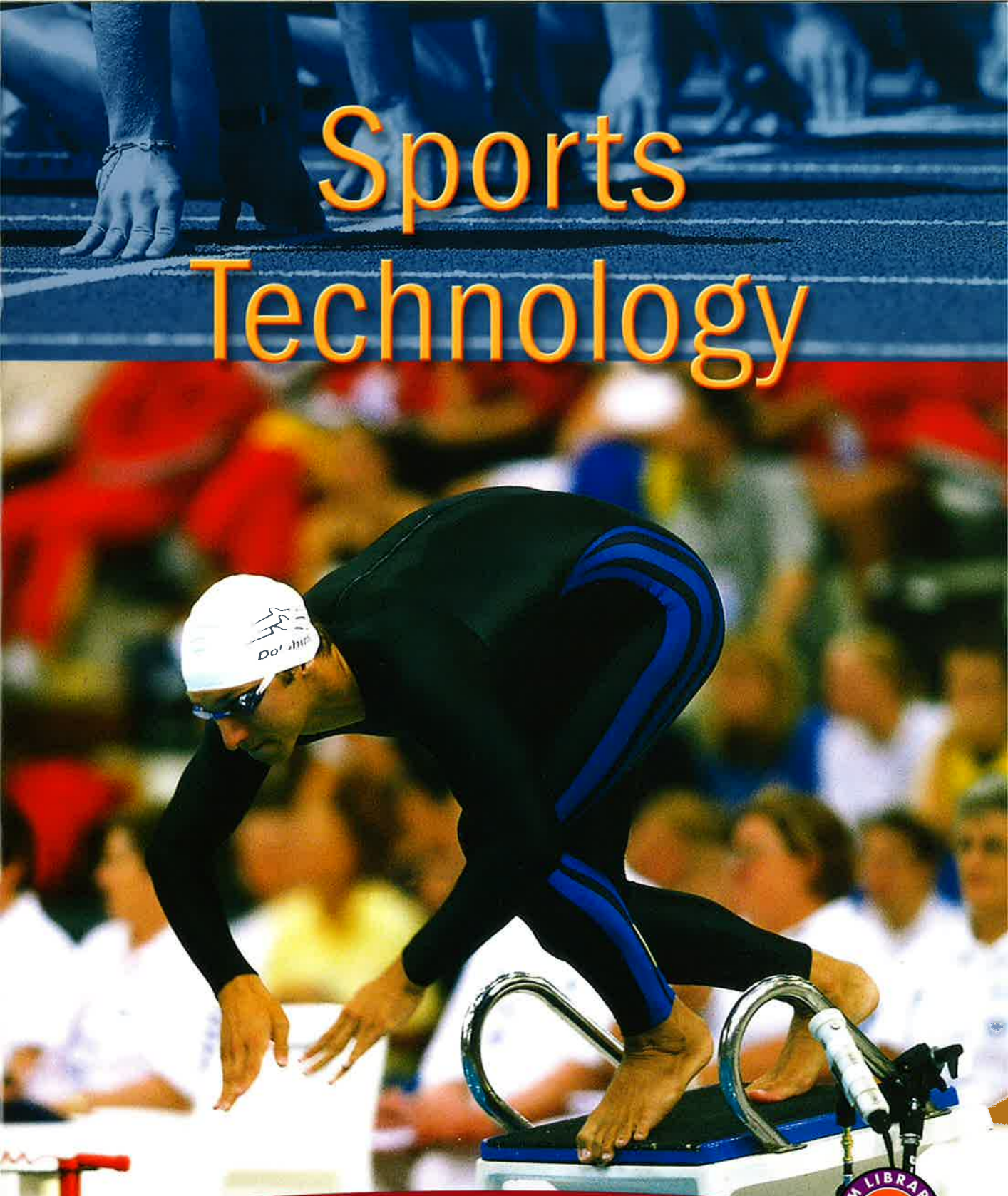
# Sports Technology



Geoff Thompson

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# Contents


Introduction 3

Chapter 1
Tools of the trade 4

Chapter 2
Clothing and protective gear 8

Chapter 3
Playing surfaces 14

Chapter 4
Large equipment 18

Chapter 5
Electronic timing systems 22

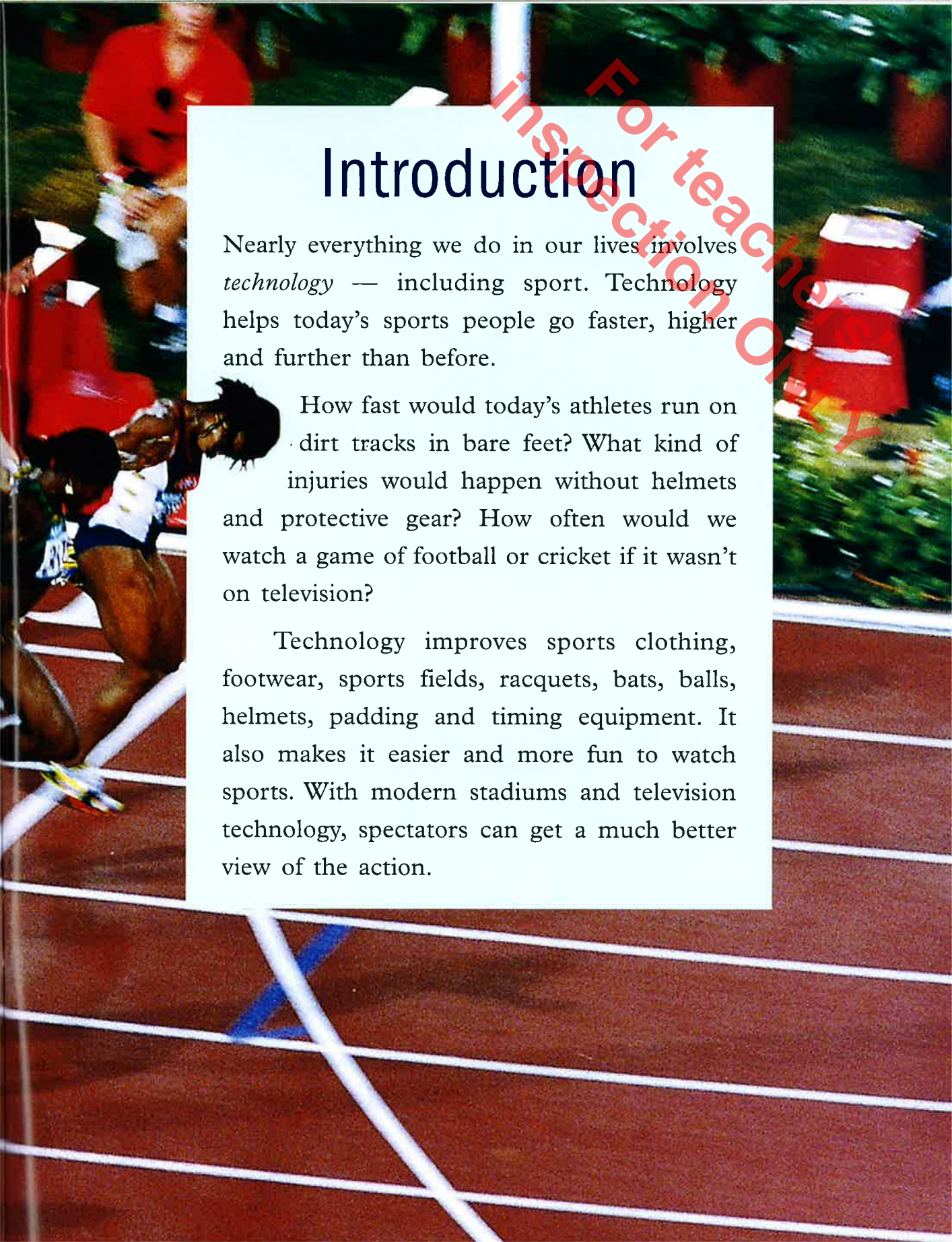
Chapter 6
Watching sport 26

Chapter 7
Technology of the future 30

Glossary, Further reading and Websites 32

Index 33


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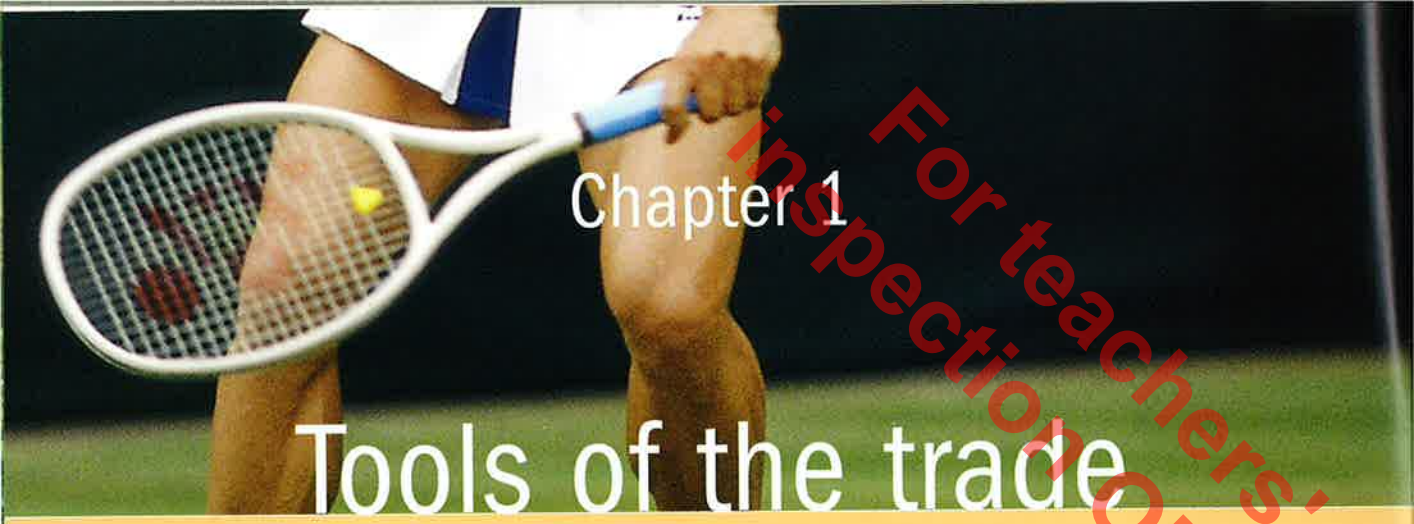
# Introduction

Nearly everything we do in our lives involves *technology* — including sport. Technology helps today's sports people go faster, higher and further than before.

How fast would today's athletes run on dirt tracks in bare feet? What kind of injuries would happen without helmets and protective gear? How often would we watch a game of football or cricket if it wasn't on television?

Technology improves sports clothing, footwear, sports fields, racquets, bats, balls, helmets, padding and timing equipment. It also makes it easier and more fun to watch sports. With modern stadiums and television technology, spectators can get a much better view of the action.

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Chapter 1

# Tools of the trade

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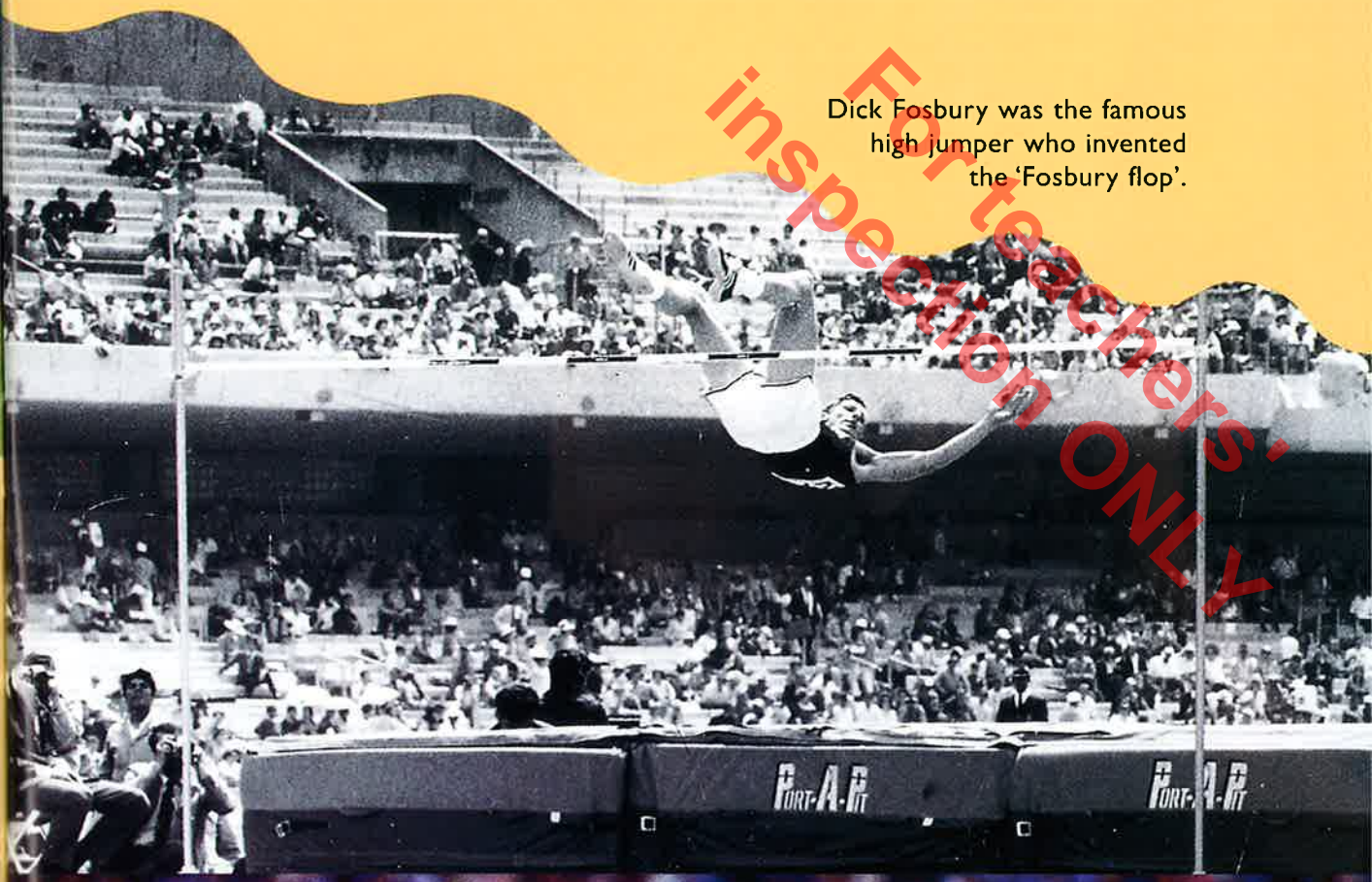
Sports people are always trying to improve their performance. They look for every advantage they can find. Better fitness, healthier food and more practice might give them an edge over their opponents. Sometimes they can get that edge with better equipment.

In the past, most sports equipment was made from wood, leather and other natural *materials*. Even bicycle wheels were once made of wood! But over the years, new materials and new designs have improved sports equipment.



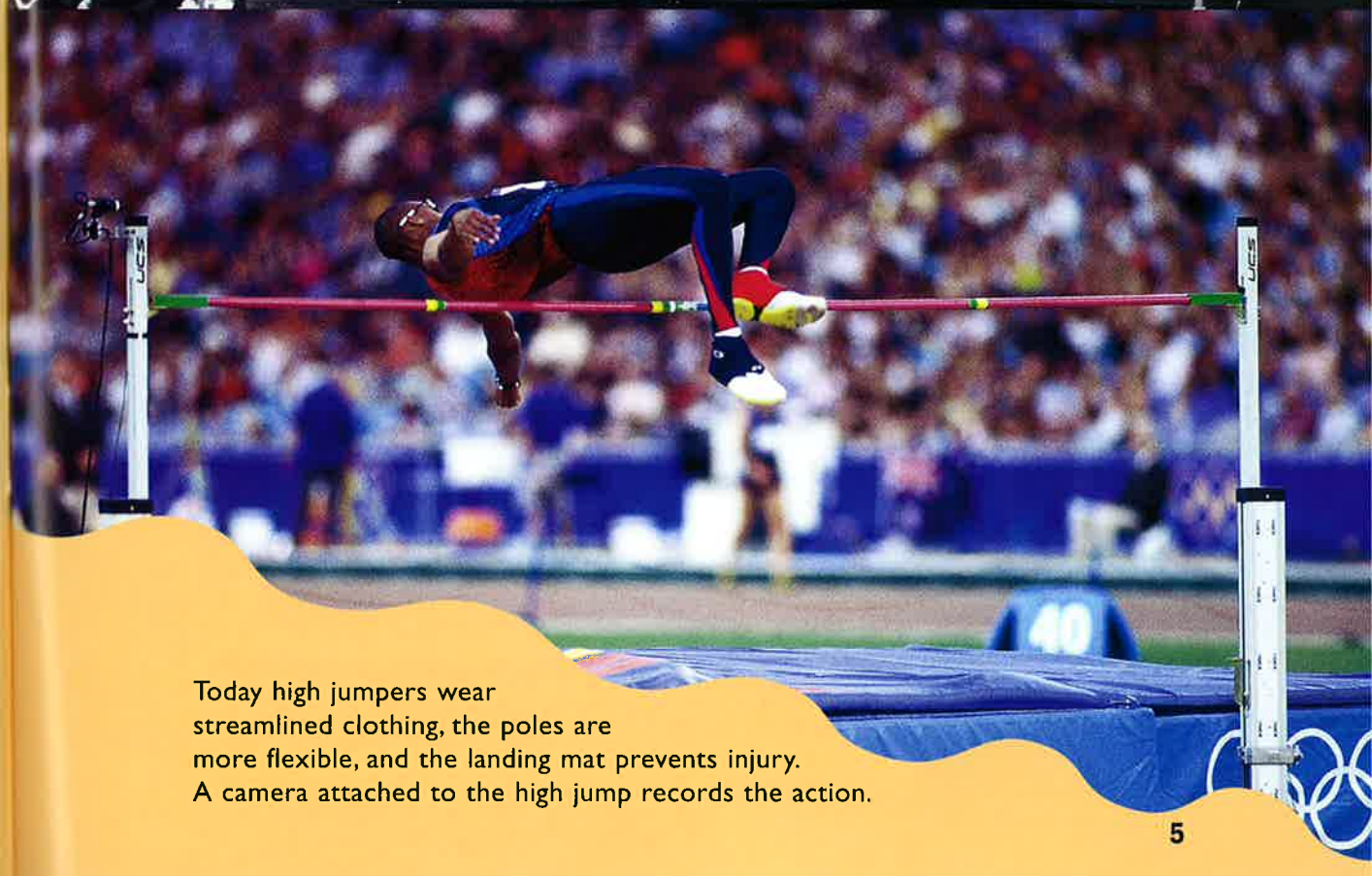
Now we have materials such as *fibreglass*, plastic, *aluminium*, and *carbon fibre*. These materials are lighter, stronger and more *flexible*.

Nearly all sports equipment uses modern materials. Can you think of any sports equipment that has always been made of the same material?



Dick Fosbury was the famous high jumper who invented the 'Fosbury flop'.

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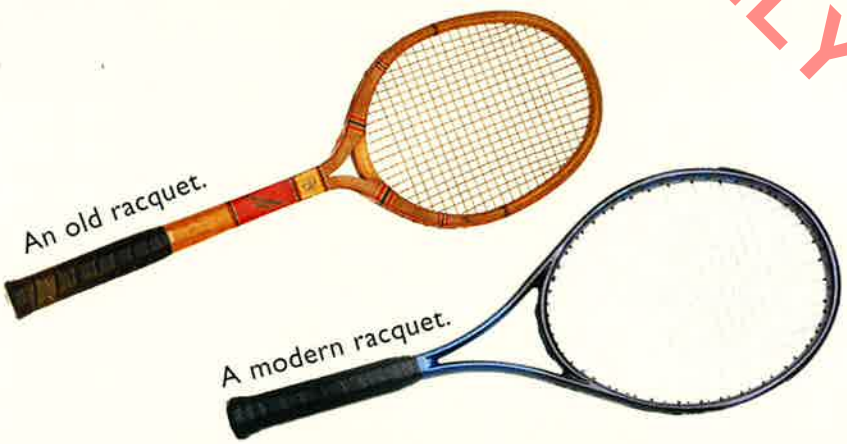


Today high jumpers wear streamlined clothing, the poles are more flexible, and the landing mat prevents injury. A camera attached to the high jump records the action.



# Playing equipment

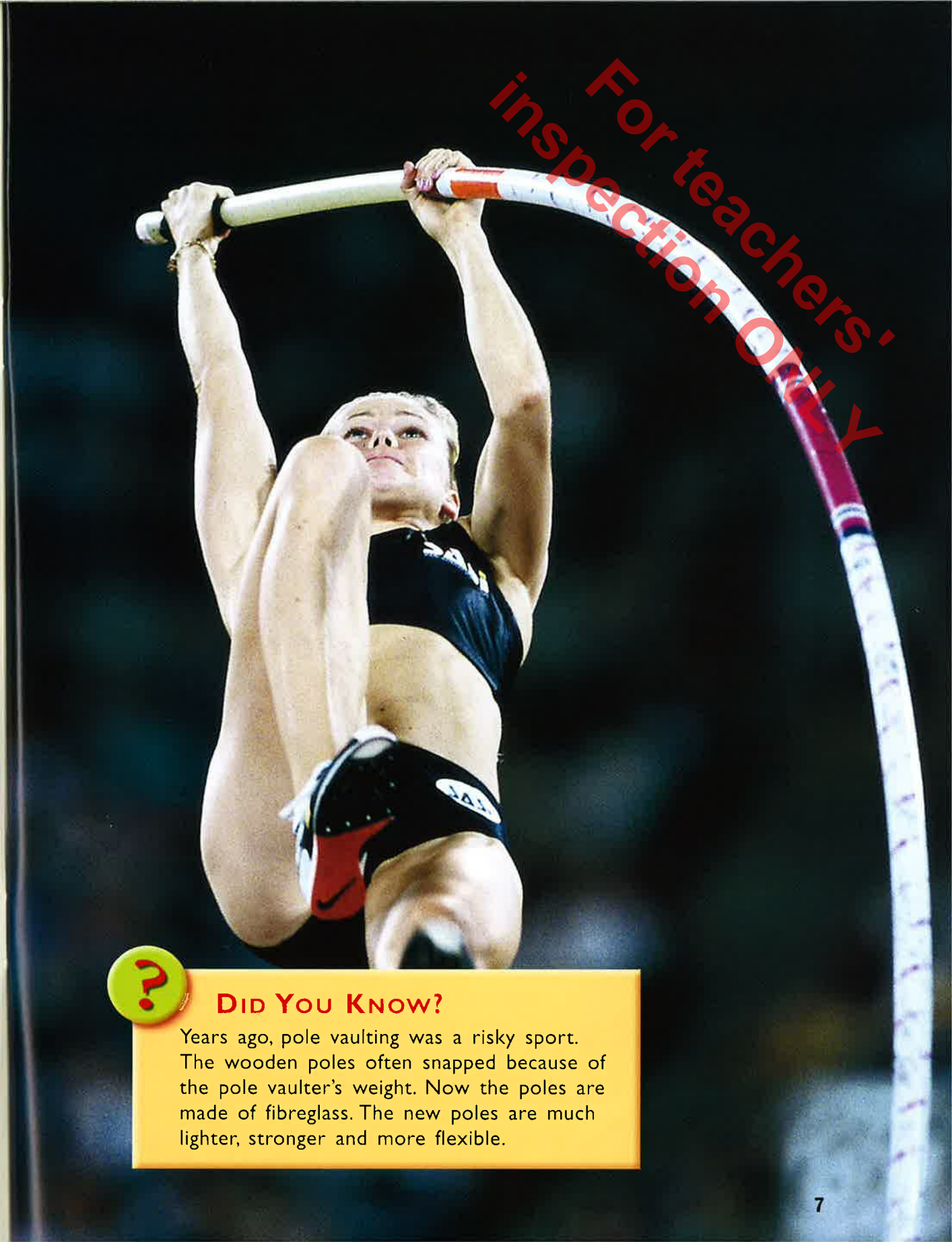
The design of sports equipment is always improving. Early tennis racquets had a small head with a thick wooden frame. Now they have big heads and strong, narrow frames made of aluminium or carbon fibre.




The strings used to be made of cat gut, but now they are *nylon*. Tennis players have more power and control over their shots when they use modern racquets. The top players serve a lot harder and faster than they used to!

Hockey sticks used to be made of wood. Now the wood is covered in fibreglass to add strength and flexibility. Some hockey sticks are made from carbon fibre, and some have aluminium handles.

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## Did You Know?

Years ago, pole vaulting was a risky sport. The wooden poles often snapped because of the pole vaulter's weight. Now the poles are made of fibreglass. The new poles are much lighter, stronger and more flexible.