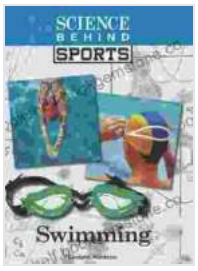
Swimming Science Behind Sports Lizabeth Hardman

Swimming is a unique and challenging sport that requires a high level of skill, fitness, and coordination. In order to optimize performance, it is essential to understand the science behind swimming. This book provides a comprehensive overview of the latest research on swimming physiology, biomechanics, training, and performance.

Swimming physiology is the study of the human body's response to swimming. This includes how the body produces energy, how it regulates temperature, and how it recovers from exercise. Understanding swimming physiology is essential for developing effective training programs and optimizing performance.

Some of the key topics covered in this section include:



Swimming (Science Behind Sports) by Lizabeth Hardman

★★★★★ 5 out of 5

Language	: English
File size	: 6804 KB
Screen Reader	: Supported
Print length	: 128 pages

- **Energy metabolism:** How the body produces energy for swimming
- **Temperature regulation:** How the body maintains a constant temperature while swimming

- **Recovery from exercise:** How the body recovers from swimming workouts
- **Nutrition for swimmers:** The importance of nutrition for swimming performance

Swimming biomechanics is the study of the human body's movement through water. This includes how the body creates propulsion, how it minimizes drag, and how it maintains stability. Understanding swimming biomechanics is essential for improving technique and optimizing performance.

Some of the key topics covered in this section include:

- **Propulsion:** How the body creates forward movement in the water
- **Drag:** How the body reduces resistance from the water
- **Stability:** How the body maintains a balanced and stable position in the water
- **Technique:** The different swimming strokes and how to improve them

Swimming training is the process of preparing the body for swimming competitions. This includes developing endurance, strength, power, and speed. Understanding swimming training is essential for maximizing performance and avoiding injury.

Some of the key topics covered in this section include:

- **Periodization:** The different phases of a swimming training program
- **Training intensity:** How hard to train

- **Training volume:** How much to train
- **Recovery:** The importance of rest and recovery
- **Injury prevention:** How to avoid swimming injuries

Swimming performance is the result of a combination of factors, including physiology, biomechanics, training, and psychology. Understanding swimming performance is essential for optimizing race day performance and achieving personal bests.

Some of the key topics covered in this section include:

- **Race day preparation:** How to prepare for a swimming competition
- **Race strategy:** How to race effectively
- **Mental preparation:** The importance of mental preparation for swimming performance
- **Post-race analysis:** How to analyze race results and improve performance

Swimming Science Behind Sports Lizabeth Hardman is a comprehensive guide to the science of swimming. This book provides a detailed overview of the latest research on swimming physiology, biomechanics, training, and performance. This book is an essential resource for swimmers, coaches, and anyone interested in the science of swimming.

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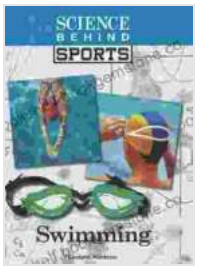

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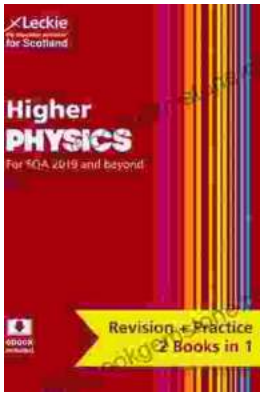
Ushuaia, the southernmost city in the world, is a fascinating place to visit. It's a...



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