

What is the back?

Your back is a complex structure of bones, muscles, and other tissues that extends from your neck to your pelvis. It is designed for flexibility and stability—flexibility to allow for motion, and stability to maintain a vertical posture.

The central part of the back is the spine, which is a column of 24 vertebrae, or bones. This vertebral column provides the main support for your body and protects the spinal cord. The spinal cord is a wire-like group of nerves, about the thickness of your thumb that extends about 46 cm from the base of the brain down through a central hole in the vertebral column. It serves as a kind of information network, carrying millions of messages between the brain and the body.

The top seven vertebrae of the spine are smaller than the other vertebrae. They support your head and neck and allow you to move your head. The middle twelve vertebrae provide stability and protect the organs of the chest by serving as the attachment, or connection, for the rib cage. The lower five vertebrae are larger and thicker than the other vertebrae because they support the most weight.

The vertebrae are held in place by belts of strong tissue called ligaments. Muscles also surround the spine to give it support and help with movement. In addition, there are disks located between each of the vertebrae. These disks, together with the S-shape of your spine, absorb impact and prevent shock to your head when you walk or run.

Most back pain occurs in the lower back. However, it can result from damage to any part of the back—vertebrae, ligaments, muscles, disks, or nerves. Pain that is felt in the lower back may come from the spine, muscles, nerves, or other structures in that region. It also may have spread out from other areas, such as your middle or upper back.

—315 words

Now, read the statements below. Are they true or false? Write T for true and F for false.

1. Your back allows you to sit and stand up. _____
2. The underlined word “It” in paragraph 1 refers to “pelvis.” _____
3. Another name for the spine is the vertebral column. _____
4. The spinal cord consists of 24 vertebrae. _____
5. One function of the vertebrae is to protect the spinal cord. _____
6. The ligaments of the back keep the vertebrae in place. _____
7. Messages between the brain and the body pass along the spinal cord. _____
8. Muscles surround the spine. _____
9. You would probably be able to walk better if you didn't have discs between your vertebrae. _____
10. Most back pain is experienced in the upper back. _____