TEL PE Revision

Revision Series 2024

Edexcel A-Level PE - Paper 1

• Notes pages •

The EverLearner

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 AO1 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.
- 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 exam infographics to hand. These will be referred to throughout the show.

My ticklist:

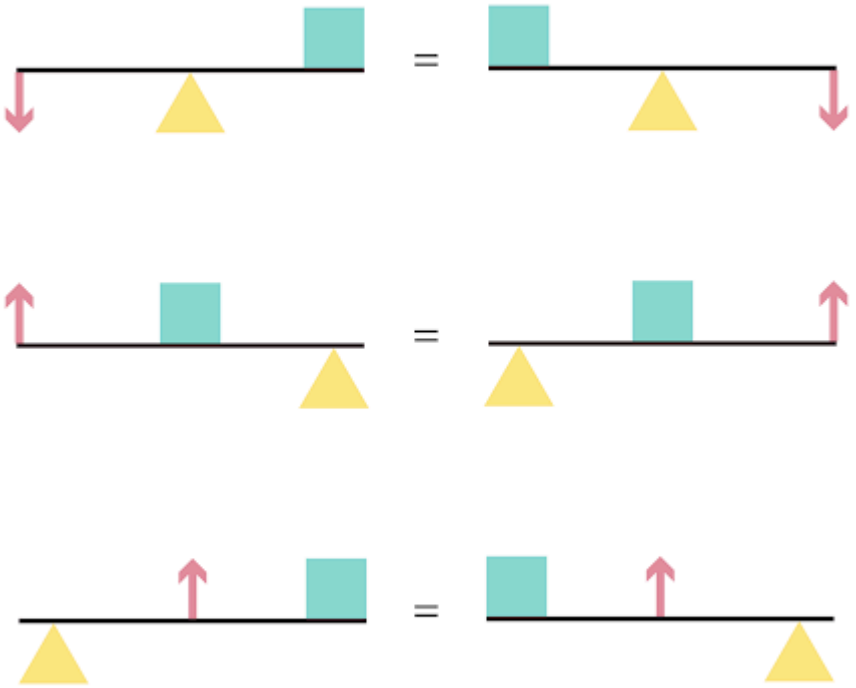
- ☑ Notes pages
- ☑ Exam infographics
- ☑ Exam paper
- ☑ Exam mark scheme
- ☑ Exam model answers

During the live show, we will cover...

We will also cover a wide array of exam skills including command terms for A01, A02 and A03 as well as the extended writing requirements of the paper.

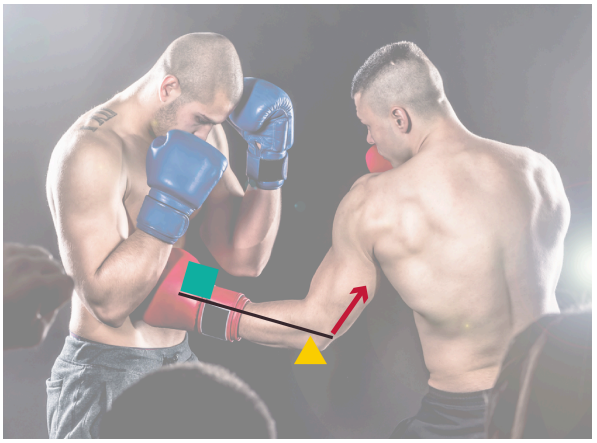
You may also find it useful to study our previous years' revision shows when different samples of content and skills have been developed.

Topic 1: Levers



Lever component	In the human body	Shape and position
Lever arm		
Fulcrum		
Load		
Effort		

First-class levers



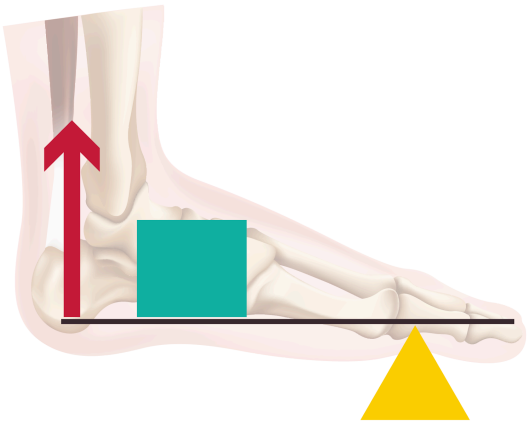
The two images above represent a first-class lever. Using an arrow, a square, a triangle and a straight line **only**, draw a first-class lever below.

Complete this statement:

First-class levers, such as neck extension and elbow extension, have the _____ between the _____ and the _____.

Lever component	For elbow extension
Lever arm	
Fulcrum	
Load	
Effort	

Second-class levers

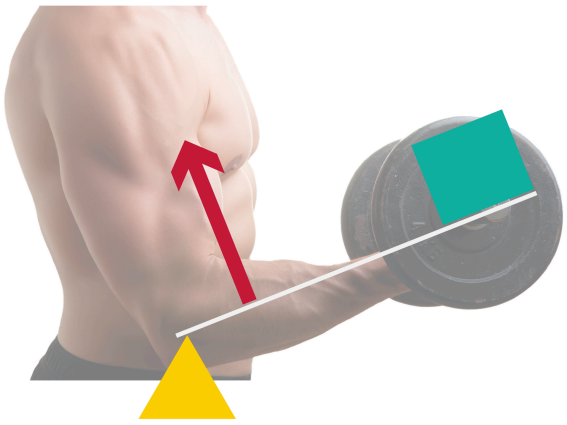


The image on the previous page represents a second-class lever. Using an arrow, a square, a triangle and a straight line **only**, draw a second-class lever below.

Second-class levers such as plantar flexion at the ankle have the _____ between the _____ and the _____.

Lever component	For plantar flexion
Lever arm	
Fulcrum	
Load	
Effort	

Third-class levers

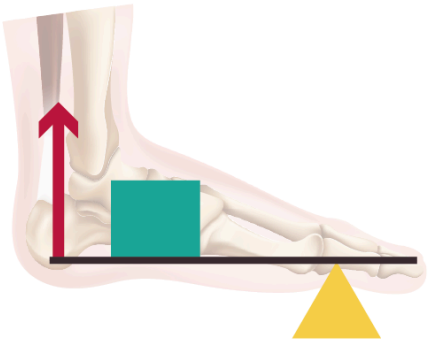


The image above represents a third-class lever. Using an arrow, a square, a triangle and a straight line **only**, draw a third-class lever below.

Third-class levers such as elbow flexion have the _____ between the _____ and the _____.

Lever component	For elbow flexion
Lever arm	
Fulcrum	
Load	
Effort	

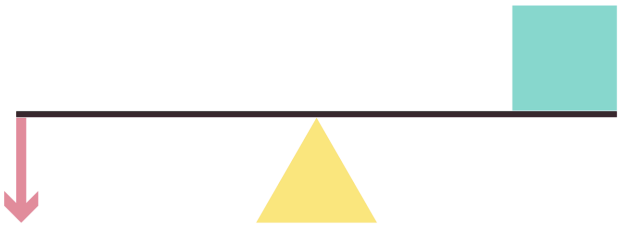
Mechanical advantage



$$\text{Mechanical advantage} = \frac{\text{Effort arm}}{\text{Load arm}}$$

Effort arm: Distance from effort to the fulcrum
Load arm: Distance from the load to the fulcrum

Accurately draw the effort and load arms on this lever:



Which one is greater, the effort or the load arm? ▢ Effort arm ▢ Load arm

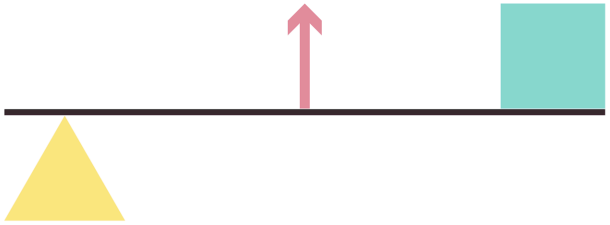
Does this lever operates with mechanical advantage? ▢ Yes ▢ No

Accurately draw the effort and load arms on this lever:

Which one is greater, the effort or the load arm? ▢ Effort arm ▢ Load arm

Does this lever operate with mechanical advantage? ▢ Yes ▢ No

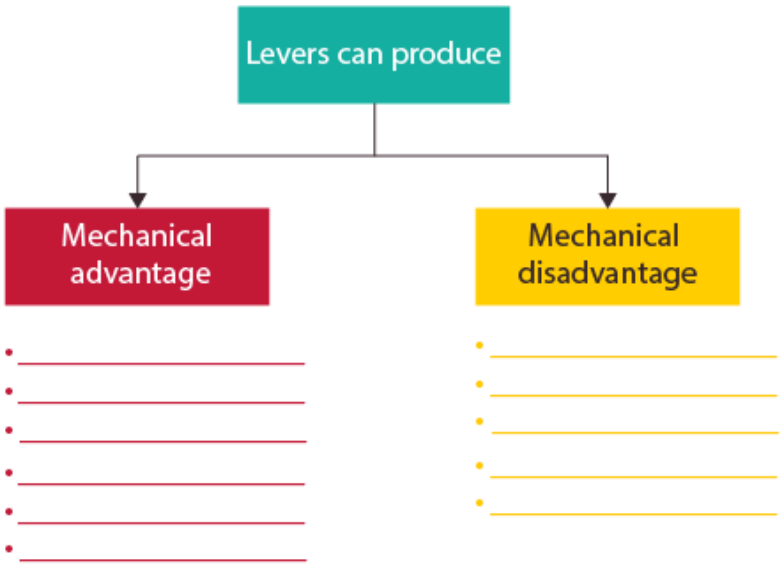
Accurately draw the effort and load arms on this lever:



Which one is greater, the effort or the load arm? ▢ Effort arm ▢ Load arm

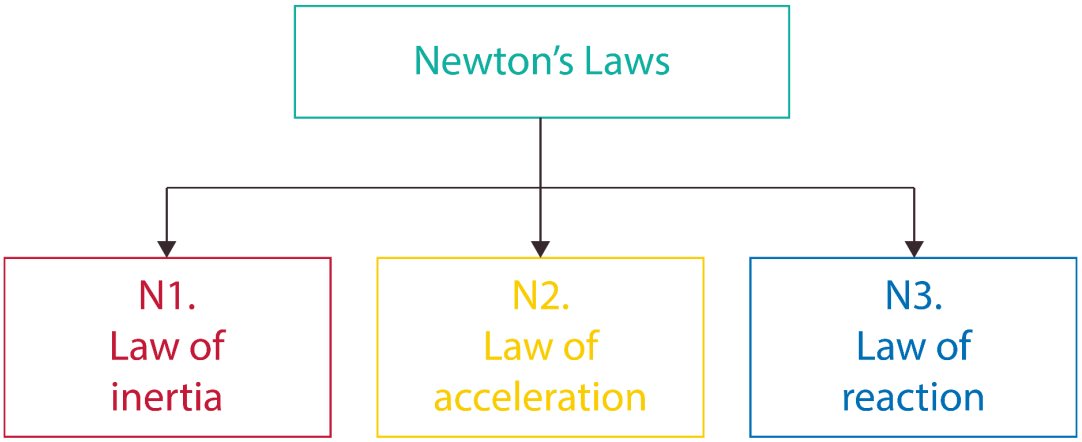
Does this lever operates with mechanical advantage? ▢ Yes ▢ No

Mechanical advantage



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

Topic 2: Newton's three laws of motion



Law of inertia definition: _____

_____

Law of acceleration definition: _____

_____

Law of reaction definition: _____

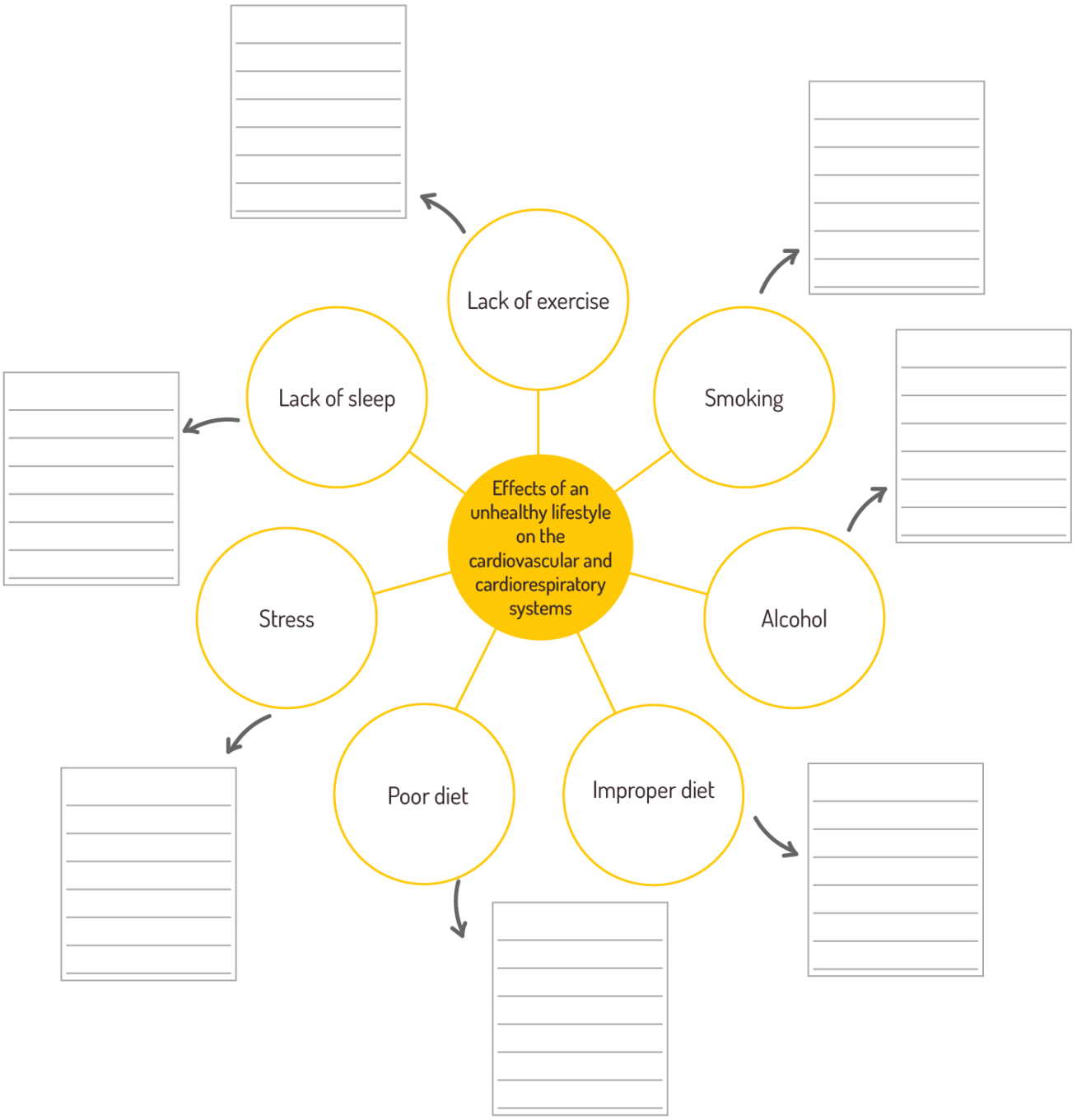
_____

Apply Newton's laws of motion to the taking of a free throw in basketball.

Newton's law	Application to a free throw in basketball
Law of inertia	
Law of acceleration	
Law of reaction	

Want to know more? Watch the FREE tutorial "Newton's laws" on TheEverLearner.com

Topic 3: Unhealthy lifestyle and its effects on the cardiovascular and cardiorespiratory systems



Want to know more?

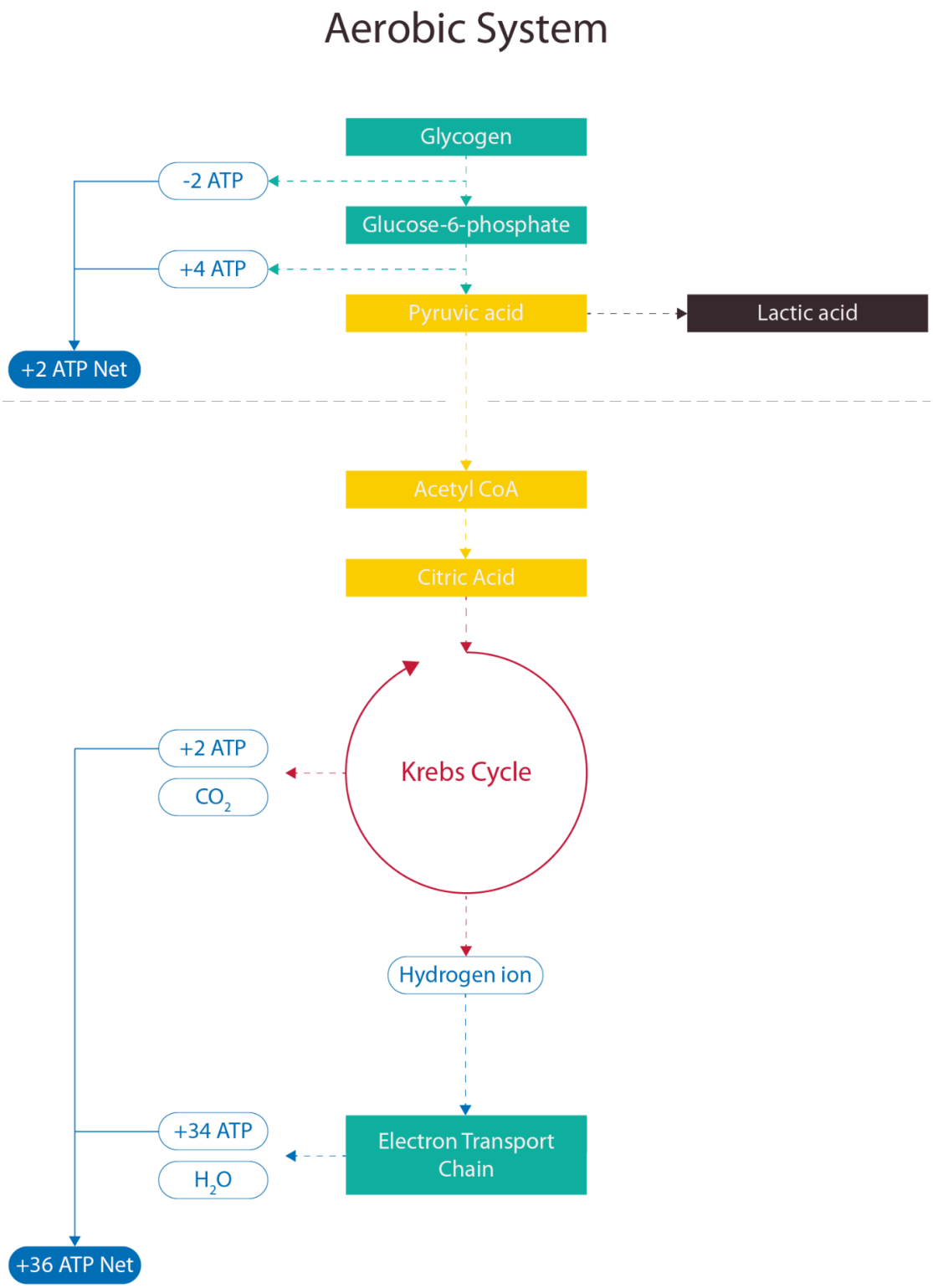
Watch the tutorial "Cardiovascular and respiratory health" on TheEverLearner.com (subscribers only).

Topic 4: Muscle fibre types

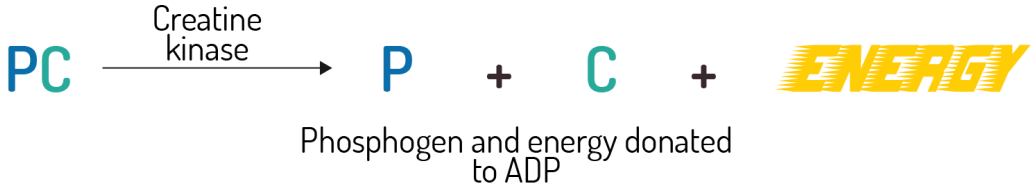
Want to know more?

Watch the tutorial "Muscle fibre types" on TheEverLearner.com (subscribers only).

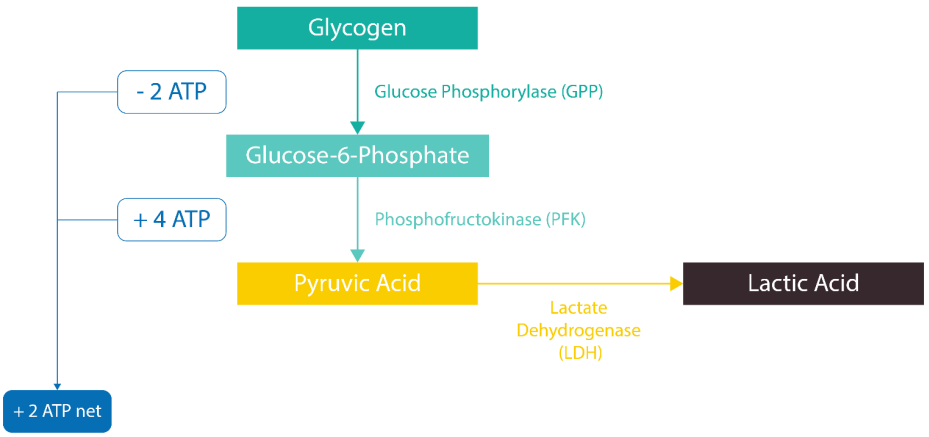
Topic 5: Energy pathways



ATP - PC System



Glycolytic system



Students to use images as a point of reference and fill out the table below:

Energy system	Explanation	Strengths	Weaknesses
Aerobic			
ATP- PC			
Glycolytic			

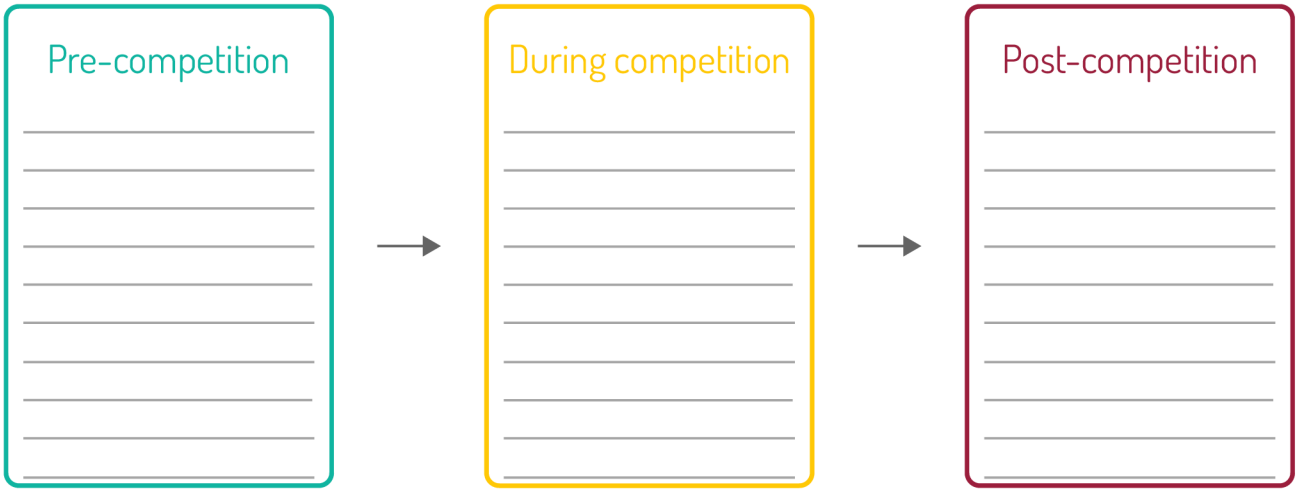
Want to know more?

Watch the tutorials "ATP-PC System", "Glycolytic System" and "Aerobic System" on TheEverLearner.com **(subscribers only)**.

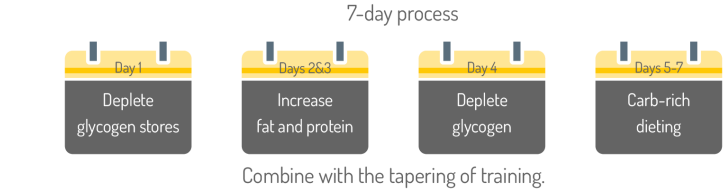
Topic 6: Dietary manipulation for performance

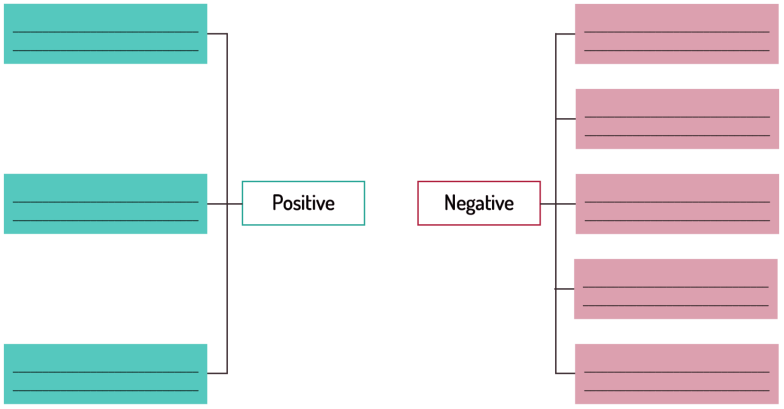
A performer's diet can be manipulated for performance by adjusting the amount of food. A average person would consume _____. An active performer would consume _____.

Diet can also be manipulated through the timing of meals. Fill out the flow chart below to show the timing of meals on a competition day for a performer.



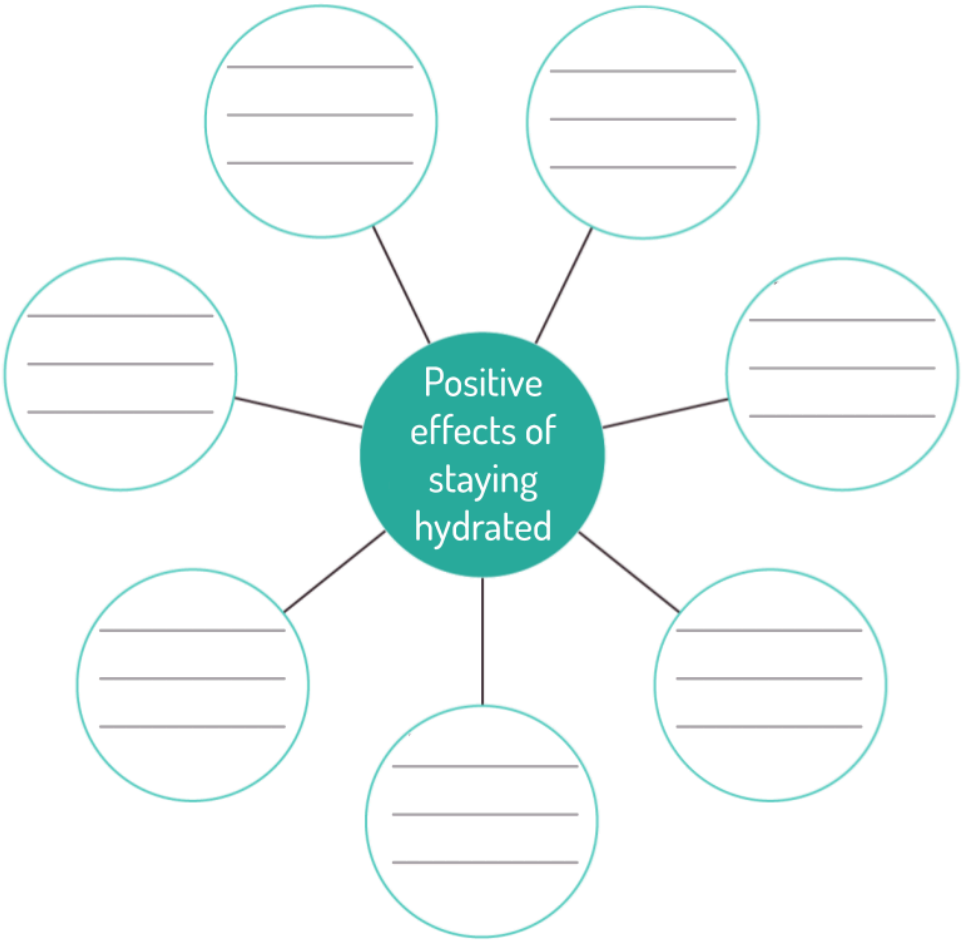
Nutritional Aid: Glycogen loading





Hydration

- Dehydration: Excessive loss of body water interrupting the function of the body
- Water balance prevents dehydration



Want to know more?

Watch the tutorial "Hydration" on TheEverLearner.com (subscribers only).

Topic 7: Fitness tests

Describe the protocols for the following fitness tests:

Wingate test:

RAST test:

Evaluate the effectiveness of these tests using the table below:

Test	Advantages	Disadvantages
Wingate test		
RAST test		

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

Topic 8: Principles of training

Apply the principles of training to a **rugby player** who wants to improve their **muscular strength and cardiovascular fitness**.

Principle of training	Application of principle to the rugby player
Individual differences	
Specificity	
Progressive overload	
Reversibility	
Overtraining	

Use the table below to apply FITT to the rugby player, in order to progress and overload their training:

	Application to the rugby player
Frequency	
Intensity	
Time	
Type	

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

Topic 9: Methods of training

Plyometric training

+

-

SAQ

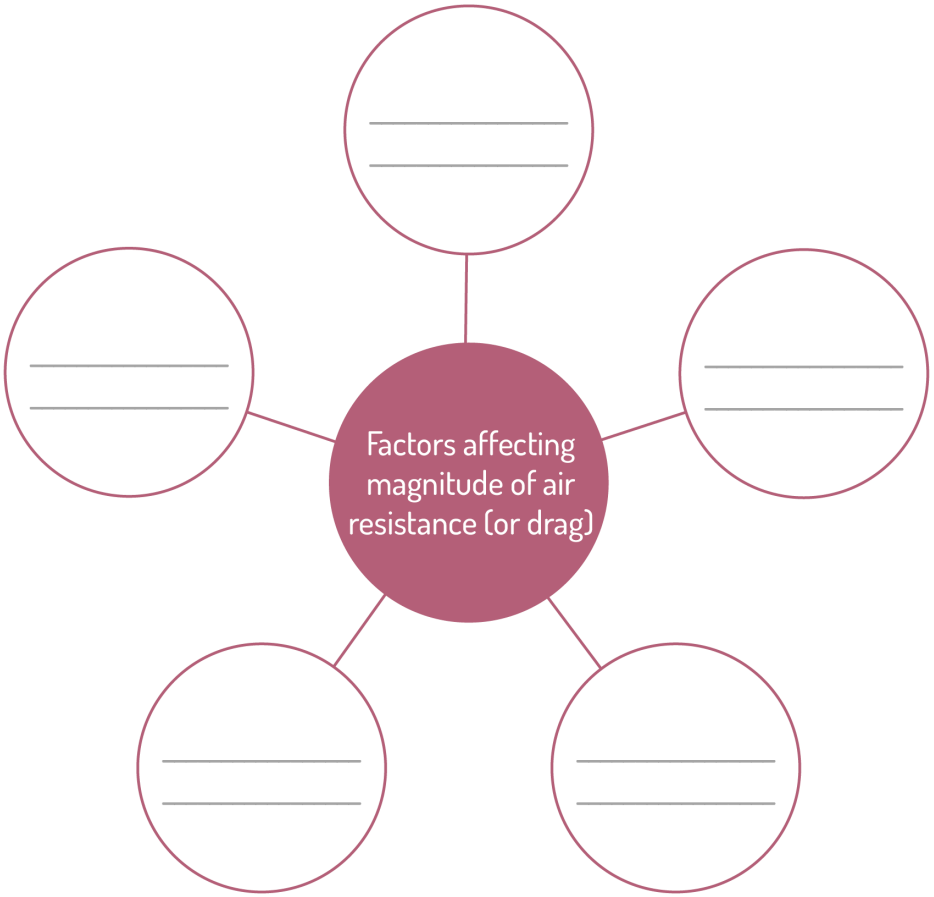
+

-

Want to know more?

Watch the tutorial "Plyometric training" on TheEverLearner.com (subscribers only).

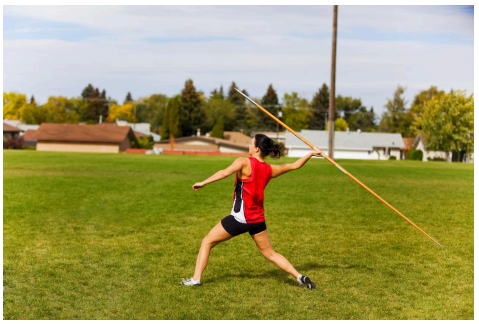
Topic 10: Projectile motion



Factors affecting horizontal displacement of projectiles

Factor 1: Angle of release

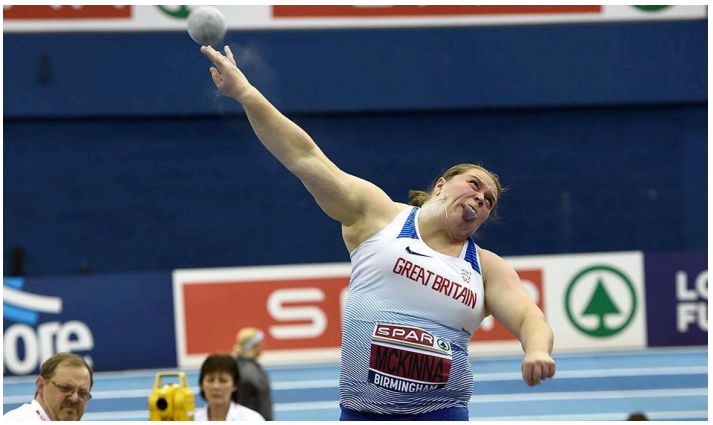
Factor 2: Velocity of release



Complete this statement:

A greater velocity of release increases the _____ _____ of a projectile.

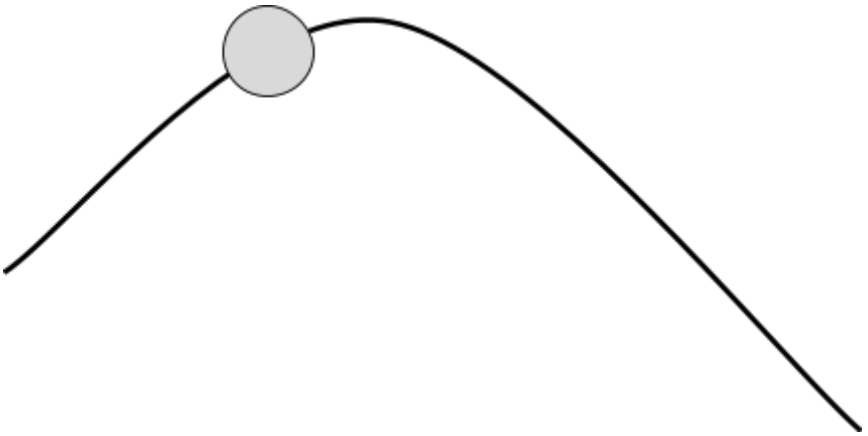
Factor 3: Height of release



Complete this question:

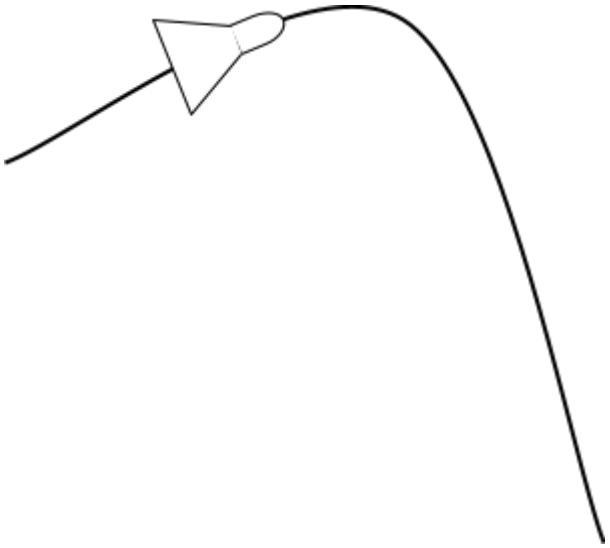
Explain how a shot putter uses the height of release of the shot to improve her performance.

Illustrate the resultant force of the shot:



Explain why the flight path of the shot is symmetrical.

Illustrate the resultant force of the shuttle:



Explain why the flight path of the shuttle is asymmetrical.

Want to know more?

Watch the tutorials "Factors Affecting Projectiles" and "Projectile Motion" on TheEverLearner.com (subscribers only).