Physical Education Studies
Year 11 ATAR

CHAPTER 4:
Biomechanics

NEXT

Welcome to the quiz for Chapter 4

- You will be given 20 multiple choice questions
- Click on the correct answer
- Use the links to navigate through the quiz
- To finish the test you must answer all the questions correctly

ARE YOU READY?

Question 1

Which of the following is NOT an aspect of linear motion?

A. How far a body moves

B. How fast a body moves

C. How well a body spins

D. How consistently a body moves

TRY AGAIN...

BACK TO QUESTION

THAT'S CORRECT!

NEXT QUESTION

Question 2

What is distance?

A. The path of a body as it moves from one location to another

B. The path of a body as it moves in a straight line

C. The rate at which a body moves from one location to another

D. The rate at which the speed of the body changes with time

TRY AGAIN...

BACK TO QUESTION

THAT'S CORRECT!

NEXT QUESTION

Question 3

What is positive acceleration?

A. When speed is increasing to the left

B. When speed is increasing to the right

C. When velocity is decreasing

D. When velocity is increasing

TRY AGAIN...

BACK TO QUESTION

THAT'S CORRECT!

NEXT QUESTION

Question 4

Which of the following does NOT represent a projectile?

A. A pitched softball

B. A sprinter crossing finish line

C. A thrown javelin

D. A kicked soccer ball

TRY AGAIN...

BACK TO QUESTION

THAT'S CORRECT!

NEXT QUESTION

Question 5

The 'time in flight' of a body is equal to which of the following?

A. Trajectory up – trajectory down

B. Horizontal distance – vertical distance

C. Trajectory up + trajectory down

D. Horizontal distance + vertical distance

TRY AGAIN...

BACK TO QUESTION

THAT'S CORRECT!

NEXT QUESTION

Question 6

Which of the following represents the ideal angle of projection for a long jumper?

A. 60-68 degrees

B. 5-10 degrees

C. 40-48 degrees

D. 18-27 degrees

TRY AGAIN...

BACK TO QUESTION

THAT'S CORRECT!

NEXT QUESTION

Question 7

What is angular displacement?

A. The angle between the initial and final positions of the body

B. The exact length of the body's angular path

C. The angular distance – time taken

D. Time taken + angular distance

TRY AGAIN...

BACK TO QUESTION

THAT'S CORRECT!

NEXT QUESTION

Question 8

Which of the following is NOT a means of increasing the distance of a kick in soccer?

A. Increasing the angular velocity of the leg as it strikes the ball

B. Extending the knee joint at the point of impact

C. Decreasing the backswing of the leg

D. All of the above

TRY AGAIN...

BACK TO QUESTION

THAT'S CORRECT!

NEXT QUESTION

Question 9

What is general motion?

A. Motion of the body as a whole

B. A combination of linear and angular motion

C. The combined motion of all body parts involved in an action

D. Any motion in a forward or backward direction

TRY AGAIN...

BACK TO QUESTION

THAT'S CORRECT!

NEXT QUESTION

Question 10

Which of the following is an example of general motion?

A. Swimming

B. Kicking a football

C. Throwing a softball

D. Shooting a netball

TRY AGAIN...

BACK TO QUESTION

THAT'S CORRECT!

NEXT QUESTION

Question 11

Which law states that: 'an object at rest tends to stay at rest, and an object in motion tends to stay in motion, with the same speed and in the same direction, unless acted upon by an external force?

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

TRY AGAIN...

BACK TO QUESTION

THAT'S CORRECT!

NEXT QUESTION

Question 12

What is force?

A. The quantity of matter making up a body

B. The degree of difficulty in making a stationary object move or a moving object stop

C. The action of another body that changes the state of being of a body at rest or in motion

D. The degree of resistance to a change in rotation

TRY AGAIN...

BACK TO QUESTION

THAT'S CORRECT!

NEXT QUESTION

Question 13

Which of the following is NOT an example of changing the rotational inertia of an object?

A. Moving the hands down the golf club

B. Using a longer cricket bat

C. Diver coming out of a tuck into a pike

D. Following through with the fingers on a basketball free throw

TRY AGAIN...

BACK TO QUESTION

THAT'S CORRECT!

NEXT QUESTION

Question 14

Which law states that: 'when a body is acted upon by a constant force, its resulting acceleration is proportional to the force and inversely proportional to the mass?

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

TRY AGAIN...

BACK TO QUESTION

THAT'S CORRECT!

NEXT QUESTION

Question 15

Which of the following represents momentum?

A. Mass x acceleration

B. Mass x velocity

C. Force x time

D. Mass x time

TRY AGAIN...

BACK TO QUESTION

THAT'S CORRECT!

NEXT QUESTION

Question 16

Why does a fielder in cricket cradle the ball on impact, making sure there is some 'give' in the hands?

A. For a better recovery to throw

B. To create greater impulse on the ball

C. To fool the batter

D. To reduce the force on the ball

TRY AGAIN...

BACK TO QUESTION

THAT'S CORRECT!

NEXT QUESTION

Question 17

Which law states that: 'to every action there is an equal and opposite reaction'?

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

TRY AGAIN...

BACK TO QUESTION

THAT'S CORRECT!

NEXT QUESTION

Question 18

The golf swing is an example of which of the following types of movement?

A. Sequential movement

B. Simultaneous movement

C. Movement in equilibrium

D. Coordinated movement

TRY AGAIN...

BACK TO QUESTION

THAT'S CORRECT!

NEXT QUESTION

Question 19

What is the centre of gravity?

A. The centre line of the body

B. The point at which the force of gravity is the strongest

C. The point at which all parts of the body are in balance

D. The point at which the force of gravity is neutralised

TRY AGAIN...

BACK TO QUESTION

THAT'S CORRECT!

NEXT QUESTION

Question 20

Which of the following is NOT a means of increasing stability?

A. Increasing the speed of rotation

B. Increasing the base of support

C. Lowering the centre of mass

D. increasing the mass of the body

TRY AGAIN...

BACK TO QUESTION

THAT'S CORRECT!

NEXT

CONGRATULATIONS!

YOU HAVE COMPLETED THE CHAPTER 4 QUIZ