- The action potential moves through the T-tubules causing the release of Ca²⁺ from the sarcoplasmic reticulum
- Ca²⁺ flood into the sarcoplasm
- Myosin heads attach to actin's binding sites
- Myosin heads flex towards the centre of the sarcomere
- Sarcomeres shorten as the Z lines move towards each other
- ATP binds to the myosin head and myosin detaches from the actin
- > Sarcomere light band area would be any area with actin without myosin
- > Sarcomere dark band area would be any area with myosin or myosin with actin

Troponin and tropomyosin

- The binding sites on the actin aren't always available. When a muscle isn't contracting, they are covered by *tropomyosin*, a thin protein filament
- Another protein called *troponin* has binding sites for Ca²⁺ and it binds to tropomyosin at regular intervals
- Ca²⁺ bind to troponin stimulating the tropomyosin filament to slide uncovering the actin binding sites
- Myosin heads find an actin binding site and under Static movement leading to the shortening of the sarcomere
- The release of Ca²⁺ and the meraction with troponintard tropomyosin represents the link between the nervous system the muscular system and the skeletal one
- > Call accreleased from the sale prosmic reticulum