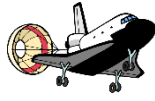


Name: _____



10 Minutes with Science

The Spine



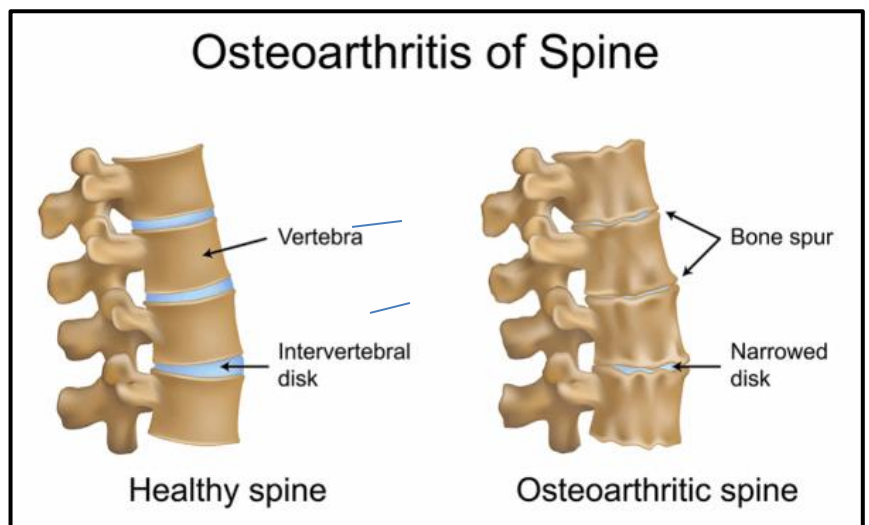
The spine, also known as the 'vertebral column', is an organ composed of bones called vertebrae, as well as fibers and cartilage that allow it to move, or articulate.

It consists of 33 vertebrae separated as follows: seven cervical vertebrae in the neck region, twelve thoracic or dorsal vertebrae in the middle of the back, five lumbar vertebrae in the lower back, five sacral vertebrae fused into the sacrum bone, and four vertebrae fused into the coccyx.

As we see, the spine goes from the base of the head down to the pelvis; so, this powerful organ supports both the head and the pelvis. It helps us walk upright, stand, and maintain balance.

The secret of the mobility of the spine is in the 'intervertebral discs,' this is a special structure that is between each of the moving vertebrae. Each disc has an outer fibrous ring made of fibrocartilage called the annulus fibrosus. This ring surrounds a soft, fleshy, and very elastic substance called nucleus pulposus.

The discs make the joint stronger and more flexible, making possible the movements of the spine and absorbing vertical impacts. However, under compression force, the discs are flattened and widened; so, the nucleus pulposus becomes harder and less elastic. This causes the elderly to decrease in height, as well as mobility in their spine.



Name: _____

ANSWER THE QUESTIONS



1. What is the spine?
 - a. It is known as 'vertebral column'.
 - b. It is an organ that goes from the base of the head down to the pelvis.
 - c. It is an organ composed of vertebrae, fibers and cartilage.
 - d. All of the above are correct



2. How many vertebrae does the spine have?
 - a. 12
 - b. 5
 - c. 33
 - d. 10



3. Where is the secret of spine mobility?
 - a. In the vertebrae
 - b. In the intervertebral discs
 - c. In the coccyx bone
 - d. In all of the above
4. The spine helps us walk upright, stand, and maintain balance.
 - a. True
 - b. False

5. Where are the seven cervical vertebrae?
 - a. In the neck region
 - b. In the region of the back
 - c. In the lumbar region
 - d. In none of the above

