

Pioneers of Performance

Sports Science · Practice Test · 20 Questions

1. Who is widely considered the father of biomechanics, having first analyzed human movement in 'De Motu Animalium'?

- A) Giovanni Borelli
- B) Isaac Newton
- C) Archimedes
- D) Leonardo da Vinci

2. In which decade was the first 'heart rate monitor' for athletic training invented?

- A) 1950s
- B) 1960s
- C) 1970s
- D) 1980s

3. What synthetic material, invented in 1935, revolutionized the production of lightweight sports clothing and swimsuits?

- A) Polyester
- B) Nylon
- C) Rayon
- D) Spandex

4. Which company introduced the first mass-marketed 'waffle-soled' running shoe in the 1970s?

- A) Adidas
- B) Puma
- C) Nike
- D) Reebok

5. What type of camera technology was first used in the 1948 London Olympics to determine race winners?

- A) High-speed film
- B) Digital sensor
- C) Photo finish camera
- D) Infrared scanner

6. Which scientist is credited with publishing the first formal study on the 'oxygen debt' theory during exercise?

- A) A.V. Hill
- B) Louis Pasteur
- C) Gregor Mendel
- D) Marie Curie

7. What does the 'Cooper Test', developed by Kenneth Cooper in 1968, primarily measure?

- A) Flexibility
- B) Muscle mass
- C) Aerobic capacity
- D) Reaction time

8. The first official Sports Medicine journal was published in which country in 1954?

- A) USA
- B) Germany
- C) Australia
- D) Japan

9. What invention, first used in the 1990s, allowed swimmers to reduce drag in the water significantly?

- A) Full-body tech suits
- B) Silicone caps
- C) Goggles with HUD
- D) Magnetic fins

10. Which common piece of modern sports equipment was first patented by Albert Spalding in the late 19th century?

- A) The baseball glove
- B) The carbon fiber bat
- C) The synthetic tennis ball
- D) The soccer cleat

11. In what year was the first formal Department of Sports Science established at a university?

- A) 1902
- B) 1924
- C) 1955
- D) 1972

12. The 'Borg Scale', invented by Gunnar Borg, is used to measure what?

- A) Perceived exertion
- B) Body fat percentage
- C) Joint range of motion
- D) Hydration levels

13. Which material replaced traditional wooden bats in many professional baseball leagues due to its durability?

- A) Titanium
- B) Aluminum
- C) Fiberglass
- D) Carbon fiber

14. What did the 'Grip Strength Dynamometer' first allow researchers to quantify in the early 20th century?

- A) Neural fatigue
- B) Hand muscle force
- C) Reflex speed
- D) Bone density

15. The first 'treadmill' used for medical and sports research was developed in which century?

- A) 17th century
- B) 18th century
- C) 19th century
- D) 20th century

16. What was the primary purpose of the first sports mouthguards invented in the late 1800s?

- A) Protecting dental work
- B) Reducing concussions
- C) Improving jaw alignment
- D) Stabilizing breathing

17. Which Olympic event was the first to use automated timing systems involving electronic touch pads?

- A) 1968 Mexico City
- B) 1972 Munich
- C) 1980 Moscow
- D) 1984 Los Angeles

18. What did the 1920s invention of the 'isokinetic machine' help sports scientists study?

- A) Constant velocity muscle contraction
- B) Bone fracture healing
- C) Heart rate recovery
- D) Balance stability

19. The first 'gait analysis' laboratory for athletes was established to study which specific sport?

- A) Tennis
- B) Track and field
- C) Swimming
- D) Cycling

20. Which invention allows modern sports scientists to measure body composition by sending a low-level electrical current?

- A) BIA (Bioelectrical Impedance Analysis)
- B) MRI scan
- C) X-ray
- D) Calipers