



Name \_\_\_\_\_

### Sarcomere Coloring

Color the individual myofilaments (A) purple, these are composed of both thick and thin filaments. Mitochondria (B) are dispersed through the muscle fibers, color all mitochondria pink. Recall that mitochondria supply energy needed for muscle contraction.

Two types of transport systems are found within the muscle. The sarcoplasmic reticulum (E) is a network of tubes that run parallel to the myofilaments. Color this network green. The transverse tubules (C) run perpendicular to the filaments – color both yellow. The enter muscle fiber is surrounded by the sarcolemma (D), color this membrane brown.

If expanded, the light and dark bands are shown as individual thick and thin filaments. Color the thick filaments (not labeled) red and the thin filaments blue.

A Z line is the boundary between sarcomeres, named after its shape. Color the Z –line orange.