Chapter 4: The Muscle System

Throughout the chapter, refer back to the building blocks of the body by asking students questions such as *What's a molecule? What's a cell? What's an organ? What's a tissue?*

Organization of skeletal muscle

Make an overhead transparency of a muscle or draw a picture on the board. Have the students say the different parts of a muscle from small to large or large to small: muscle, fascicle, fiber, myofibrils, and myofilaments.

Have the students construct a muscle. They can use a paper towel roll (the muscle), and thin strips of paper bundled together (the fibers and myofibrils). They can draw the actin and myosin on the myofibril.

From Brain to Muscle

Have students tell a partner what happens when they decide to move a muscle. For example, *I want to stand. My brain sends a message along motor neurons to muscles. ACh jumps from motor neurons to muscle fibers. The muscle fibers produce an electrical signal causing the actin and myosin to move in my legs and I can stand.*

The skeletal muscles of the body

You can use techniques similar to those in the skeletal unit for practice with naming the muscles. Work on learning one area of muscles at a time. Be sure to note similarities of muscle names w/bone names.