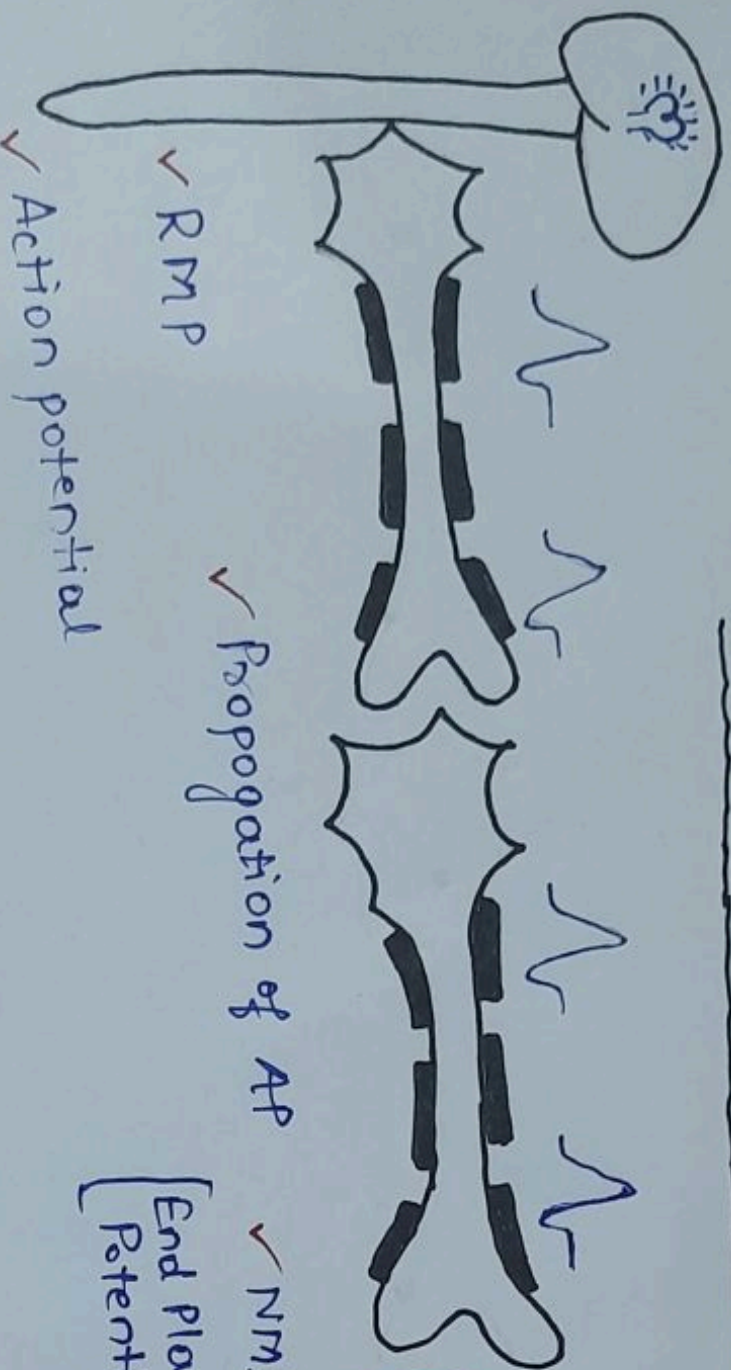
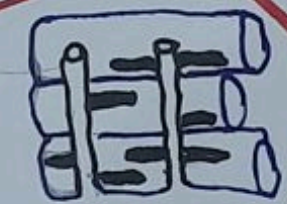


MECHANISM OF MUSCLE CONTRACTION

SLIDING FILAMENT THEORY



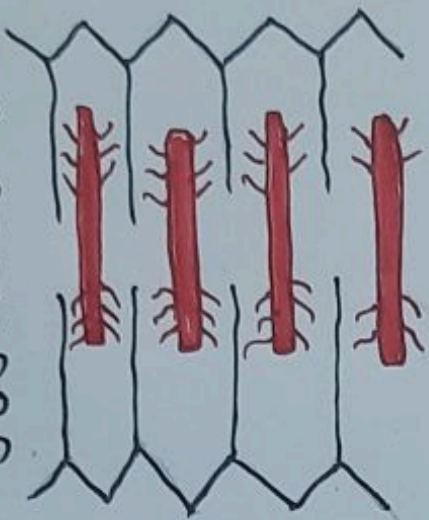
✓ NMJ
[End plate Potential]



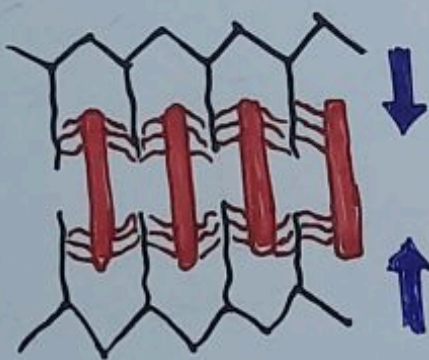
✓ 'Excitation Contract?'
coupling
cisternae
Release
 Ca^{++} ?

✓ contraction?

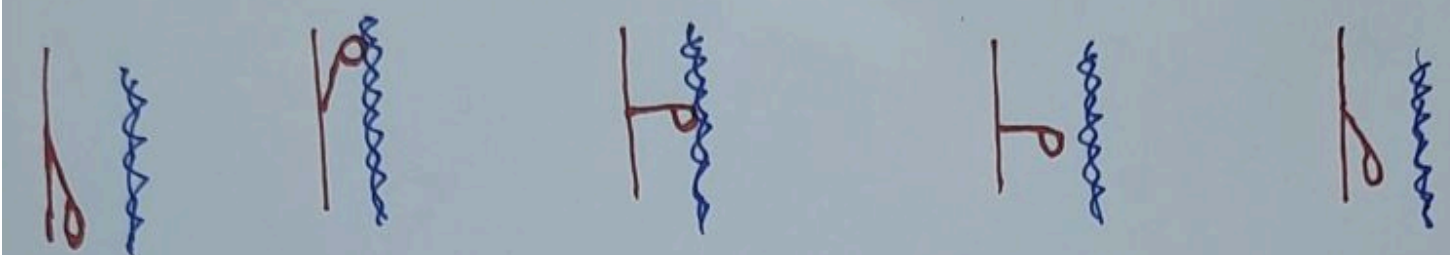
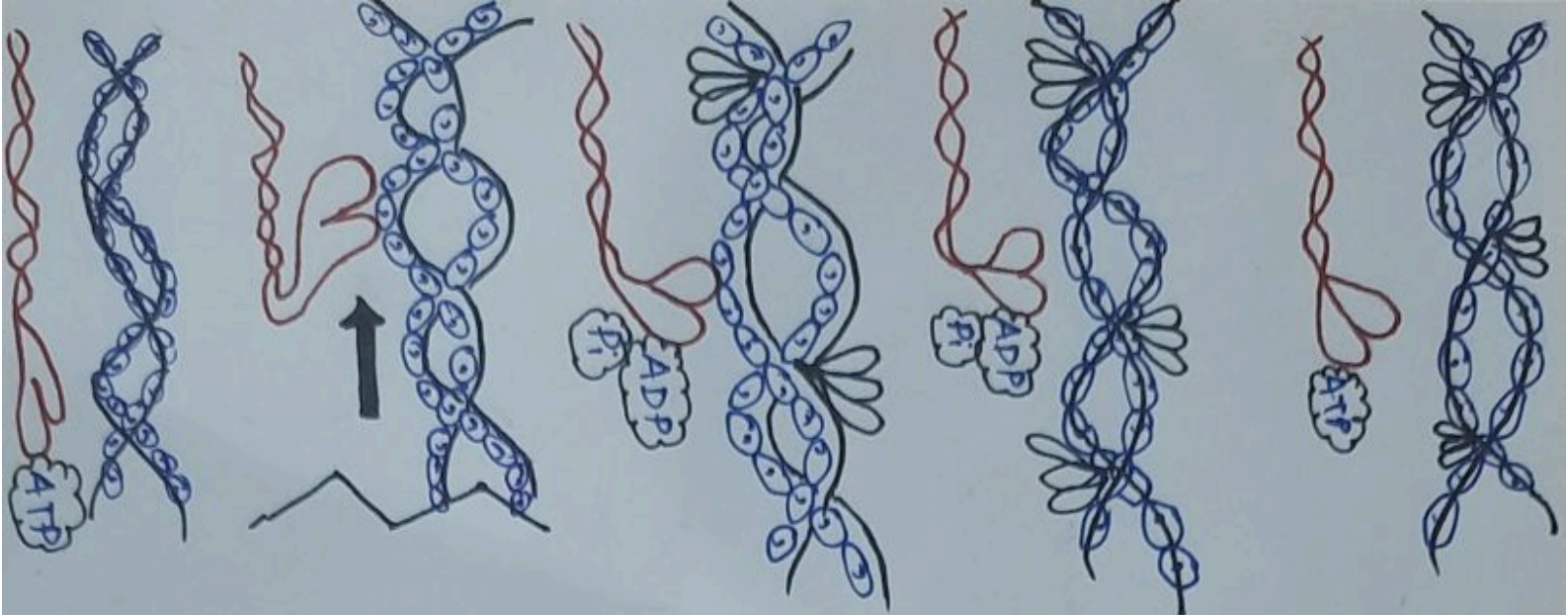
✓ Structure of
Sarcomere,
Actin, myosin



SARCOMERE
'Relaxed'



SARCOMERE
'Contracted'



Myosin + ATP

↓ ATPase

Myosin moves perp. towards active site

ADP + P_i

← Ca^{++} (c'troponin)

Active site uncover (Help of troponin-myosin complex)
"cross Bridge"

↓ ADP + P_i release

Power stroke

↓

New ATP binds

↓

Head detach — NEW CYCLE