Lecture 14: Active Learning Questions

1. Which cell/tissue types are *excitable*? What is an *action potential*? What *stimuli* can induce an action potential? When an excitable cell is stimulated to threshold, what *ion channels* open 1st?

2. What are the *3 basic types* of *muscle*? *Where* generally are they *located* and *what* are their basic *functions*? Which type is the *most prevalent* in the human body?

3. In skeletal muscle, what are *thick filaments* made of? ...*thin filaments*? What is the relationship among *thick* and *thin filaments*? What is a *sarcomere*? What makes up *myofibrils*?

4. What does an *A* (*dark*) *band* within a *myofibril* contain? What does an *I* (*light*) *band* contain? What is a *cross-bridge cycle*?

5. Draw a cartoon of a *myosin* molecule and sketch a nearby *actin* molecule. How do the *molecules* you've drawn differ from *thick* and *thin* filaments?