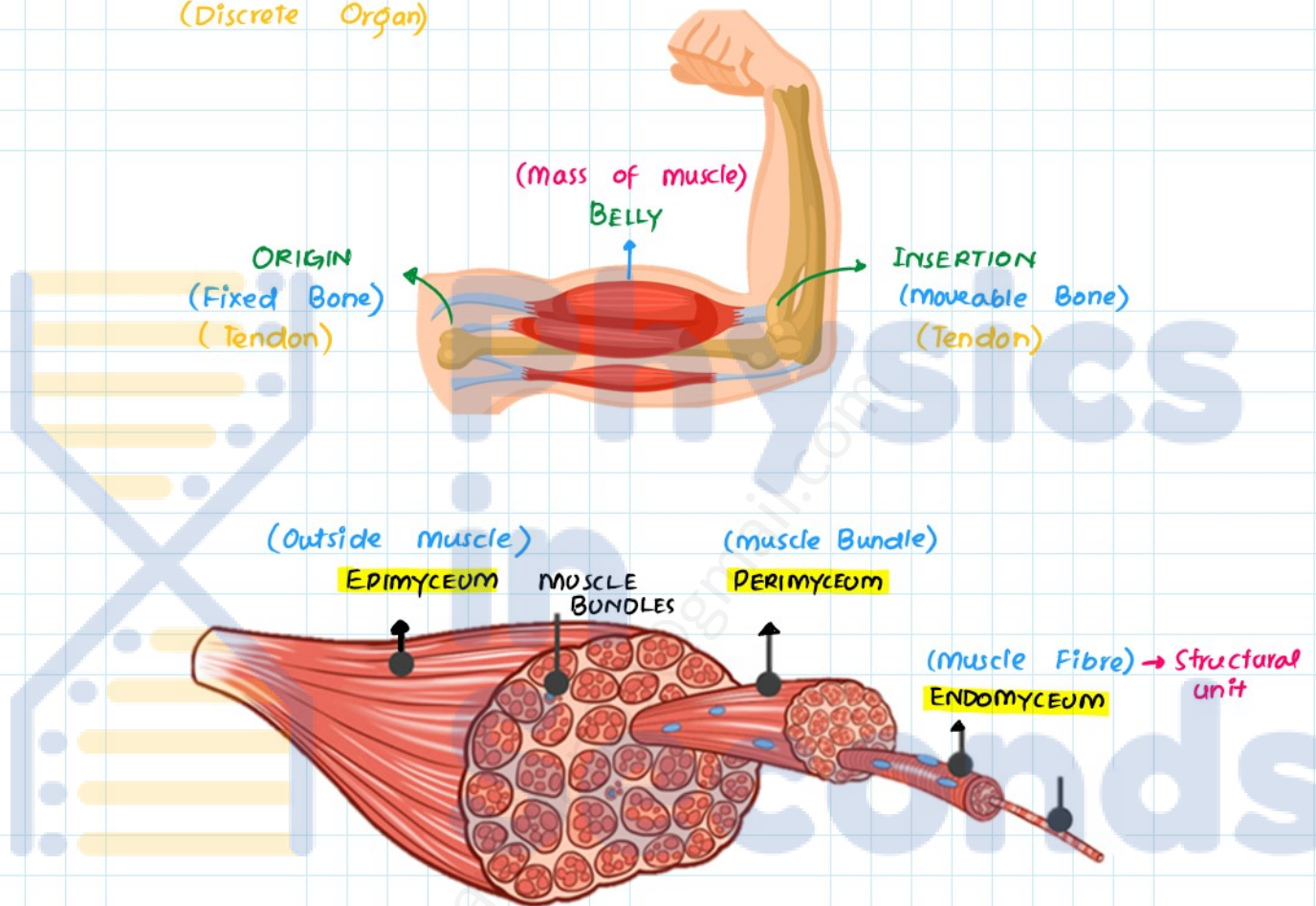


Structure of a Skeletal Muscle

• SKELETAL MUSCLE (Discrete Organ)

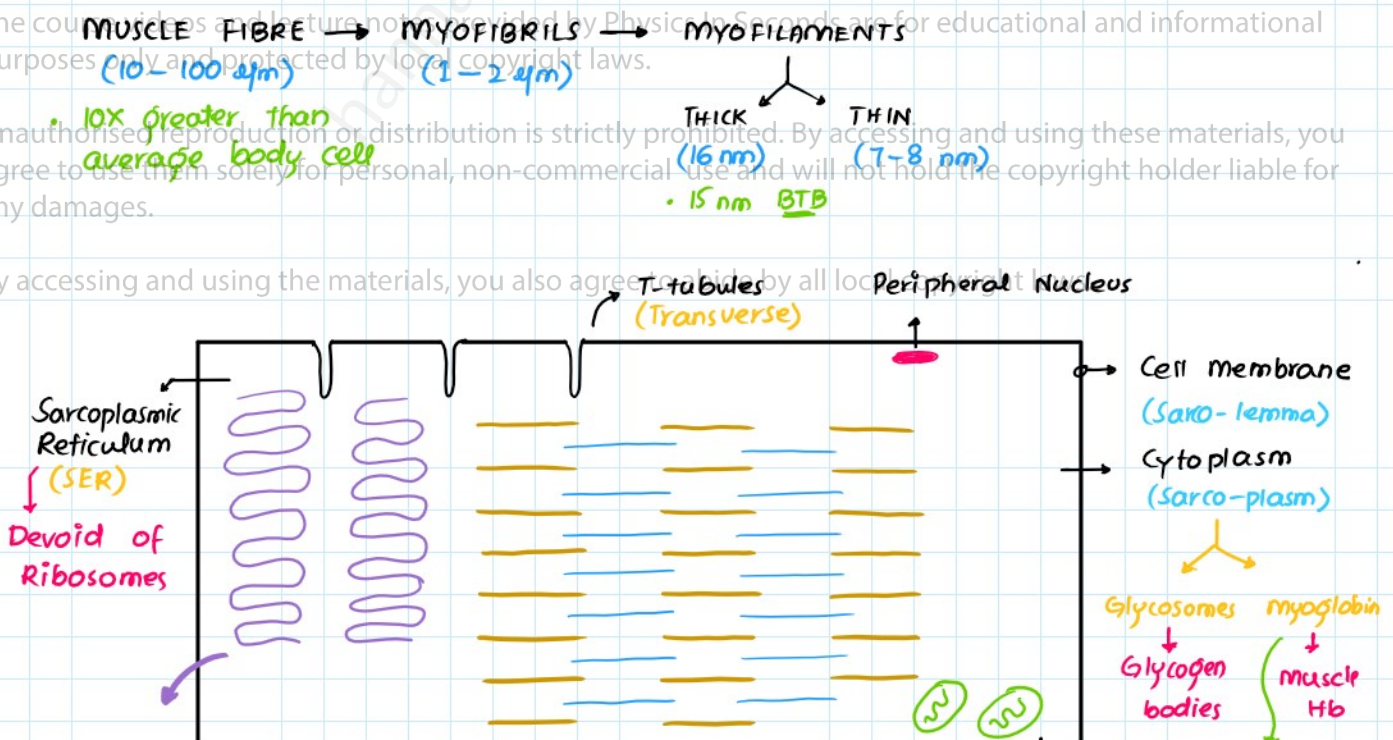
which are attached with bones.

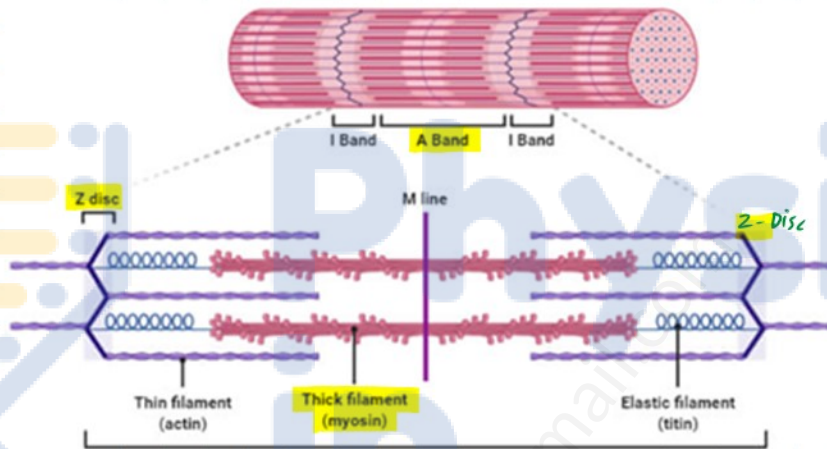
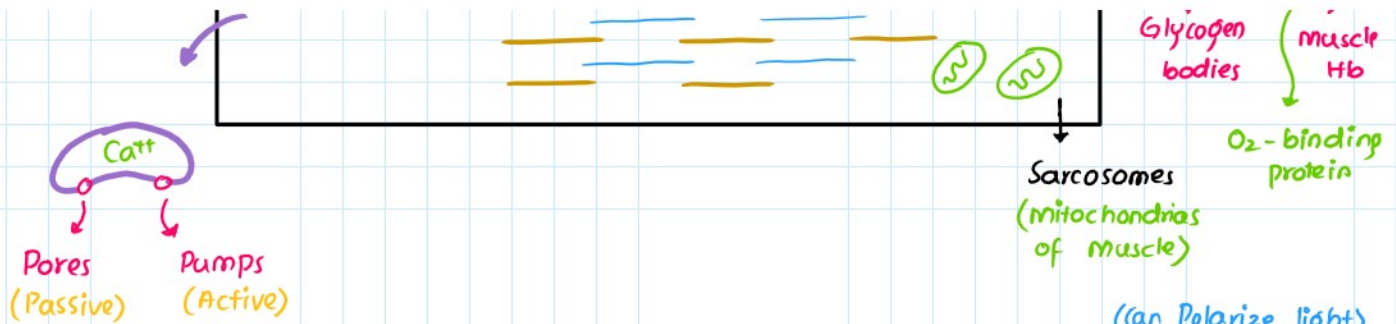


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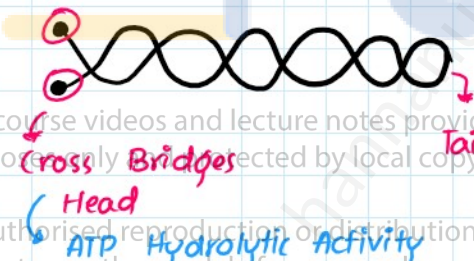


- (Can Polarize light)
- A-BAND** (Anisotropic)
 - Thick filament
 - Thin filament
 - I-BAND** (Isotropic (can't Polarize))
 - Thin filament

SARCOMERE (Basic Contractile unit)

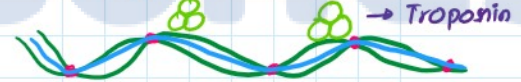
THICK FILAMENT (16nm)

- Myosin Protein
- Mechano-Enzyme



THIN FILAMENT (7-8nm)

- G-Actin (monomer)** → Actin (3)
- F-Actin (Polymer)** → Tropomyosin (2) → Covers attach. site
- Troponin



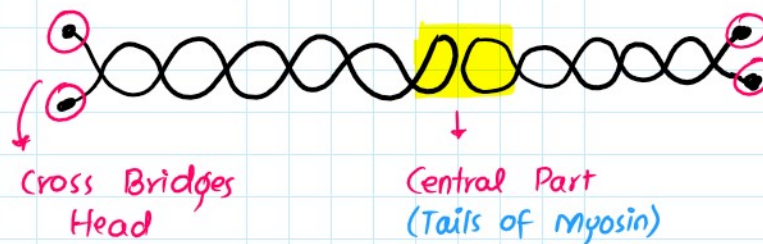
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- Each myosin molecule → 6 Polypeptides
- Each Thick filament → 300 molecules

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- Troponin C** → Attachment site
- Troponin I/A** → Inhibitory Sub-unit
- Troponin T** → Attaches with Tropomyosin
- Calcium ion**



- Tropomyosin** (40-60 molecules)