02.
- Complete the notes pages 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.
- Have the National Mock Exam to hand and, ideally, your completed, marked version of it.
- Have the <u>exam infographics</u> to hand. These will be referred to throughout the show.

My ticklist:



Exam infographics

Exam paper

Exam mark scheme

Exam model answers



During the live show, we will cover...

| Topic 1: Antagonistic muscle action | 3 |
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We will also cover a wide array of exam skills including command terms for A01 and A02.

You may also find it useful to study our previous years' revision shows when different samples of content and skills have been developed.



Topic 1: Antagonistic muscle action

| Complete the follow | ring sentences: | | |
|---------------------|---|---------------------------|-----------------------|
| The | is the muscle that prod | duces movement. It is als | so referred to as the |
| The antagonist i | s the muscle that | when the | is contracting. |
| the | pairs to create movement relax during flexion at t contract and the | he elbow. During extens | |

Antagonistic muscle pairs

Fill out the table to identify the agonist/antagonist for each movement. Give a sporting example for each.

| Movement | Agonist | Antagonist | Sporting example |
|-------------------------|---------|------------|------------------|
| Flexion at the knee | | | |
| Extension at the knee | | | |
| Flexion at the elbow | | | |



| Movement | Agonist | Antagonist | Sporting example |
|----------------------------|---------|------------|------------------|
| Extension at the elbow | | | |
| Abduction at the hip joint | | | |
| Adduction at the hip joint | | | |

Contractions

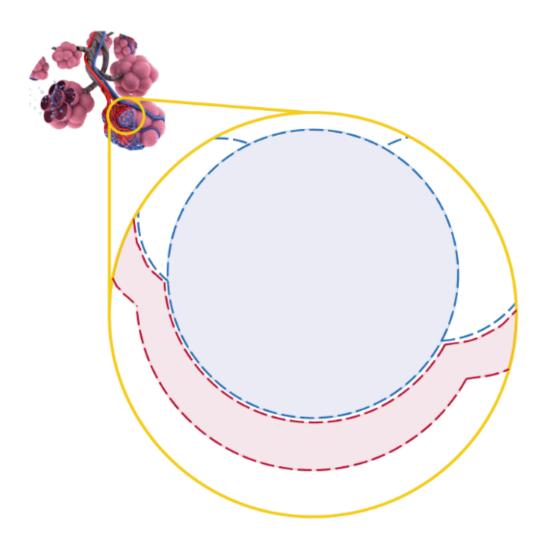
| Type of contraction | Description | Example |
|---------------------|---|-----------------|
| Isometric | Muscle contracts but stays the same length, so no movement takes place. | Holding a plank |
| Concentric | | |
| Eccentric | | |

| • | | | |
|------|----|------|-------|
| Want | to | know | more? |

Watch the FREE tutorial "Antagonistic pairs" on TheEverLearner.com



Topic 2: Gaseous exchange at the alveoli

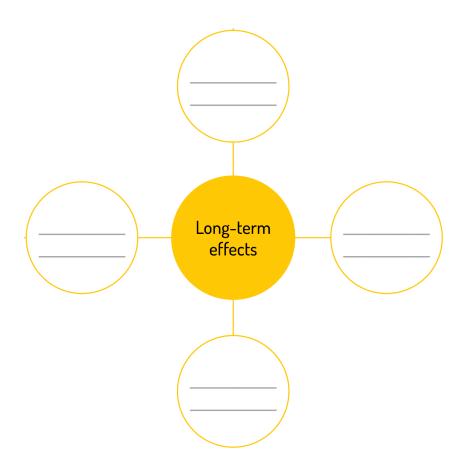




Want to know more? Watch the FREE tutorial "Gaseous exchange" on TheEverLearner.com



Topic 3: Long-term effects of exercise



| Long-term effect | Explanation |
|----------------------------------|-------------|
| Heart size (hypertrophy) | |
| Resting heart rate (bradycardia) | |

| Long-term effect | Explanation |
|---|-------------|
| Increased stroke volume | |
| Increased ability to tolerate lactic acid | |



Watch the FREE tutorial "Long-term effects of exercise" on TheEverLearner.com



Topic 4: Components of fitness

From definitions to examples



19 100m Sprint

Olympic Podium Potential

Basic Details

Age: Sport:

Josh



Basic Details

43 Tennis (singles and doubles)



Kate



Laura

Tom

Basic Details

Age: Sport: 17 Triathlon **Basic Details**

Gymnastics (Artistic) Sport:

National



Julie



Carlos

Basic Details

Age: 26 Sport: Netball (GD, GK)

Semi-professional/National

Basic Details

Age:

Sport: Wheelchair basketball



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 |
|---|--|---|--|-------------------------------|
| | | Laura/Josh/Julie/ Tom/Kate | Laura/Josh/Julie/ Tom/Kate | this component |
| Agility | Changing direction quickly whilst maintaining control | (Julie) Ability to dodge an opponent in netball to get free and receive a pass. | | © © ⊗ |
| Balance (static and dynamic) | Maintenance of the centre of mass over the base of support | | | © © ⊗ |
| Cardiovascular endurance/ Stamina | Ability of the heart and lungs to supply oxygen to the working muscles | | | ⊜ ⊕ ⊖ |
| Coordination | The ability to use different parts of the body together smoothly and efficiently | | | © © ⊗ |
| Flexibility | Range of movement possible at a joint | | (Laura) Ability to perform a split leap with a wide RoM at the hip. | © © ⊗ |
| Muscular endurance | Ability of a muscle to undergo repeated contractions without fatigue | | | ⊕ ⊕ |
| Power | Product of strength and speed (strength x speed) | | | © © ⊗ |



| Component | Definition (A01) | Performer 1 (A02) | Performer 2 (A02) | Your level of confidence with |
|---------------|---|-------------------------------|-------------------------------|-------------------------------|
| | | Laura/Josh/Julie/ Tom/Kate | Laura/Josh/Julie/ Tom/Kate | this component |
| Reaction time | Time taken to initiate response to a stimulus | | | ⊕ ⊕ |
| Strength | Ability to overcome a resistance. Maximal, dynamic, static, explosive | | | ⊕ ⊕ |
| Speed | Maximum rate at which an individual is able to perform a movement or cover a distance in a period of time | | | © © ⊗ |

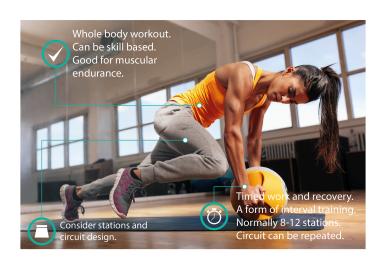


Watch the tutorial "Components of fitness" on The Ever Learner.com (subscribers only).

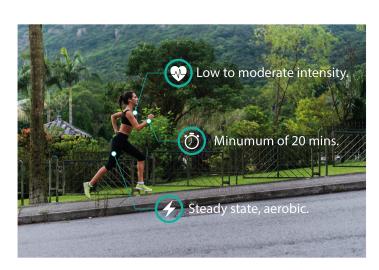


Topic 5: Methods of training

Circuit training



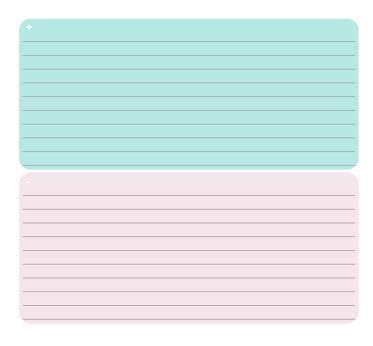






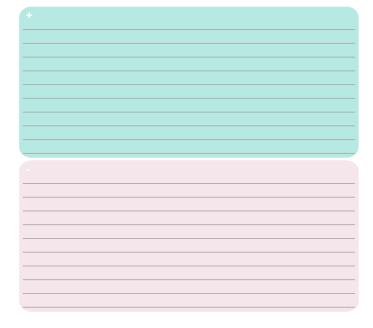
Fartlek training





Plyometric training

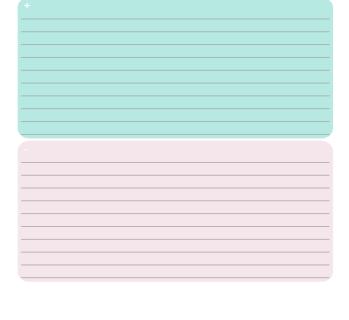






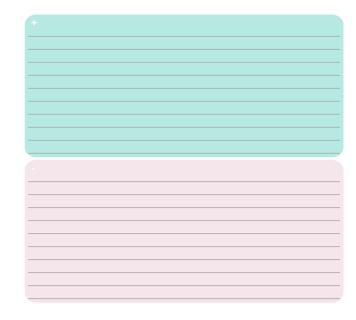
Resistance training





HITT training







Want to know more?

Watch the tutorials "Methods of training 1" and "Methods of training 2" on TheEverLearner.com (subscribers only).



Topic 6: Skill and ability

Skill

A learned behaviour stored in the long-term memory, that can be used in a variety of ways.

Ability

A stable, inherited trait that determines an individual's potential to learn or acquire a skill.

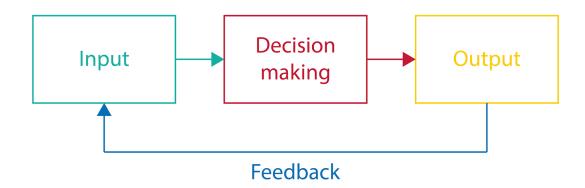


Want to know more?

Watch the tutorial "Skill and ability" on The Ever Learner.com (subscribers only).

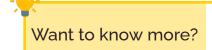


Topic 7: Simple information processing



Describe the information processing model for catching a ball in rounders:

| Input: | |
|------------------|--|
| Decision making: | |
| Output: | |
| Feedback: | |

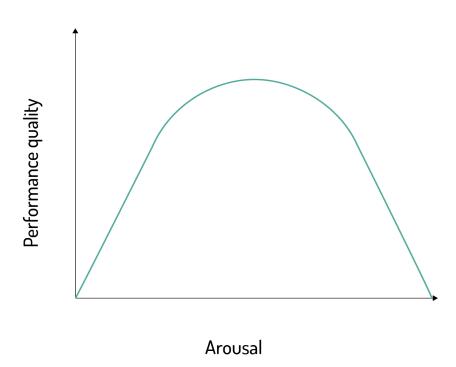


Watch the tutorial "Simple information processing" on The EverLearner.com (subscribers only).



Topic 8: Arousal

Inverted U Theory

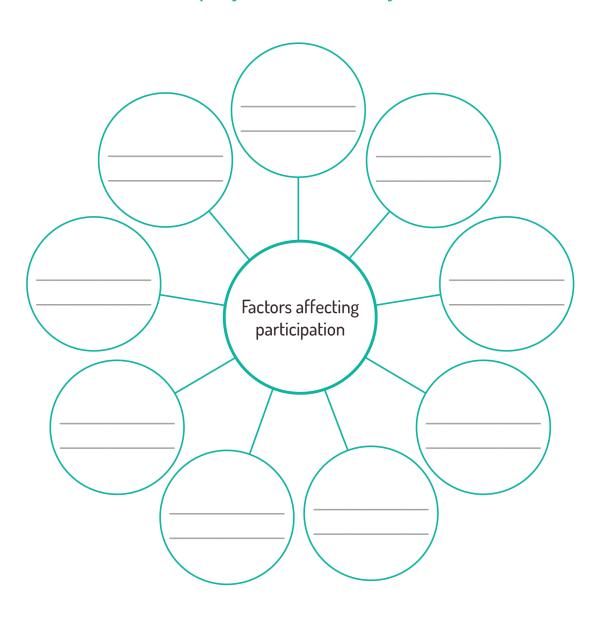




Want to know more? Watch the tutorial "Arousal" on TheEverLearner.com (subscribers only).



Topic 9: Factors affecting access and participation in physical activity





Watch the tutorial "Engagement patterns" on The Ever Learner.com (subscribers only).



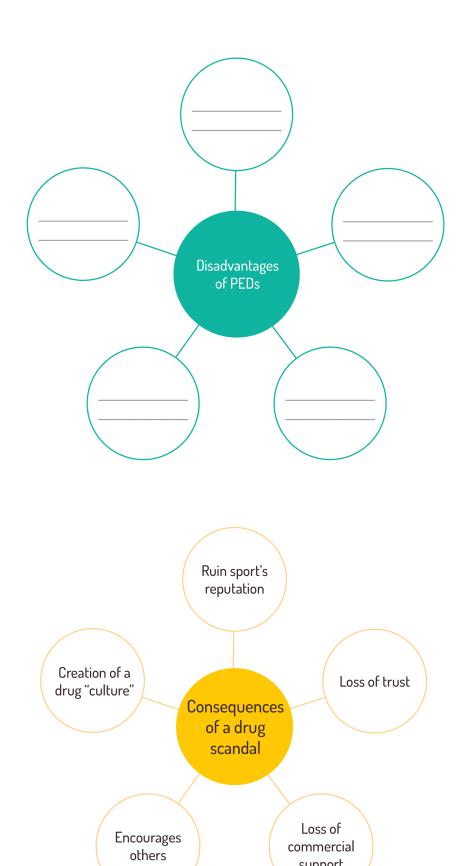
Topic 10: Performance-enhancing drugs

Reasons why performers take PEDs:

| 1: | | |
|----|--|--|
| 2: | | |
| 3: | | |

| Type of PED | Effect/ How it enhances performance | Most likely users |
|-------------------|--|-------------------|
| Anabolic steroids | | |
| Beta blockers | | |
| Stimulants | | |
| Diuretics | | |

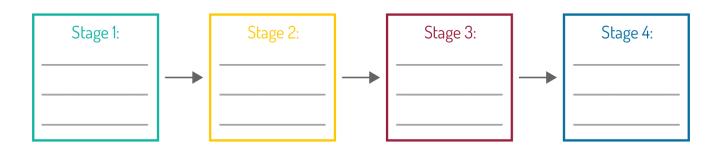






support

Blood Doping



| Positive effects of blood doping | Negative effects of blood doping |
|----------------------------------|----------------------------------|
| Increase in red blood cells | Increased blood viscosity |
| | |
| | |
| | |
| | |

Want to know more?

Watch the tutorials "PEDs" and "Disadvantages of PEDs" on TheEverLearner.com (subscribers only).

