

WHAT MAKES AN OLYMPIC CHAMPION?



Before You Read

- A. Completion.** Read the information below and complete sentences 1–4 using the correct form of the words in **bold**.

Several **athletes** made headlines during the 2012 London **Olympics**. Some, like Usain Bolt, broke Olympic records after many years of **training**. Considered the fastest runner ever, “Lightning” Bolt continued his winning streak when he won gold **medals** in the 100-meter and 200-meter races.

1. Usain Bolt is one of the world’s most famous _____.
2. _____ is an essential part of preparing for a sports competition.
3. The world’s biggest athletics competition is the _____.
4. When people achieve something special, they are awarded _____.

- B. Discussion.** Discuss these questions. Then read the passage to learn more about Olympic athletes.

1. Do you think anyone can train to become an Olympic athlete?
2. Do you think the life of an Olympic athlete is enjoyable? Why or why not?

^ Usain Bolt crosses the finish line to win the 100-meter gold medal in the 2012 London Olympics.



◀ A girl swims during a training session at Hangzhou Chen Jinglun Sport School Natatorium, where Chinese Olympic swimmer Ye Shiwen also trained.

1 How does a person become an Olympic **champion**—someone capable of winning the gold? In reality, a combination of biological, environmental, and **psychological** factors, as well as training and practice, all go into making a super athlete.

10 Perhaps the most important factor involved in becoming an elite¹ athlete is **genetics**. Most Olympic competitors are equipped with certain physical characteristics that **differentiate** them from the average person. Take an elite athlete's

15 muscles, for example. In most human skeletal muscles (the ones that make your body move), there are fast-twitch fibers² and slow-twitch fibers. Fast-twitch fibers help us move quickly. Olympic weightlifters, for example, have a large number of fast-twitch fibers in their muscles—many more than the average person. These allow them to lift hundreds of kilos from the ground and over their heads in seconds. Surprisingly, a large, muscular body is not the main requirement to do well in this sport. It is more important to have a large number of fast-twitch fibers in the muscles.

1 **Elite** refers to the most powerful, rich, or talented people within a particular group.

2 **Muscle fibers** are thin, threadlike pieces of flesh that make up the muscles in your body.

“You have less than three seconds from takeoff until you hit the water, so it has to be reflex.”

Greg Louganis

30 The legs of an elite marathon runner, on the other hand, might contain up to 90 percent slow-twitch muscle fibers. These **generate** energy efficiently and enable an athlete to control fatigue and keep moving for a longer period of time. When we exercise long or hard, it's common to experience tiredness, muscle pain, and difficulty breathing. These
35 feelings are caused when the muscles produce high amounts of lactate³ and can't remove it quickly enough. Athletes with many slow-twitch muscle fibers seem to be able to clear the lactate from their muscles faster as they move. Thus, the average runner might start to feel discomfort halfway into a race. A trained Olympic athlete, however, might not feel pain until much later in the competition.

45 For some Olympic competitors, size is important. Most male champion swimmers are 180 cm (six feet) or taller, allowing them to reach longer and swim faster. For both male and female gymnasts, though, a smaller size and body weight mean they can move with greater ease, and are less likely to suffer damage when landing on the floor from a height of up to 4.5 meters (15 feet).

55 Some athletes' abilities are naturally **enhanced** by their environment. Those raised at high altitudes in countries such as Kenya, Ethiopia, and Morocco have blood that is rich in hemoglobin. Large amounts of hemoglobin carry oxygen⁴ around the body faster, enabling these athletes to run better. Cultural factors
60 also help some athletes do well at certain sports. Tegla Loroupe, a young woman from northern Kenya, has won several marathons. She **attributes** some of her success to her country's altitude (she trains at about 2,400 meters, or 8,000 feet) and some to her cultural background. As a child, she had to run ten kilometers to school every day. “I'd be punished if I was late,” she says.

70 Although genetics, environment, and even culture play a part in becoming an elite athlete, training and practice are needed to succeed. Marathon runners may be able to control fatigue and keep moving for long periods of time, but they must train to reach and maintain their goals. Weightlifters and gymnasts perfect their skills by repeating the same **motions**
75 again and again until they are **automatic**. Greg Louganis, winner of four Olympic diving gold medals, says divers must train the same way to be successful: “You have less than three seconds from takeoff until you hit the water, so it has to be reflex. You have to repeat the dives hundreds, maybe thousands, of times.” Training this way requires an athlete to be not
80 only physically fit but psychologically healthy as well. “They have to be,” says Sean McCann, a sports psychologist at the Olympic Training Center in the U.S. “Otherwise, they couldn't handle the training loads we put on them. [Athletes] have to be good at setting goals, generating energy when they need it, and managing anxiety.”

85 How do athletes **adjust** to such intense pressure? Louganis explains how he learned to control his anxiety during a competition: “Most divers think too much . . . ,” he says. “They're too much in their heads. What worked for me was humor. I remember thinking about what my mother would say if she saw me do a bad dive. She'd probably just compliment⁵ me on the beautiful splash.”⁶

3 **Lactate** is a substance produced by your muscles when you have been exercising a lot.

4 **Oxygen** is a colorless gas in the air that is needed by all plants and animals.

5 If you **compliment** someone, you say something polite about their appearance or something they did.

6 A **splash** is the sound made when something hits water or falls into it.

Reading Comprehension

Multiple Choice. Choose the best answer for each question.

Gist

1. What is this reading mainly about?
- a. factors that make someone a super athlete
 - b. the different muscle types of a super athlete
 - c. the size of a super athlete
 - d. how to qualify for the Olympics

Reference

2. The word *more* in line 20 refers to _____.
- a. Olympic weightlifters
 - b. fast-twitch fibers
 - c. muscles
 - d. average people

Inference

3. Having a lot of slow-twitch muscle fibers is particularly important for _____.
- a. cyclists
 - b. divers
 - c. weightlifters
 - d. table tennis players

Detail

4. When lactate builds up in their muscles, people feel _____.
- a. strength
 - b. energy
 - c. dizziness
 - d. pain

Detail

5. What advantage do athletes from high-altitude countries have?
- a. a strong sense of culture
 - b. hemoglobin-rich blood
 - c. lower amounts of lactate in their muscles
 - d. more muscles in their legs

Main Idea

6. What is the main idea of the sixth paragraph (starting line 69)?
- a. Genetics is an important part of athletic success.
 - b. Divers must train to be successful.
 - c. Marathon runners must train hard to succeed.
 - d. Success in sports comes from a lot of practice.

Inference

7. What statement would diver Greg Louganis probably agree with?
- a. Athletes cannot perform well unless they are under pressure.
 - b. It's key to practice and train hard, but try not to take things too seriously.
 - c. It's important to joke around with your teammates before you perform any sport.
 - d. A professional athlete should never feel anxiety.

Critical Thinking

Interpreting: What do you think Louganis means when he says most divers are *too much in their heads*? How might this affect an athlete's performance?

Discussion: One of the aims of the Olympic Games is to improve relationships among countries. Do you think they achieve this?

Classifying Information

When you classify information, you organize it. There are several ways to classify information. For example, you can classify sports and activities by those that emphasize speed vs. those that emphasize strength. Or you could classify sports by those that are more popular with men vs. those more popular with women. T-charts (A below) and Venn diagrams (B below) are two ways to classify information.

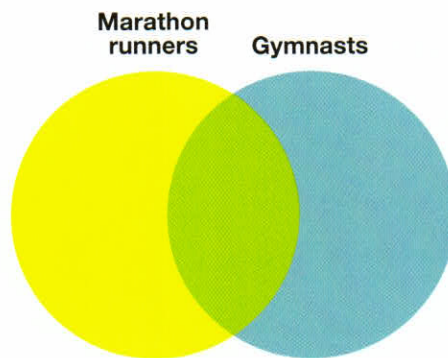
A. Classification. Write **a–h** in the chart to classify each of the following sports in three different ways.

- | | | | |
|-------------|------------|-----------------|------------------|
| a. baseball | b. boxing | c. bowling | d. golf |
| e. soccer | f. surfing | g. table tennis | h. weightlifting |

| | |
|--|--|
| Sports that use a ball | Sports that don't use a ball |
| | |
| Sports usually played in teams | Sports usually not played in teams |
| | |
| Sports that you think are exciting to watch | Sports that you think are not exciting to watch |
| | |

B. Classification. According to the reading, are the following important to marathon runners, to gymnasts, or to both? Write each answer (**a–f**) in the correct place in the chart.

- a. training
- b. slow-twitch muscles
- c. repeated motions
- d. psychological health
- e. small body size
- f. ability to control fatigue and keep moving for a long time



Vocabulary Practice

A. Completion. Complete the information with the correct form of words from the box. Three words are extra.

| | | |
|----------------------|----------------------|------------------|
| adjust | attribute | automatic |
| champion | differentiate | enhance |
| generate | genetic | motion |
| psychological | | |

In September 2013, **1.** _____ swimmer Diana Nyad became the first person to swim from Cuba to the U.S. state of Florida without using a shark cage. She had unsuccessfully attempted the 177-kilometer (110-mile) swim several times before, but at age 64, she finally completed the historic swim. In total, she spent a little under 53 hours in constant **2.** _____ in the water. She was fit, had a team along to help her, and wore a special suit and mask to keep jellyfish off her skin. Some suggested this equipment **3.** _____ her swimming speed, though Nyad claimed it actually slowed her down.

What **4.** _____ this successful attempt from Nyad's four previous attempts? Experts **5.** _____ her success to Nyad's mental determination. They believe that her struggle was just as much **6.** _____ as physical. She was not allowed to grab the boat when the water was rough, because this would **7.** _____ disqualify her. Her determination was so strong that even though she felt sick for much of the journey, she never gave up.

B. Definitions. Match the definitions (1–7) to words from the box in **A.**

1. working by itself _____
2. the act of moving _____
3. related to the human mind _____
4. to make something better, improve it _____
5. to produce or cause something to begin _____
6. relating to your DNA _____
7. to move or change something slightly _____



^ U.S. swimmer Diana Nyad swam across the treacherous Florida Straits from Havana to Key West, Florida.

Word Link The suffix **-ic** or **-atic** can be used to form an adjective, e.g., *genetic*, *photographic*, *problematic*, *automatic*.