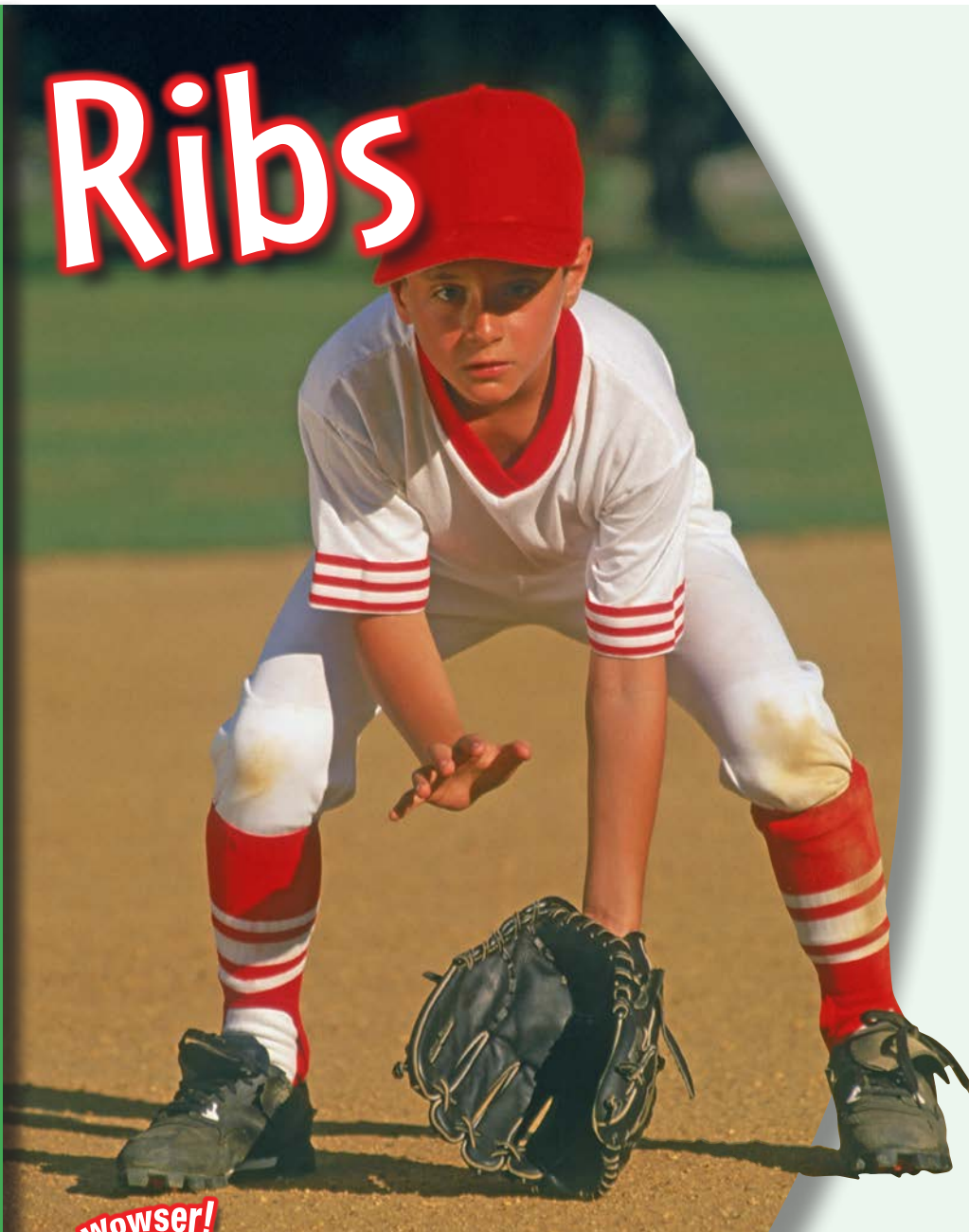


Ribs



wowser!

Every time you breathe in, muscles make your rib cage get bigger by 3 to 5 centimeters (1 to 2 in.)!

Chest Armor

Imagine you are playing baseball or softball. A friend throws the ball to you, but it misses your glove. *Thud!* It hits you right in the chest. Getting hit may hurt, but you should be fine, thanks to your *rib cage*. The rib cage is made of hard and rigid bones called *ribs*. Your ribs support and protect your chest. The chest is home to your heart, lungs, and other important organs.

Feel your ribs along the sides and front of your body. They come in pairs. The left and right sides of each pair look the same. These bones give your upper body its shape. You would look a lot different without ribs!



Extra Ribs

Most people have twelve pairs of ribs. Some people are born with one or more extra ribs. Most of the time, the extra ribs don't hurt at all. But sometimes they cause problems. An opera singer was born with two extra ribs. Like all bones, ribs are made of living tissue. As she grew, her ribs grew, too. The extra ribs made it hard for her to sing. Doctors took out her extra ribs. Now, she can sing better than ever!

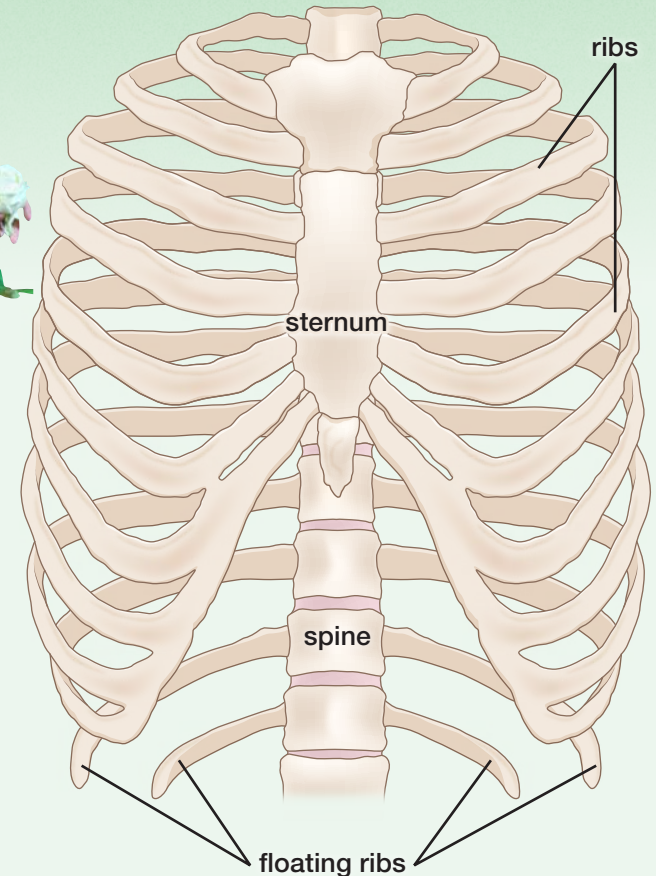


Opera singers use their rib cage to help project their voice.

Math Moment

About 1 out of every 200 people is born with at least one extra rib. Suppose there are 1,000 students in your school. How many students would probably have an extra rib?

BONES OF THE RIB CAGE



All of your ribs are attached to the sternum except for two—the *floating ribs*. Don't worry. They won't float out of your body. They are attached to your spine.

Do You Know?

Ribs are very hard bones. But they can be hurt or broken by something hitting your chest hard or even by a very powerful sneeze!

