

**Question/Answer booklet****YEAR 11  
PHYSICAL  
EDUCATION  
STUDIES**

WA Student number: In figures 

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In words \_\_\_\_\_

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**Time allowed for this paper**

Reading time before commencing work: ten minutes  
Working time: two and a half hours

**Materials required/recommended for this paper*****To be provided by the supervisor***

This Question/Answer booklet

***To be provided by the candidate***

Standard items: pens (blue/black preferred), pencils (including coloured),  
sharpener, correction fluid/tape, eraser, ruler,  
highlighters

Special Items: Nil

**Important note to candidates**

No other items may be taken into the examination room. It is **your** responsibility to ensure that you do not have any unauthorised material. If you have any unauthorised material with you, hand it to the supervisor **before** reading any further.

# YEAR 11 PHYSICAL EDUCATION STUDIES

## Structure of this paper

Section	Number of questions available	Number of questions to be answered	Suggested working time (minutes)	Marks available	Percentage of written examination
Section One Multiple-choice	20	20	30	20	20
Section Two Short answer	6	6	90	65	50
Section Three Extended answer	4	2	60	30	30
			<b>Total</b>	115	100

## Instructions to candidates

1. Write your answers in this Question/Answer booklet preferably using a blue/black pen. Do not use erasable or gel pens.
2. Answer the questions according to the following instructions.

Section One: Answer all questions in the Question/Answer booklet. For each question, circle the letter to indicate your answer. Use only a blue or black pen. If you make a mistake, place a cross through that letter, then circle your new answer. Do not erase or use correction fluid/tape. Marks will not be deducted for incorrect answers. No marks will be given if more than one answer is completed for any question.

Section Two: Write your answers in this Question/Answer booklet. Wherever possible, confine your answers to the line spaces provided.

Section Three: Consists of four (4) questions. You must answer two (2) questions. Write your answers in this Question/Answer booklet.

3. You must be careful to confine your answers to the specific questions asked and to follow any instructions that are specific to a particular question.
4. Supplementary pages for the use of planning/continuing your answer to a question have been provided at the end of this Question/Answer booklet. If you use these pages to continue an answer, indicate at the original answer where the answer is continued, i.e. give the page number.

# YEAR 11 PHYSICAL EDUCATION STUDIES

## Section One:

## Multiple-choice 20% (20 Marks)

This section has **20** questions. Answer **all** questions on the Question/Answer booklet. For each question, circle the letter to indicate your answer. Use only a blue or black pen. If you make a mistake, place a cross through that letter, then circle your new answer. Do not erase or use correction fluid/tape. Marks will not be deducted for incorrect answers. No marks will be given if more than one answer is completed for any question.

**Suggested working time: 30 minutes.**

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1. All muscles contain a mixture of muscle fibre types. The main differences between the muscle fibre types are
  - (a) speed of extensibility, endurance capacity, force production.
  - (b) speed of recovery, dominant energy system, contractual speed.
  - (c) excitability, contractility, elasticity.
  - (d) speed of contraction, endurance capacity, force production.
2. The long, flat bone located in the centre of the chest is called the
  - (a) ribs.
  - (b) sternum.
  - (c) fibula.
  - (d) patella.
3. Motor skills can be classified according to specific elements. The athletic event of high jump would be classified as
  - (a) gross, discrete, closed
  - (b) fine, serial, closed
  - (c) gross, serial, closed
  - (d) fine, continuous, open
4. The local soccer team begin their pre-season training. The coach chooses a relevant method of training that involves continuous running with regular changes of pace according to the natural environment that the team comes across during the session. This method of training is called
  - (a) fartlek
  - (b) continuous
  - (c) plyometrics
  - (d) circuit
5. Which of the following is **not** a function of the blood?
  - (a) the transportation of nutrients and oxygen
  - (b) the regulation of blood pressure
  - (c) the regulation of the body's temperature
  - (d) the protection of the body to fight bacteria

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6. A baseball player strikes the ball in the ‘sweet spot’. The feedback they receive during the strike indicates that it felt successful, this is an example of
  - (a) extrinsic, concurrent feedback
  - (b) intrinsic, concurrent feedback
  - (c) extrinsic, terminal feedback
  - (d) intrinsic, terminal feedback
7. The small air sacs surrounded by capillaries, which allow oxygen and carbon dioxide to diffuse between the lungs and the blood are called the
  - (a) bronchioles
  - (b) trachea
  - (c) alveoli
  - (d) diaphragm
8. A tennis player makes a goal to achieve a first serve percentage of 65%. This type of goal is classified as
  - (a) an outcome goal
  - (b) a process goal
  - (c) a realistic goal
  - (d) a performance goal
9. As the left leg bends in a shoulder stand, the left knee and hip joint experience which movement type?
  - (a) extension at the knee and flexion at the hip
  - (b) flexion at the knee and rotation at the hip
  - (c) flexion at the knee and flexion at the hip
  - (d) flexion at the knee and extension at the hip



10. A tennis player exerts a force against the ball with the racket, this creates an equal and opposite reaction force. This is example of
  - (a) Newton’s First Law of Motion
  - (b) Newton’s Second Law of Motion
  - (c) Newton’s Third Law of Motion
  - (d) Newton’s Fourth Law of Motion

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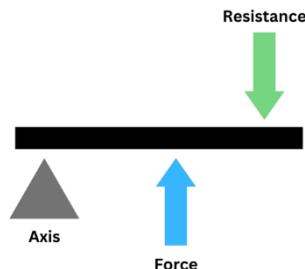
11. A rock climber grips the wall, using strength in the hand and fingers as they contract the muscles against an immovable resistance. This form of resistance training is referred to as

- (a) isometric training
- (b) isotonic training
- (c) isokinetic training
- (d) isolated training



12. Which lever system has the force (effort) located between the axis (fulcrum) and resistance (load)?

- (a) Second class lever
- (b) Third class lever
- (c) First class lever
- (d) Fourth class lever

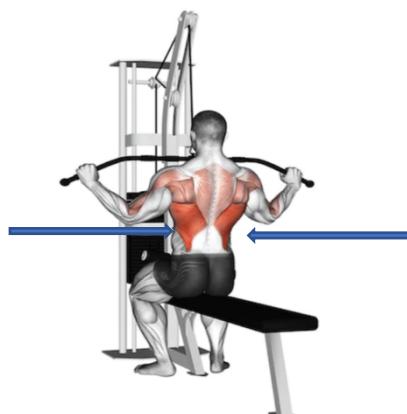


13. According to the Inverted U Hypothesis, which of the following statements would best describe the relationship between arousal levels and skill complexity?

- (a) higher levels of arousal are required for simple skills
- (b) lower levels of arousal are required for more complex skills
- (c) low levels of arousal are required for simple skills
- (d) both (a) and (b)

14. What is the name of the large, flat muscle that is located in the lower part of the trunk, which is worked during pull downs at the gym?

- (a) latissimus dorsi
- (b) trapezius
- (c) adductor group
- (d) deltoids



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15. The range of a projectile is dependent on three key factors. These are
- (a) acceleration of release, height of release, trajectory of release
  - (b) height of release, angle of release, accuracy of release
  - (c) angle of release, power of release, speed of release
  - (d) height of release, angle of release, velocity of release
16. Which of the following terms best describes the ability of a muscle to respond to a stimulus?
- (a) elasticity
  - (b) contractibility
  - (c) extensibility
  - (d) excitability
17. Which chamber of the heart is responsible for pumping oxygenated blood through the aorta for distribution to the rest of the body?
- (a) left atrium
  - (b) left ventricle
  - (c) right ventricle
  - (d) right atrium
18. Components of fitness can be categorised in terms of health related and performance related. Which of the following would be consider health related components?
- (a) coordination, flexibility, power
  - (b) cardiorespiratory endurance, body composition, speed
  - (c) body composition, muscular strength, muscular endurance
  - (d) flexibility, balance, reaction time
19. The coach provides Jamie with the following feedback, “*Much better Jamie! You held your wrist firm during the stroke and your follow-through directed the ball down the line.*” What was the purpose of giving this specific feedback?
- (a) motivation and reinforcement
  - (b) motivation and praise
  - (c) reinforcement and correction of errors
  - (d) verbal and extrinsic
20. Which of the following is the true definition of the origin and insertion points of muscle attachment?
- (a) the origin is where the muscle joins to the stationary bone. The insertion is the point where the muscle is attached to the next stationary bone
  - (b) the origin is where the muscle joins to the stationary bone. The insertion is the point where the muscle is attached to the moving bone
  - (c) the origin is where the muscle joins to the moving bone. The insertion is the point where the muscle is attached to the stationary bone
  - (d) the origin is where the muscle joins to the moving bone. The insertion is the point where the muscle is attached to the next moving bone

**End of Section One**

**See next page**

# YEAR 11 PHYSICAL EDUCATION STUDIES

## Section Two:

## Short answer 50% (65 Marks)

This section has **six** questions. Answer **all** questions. Write your answers in the spaces provided. Supplementary pages for planning/continuing your answers to questions are provided at the end of this Question/Answer booklet. If you use these pages to continue an answer, indicate at the original answer where the answer is continued, i.e. give the page number.

**Suggested working time: 90 minutes.**

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### Question 21 (9 marks)

The body has a number of important and essential systems that work together to maintain health and promote optimal sports performance.

- (a) Explain the main function of the circulatory system (2 marks)

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- (b) The heart plays a central role in the functioning of the circulatory system. Identify the type of muscle the heart is classified as. (1 mark)

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- (c) There are three main blood vessels that make up the vascular system. Name the **three** types and state **one** function of each. (6 marks)

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### Question 22

(12 marks)

The Fitts and Posner phases of motor learning can be applied by coaches and performers as they move through the continuum of learning a new motor skill.

- (a) Name the **three** phases of learning according to Fitts and Posner. (3 marks)

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- (b) A volleyball player is
- beginning to take cues from the external environment
  - starting to eliminate large errors
  - focusing practice on timing and sequencing of whole skills
  - placing greater emphasis on internal feedback.

Identify the phase of learning this volleyball player is currently in and outline **two** characteristics of performance that would move them towards a higher level of learning. (3 marks)

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- (c) A beginner would require more cues to improve their current level of skill performance than a more seasoned player. Name **three** types of cues that a coach could provide during a training session and provide an example for each. (6 marks)

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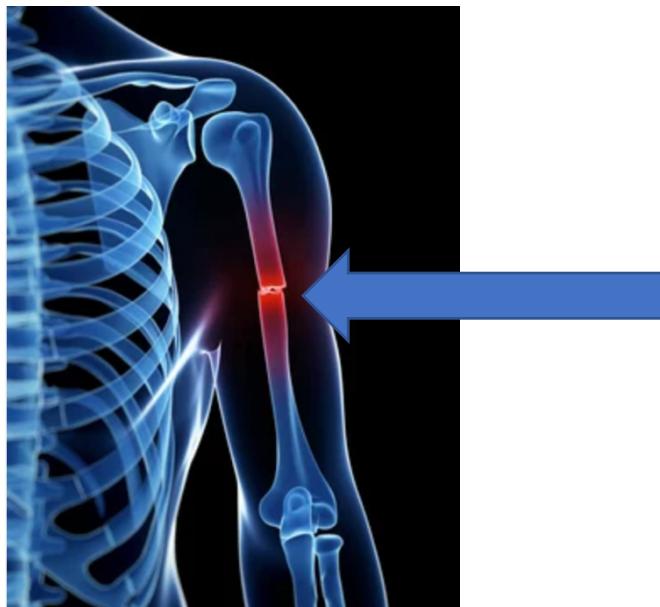
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# YEAR 11 PHYSICAL EDUCATION STUDIES

## Question 23

(6 marks)

Following a collision with a teammate during a rugby league game, Ty is taken to the hospital to receive an x-ray and assess the extent of the injury. The result of the x-ray can be seen in the image below.



- (a) Name the bone that has been broken in the upper arm. (1 mark)

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- (b) Identify the **two** muscles that are responsible for the flexion and extension of the arm at the elbow. (2 marks)

Flexion: \_\_\_\_\_

Extension: \_\_\_\_\_

- (c) The musculoskeletal system works with the joints of the body to create movement. Outline what is meant by the term 'antagonist pairs' and describe how this relationship creates movement in the body. (3 marks)

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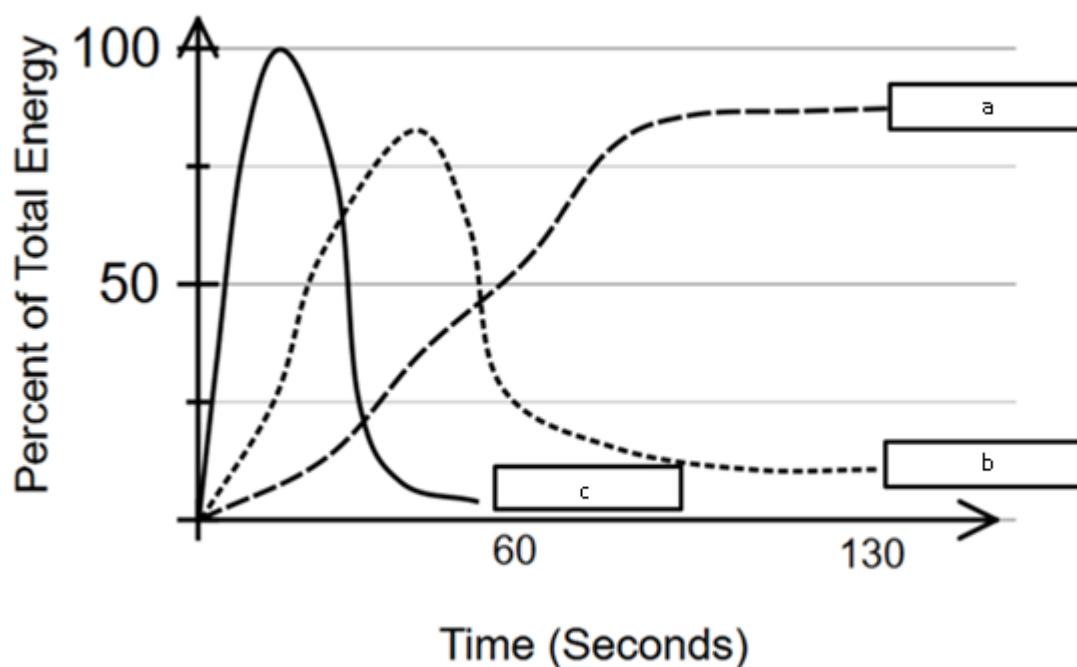
# YEAR 11 PHYSICAL EDUCATION STUDIES

## Question 24

(10 marks)

Jess is a 1500m runner, who is currently working to improve the efficiency of the energy systems throughout the duration of the race.

- (a) The graph below represents the continuum of the three energy systems to provide ATP at the start of the race. Identify each energy system on the graph. (3 marks)



a \_\_\_\_\_

b \_\_\_\_\_

c \_\_\_\_\_

- (b) Jess holds a personal best time of 4 minutes 42 seconds. Identify the energy system which would contribute the most to energy production in the latter parts of the race. Justify your answer by comparing the contribution of each energy system. (4 marks)

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- (c) Identify the primary fuel source for energy production for Jess to ensure she has enough energy to sustain herself during training and racing. Explain why this source of fuel is preferred to meet the energy demands. (3 marks)

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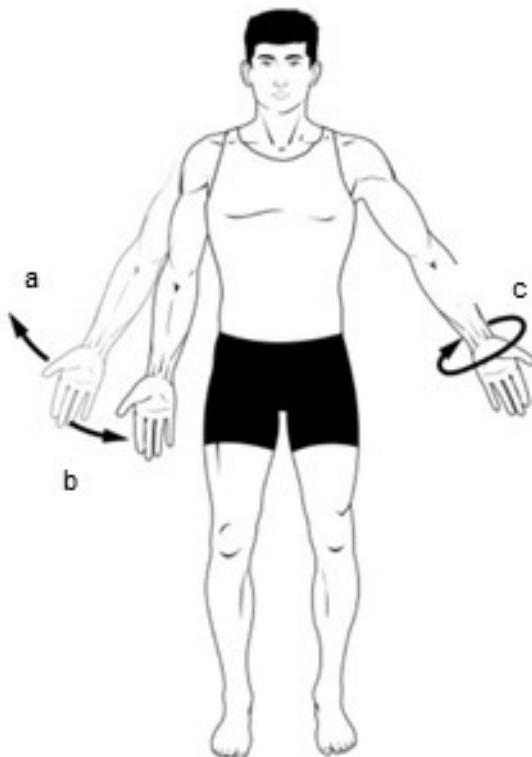
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### Question 25

(13 marks)

Javelin is a demanding, explosive throwing event which combines strength, speed, power and flexibility to maximise the distance of the throw.

- (a) At the start of a training session, an athlete begins their warmup with some gentle dynamic movements in the upper body. Label the movement types shown by the arrows below (figure 1a) The athlete moves the arm up and down (a and b) and in a circular motion (c). (3 marks)



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- (b) The coach sets up a specific number of exercise stations and the athletes complete each station consecutively according to a set work/recovery ratio. Name the type of training method the coach is implementing for the athletes. (1 mark)
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- (c) To optimise flight time and distance thrown, throwers can refer to the principle of optimal projection. Explain the optimal angle of release the athlete should consider to maximise flight time and increase distance thrown. (2 marks)
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- (d) Goal setting is a priority for any elite performer to ensure that all training is focused towards achieving a specific result. Goal setting often follows a set of characteristics. Outline the **seven** characteristics of goals the javelin throwers could use to write effective goals. (7 marks)
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### Question 26

(15 marks)

An aspiring boxer has enlisted the help of a professional performance coach in the hope of improving his physiological capacity and overall performance.

- (a) Identify and explain **two** training principles that this coach could use to achieve optimal performance results for the boxer. (6 marks)

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- (b) The boxer often uses a weighted punch bag which hangs from the roof of the gym. State Newton's First Law of Motion and explain how this law could be applied to the punch bag as the boxer throws his first punch. (3 marks)

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- (c) As the boxer begins his training session his heart rate and respiratory rate start to increase in response to the rising energy and exertion demands on the body. Identify **two** other immediate physiological responses the boxer may experience with the onset of exercise and describe why each of these occur. (6 marks)

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**End of Section Two**

**See next page**

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## Section Three:

**Extended answer 30% (30 Marks)**

This section contains **four** questions. You must answer **two** questions. Write your answers in the spaces provided. Supplementary pages for planning/continuing your answers to questions are provided at the end of this Question/Answer booklet. If you use these pages to continue an answer, indicate at the original answer where the answer is continued, i.e. give the page number.

**Suggested working time: 60 minutes.**

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### Question 27

**(15 marks)**

A goalkeeper prepares himself physically and mentally for an incoming penalty. He skilfully processes the information available to give himself the best possible chance of a successful save.



- (a) The information processing model is one example used to consider how learning and execution of a skilled performance takes place. Identify and outline each stage of the information processing model. Apply each stage of the model to the goalkeeper attempting to save the penalty. **(12 marks)**
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- (b) The soccer player below prepares to take a penalty kick. He is aiming to drive the ball fast and hard into the bottom right-hand corner of the net. Define Newton's Second Law of Motion and explain how the application of this law could assist the soccer player in achieving his objective and make it more difficult for the goalkeeper to save. (3 marks)



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### Question 28

(15 marks)

A wheelchair athlete uses their race data to evaluate speed, velocity, and acceleration over different phases of the race.



- (a) Identify and outline the type of motion a wheelchair athlete would demonstrate during a race. Explain how the athlete can use race data relating to speed and acceleration during a 1500m race (approximately three and a half minutes). (5 marks)

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The rigorous training program followed by the wheelchair athlete creates long-term physiological adaptations in the body, which continue to improve performance levels over time. The athlete may observe a gradual increase in stroke volume in addition to other long-term adaptations.

- (b) Explain how an increase in stroke volume will assist the performance of the wheelchair athlete. In addition, name and outline **two** other cardiovascular effects and **two** respiratory effects that long-term training may have on the athlete. (10 marks)

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### Question 29

(15 marks)

British tour cyclist Tao Geoghegan Hart is preparing to take the start line at one of the most challenging races on the tour, the Giro d'Italia (21 stages/total of 3,489.2km). After taking the title in 2020, Geoghegan Hart has been plagued with injury and illness, but despite these challenges a recent sports report stated that the *28-year-old Londoner has every reason to feel confident.* (Hurcom, BBC Sport, 5 May 2023).



- (a) Define self-confidence and outline a reason why optimising self-confidence is beneficial to performance outcomes. To remain confident Tao would need to consistently work on his motivation levels as he strived to overcome his challenges. Name and outline **two** types of motivation and explain how each can be applied to Tao. (10 marks)

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- (b) Tour cycling requires training specific components of fitness such as cardiorespiratory endurance. Define this component and identify **two** additional components of fitness that would be required in the sport of road racing. For each additional component, outline why this component would be important. (5 marks)

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### Question 30

(15 marks)



Image 1



Image 2

The images above show a gymnast (image 1) and a downhill skier (image 2), both skilfully managing to manipulate balance in their respective events.

- (a) Define the term balance and identify the type of balance the gymnast (image 1) and the downhill skier (image 2) are demonstrating. If mass is consistent, name and explain how each athlete uses these factors to ensure success in their respective events. (10 marks)

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- (b) To help the gymnast overcome nerves before the start of her gymnastic routine her coach encourages her to do some diaphragmatic breathing and take a long slow exhale. Outline what the diaphragm is and explain how air is pushed out of the lungs through the process of expiration (exhalation). (5 marks)

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**End of questions**

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Supplementary page

Question number: \_\_\_\_\_

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Supplementary page

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Supplementary page

Question number: \_\_\_\_\_

## ACKNOWLEDGEMENTS

<b>Question Number</b>	<b>Source</b>
9	<a href="https://pixabay.com/photos/aerobics-balance-exercise-female-18884/">https://pixabay.com/photos/aerobics-balance-exercise-female-18884/</a>
11	<a href="https://pixabay.com/photos/climbing-rope-rappelling-wall-rock-480459/">https://pixabay.com/photos/climbing-rope-rappelling-wall-rock-480459/</a>
14	<a href="https://parallelcoaching.co.uk/lat-pull-down-technique-how-to-correct-a-client">https://parallelcoaching.co.uk/lat-pull-down-technique-how-to-correct-a-client</a>
23	<a href="https://stock.adobe.com/au/search?filters%5Bcontent_type%3Aphoto%5D=1&amp;filters%5Bcontent_type%3Aillustration%5D=1&amp;filters%5Bcontent_type%3Azip_vector%5D=1&amp;filters%5Bcontent_type%3Avideo%5D=1&amp;filters%5Bcontent_type%3Atemplate%5D=1&amp;filters%5Bcontent_type%3A3d%5D=1&amp;filters%5Bcontent_type%3Aimage%5D=1&amp;k=xray+broken+arm&amp;order=relevance&amp;safe_search=1&amp;limit=100&amp;search_page=1&amp;search_type=usertyped&amp;acp=&amp;aco=xray+broken+arm&amp;get_facets=0&amp;asset_id=57194723">https://stock.adobe.com/au/search?filters%5Bcontent_type%3Aphoto%5D=1&amp;filters%5Bcontent_type%3Aillustration%5D=1&amp;filters%5Bcontent_type%3Azip_vector%5D=1&amp;filters%5Bcontent_type%3Avideo%5D=1&amp;filters%5Bcontent_type%3Atemplate%5D=1&amp;filters%5Bcontent_type%3A3d%5D=1&amp;filters%5Bcontent_type%3Aimage%5D=1&amp;k=xray+broken+arm&amp;order=relevance&amp;safe_search=1&amp;limit=100&amp;search_page=1&amp;search_type=usertyped&amp;acp=&amp;aco=xray+broken+arm&amp;get_facets=0&amp;asset_id=57194723</a>
25	<a href="https://open.oregonstate.education/aandp/chapter/9-5-types-of-body-movements/">https://open.oregonstate.education/aandp/chapter/9-5-types-of-body-movements/</a>
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