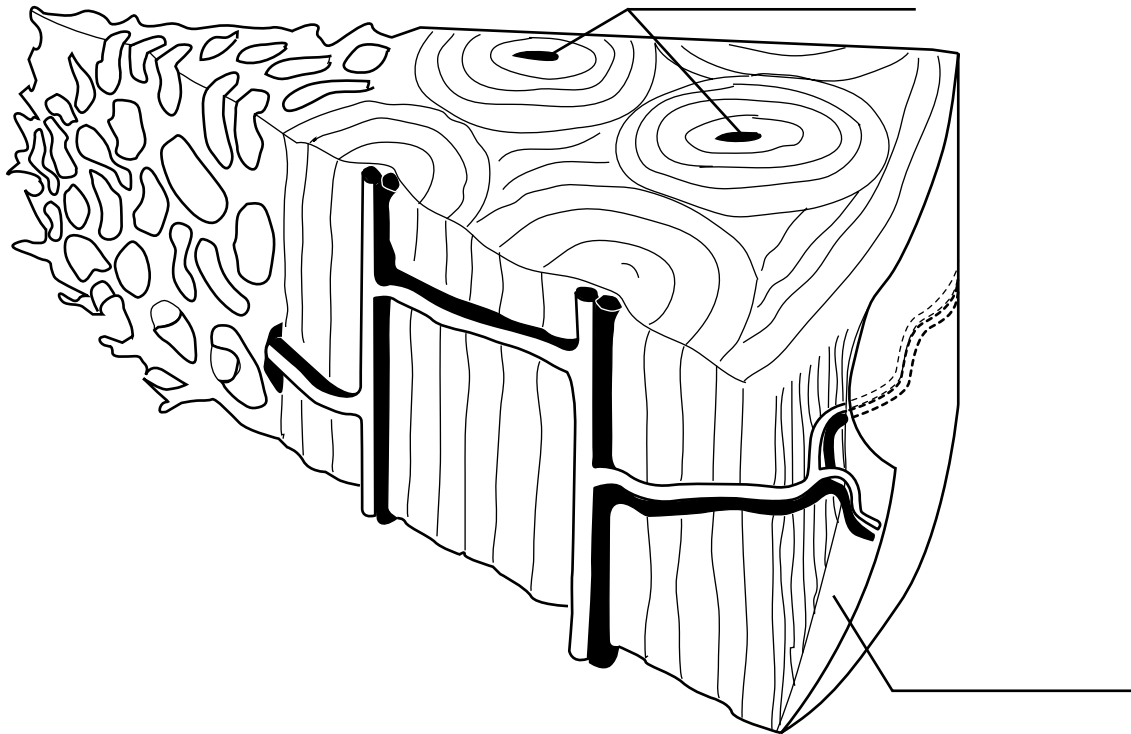


## Structure of a Bone

Most human bones are composed of compact bone and spongy bone. Spongy bone provides strength and support to the bone while limiting mass. Compact bone contains Haversian canals, which contain blood vessels. The bone is covered by a tough layer of tissue called the periosteum.

*Color the spongy bone yellow. Color the compact bone red. Then label the Haversian canals and periosteum.*



*Use the diagram to answer the questions.*

1. Where in long bones is spongy bone found? Circle the correct answer.  
     in the middle      at the ends
2. What do the Haversian canals contain?

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## Types of Joints

Any place where two bones attach to each other is called a joint. There are three major categories of joints: immovable, slightly movable, and freely movable. The four most common kinds of freely movable joints, named for how they work, are: ball-and-socket joints, hinge joints, pivot joints, and saddle joints.

*Use the words below to fill in the table. One row has been completed for you.*

ball-and-socket hinge	pivot saddle	slightly movable
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Joint Type	Kind of Movement	Example
immovable	none	joints between bones in the skull
	restricted	joints between the two bones of the lower leg
	one bone sliding in two directions	joints between bones in the wrist
	back-and-forth motion	joints in the knees
	one bone rotating around another	joints in the elbows
	movement in many directions	joints in the shoulders

*Use the table to answer the question.*

1. Which type of joint allows the greatest range of movement?

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