

Foundations of Sports Science: Historical Insights

Sports Science · Answer Key · 10 Questions

1. Who is widely considered the 'father of modern sports medicine' for his extensive research on athletic injuries and their treatment?

- A) Hermann von Helmholtz**
- B) August Krogh
- C) Sir Roger Bannister
- D) Carl Diem

2. In what year did the first modern Olympic Games take place, marking a significant revival of athletic competition with an increased focus on performance?

- A) 1892
- B) 1900
- C) 1896**
- D) 1904

3. Which early physiologist is renowned for his pioneering work on muscle physiology and the concept of the 'all-or-none law' in nerve excitation, foundational to understanding human movement?

- A) Ivan Pavlov
- B) Santiago Ramón y Cajal
- C) Edgar Adrian, 1st Baron Adrian**
- D) Otto Loewi

4. The establishment of the International Society of Biomechanics in 1973 was a significant event for sports science. In which city did this founding take place?

- A) London
- B) New York
- C) Paris
- D) St. Louis**

5. What groundbreaking event in 1954 demonstrated the physiological limits of human running and spurred further research into endurance and training?

- A) The first sub-4-minute mile run**
- B) The invention of the heart rate monitor
- C) The introduction of sports psychology
- D) The development of advanced running shoes

6. Which ancient Greek philosopher wrote extensively on the importance of physical training and its connection to mental well-being, laying early conceptual groundwork for sports science?

- A) Aristotle**
- B) Plato
- C) Socrates
- D) Herodotus

7. The development of the concept of 'training load' and its impact on performance is a core aspect of sports science. Which country's sports scientists were particularly influential in developing these concepts in the mid-20th century?

- A) United States
- B) Germany
- C) Soviet Union**
- D) Australia

8. Who was the first person to use electromyography (EMG) to study muscle activity during human movement in the early 20th century?

- A) Étienne-Jules Marey**
- B) Eadweard Muybridge
- C) Max Wertheimer
- D) Wilhelm Wundt

9. The introduction of specific physiological testing protocols for athletes, like the Cooper Test for aerobic fitness, became widespread in which decade?

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

10. Which early sports scientist's work in the early 20th century heavily influenced the understanding of human energy expenditure and metabolism during exercise?

- A) August Krogh
- B) Archibald Hill
- C) A.V. Hill**
- D) P.O. Astrand