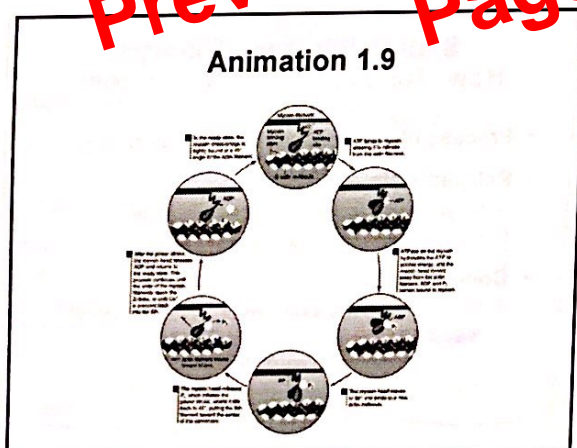


### Sliding Filament Theory: How Muscles Create Movement (continued)

- After power stroke ends
  - Myosin detaches from active site
  - Myosin head rotates back to original position
  - Myosin attaches to another active site farther down
- Process continues until
  - Z-disk reaches myosin filaments or
  - AP stops,  $Ca^{2+}$  gets pumped back into SR

Preview from Notesale.co.uk  
Page 6 of 10



### Energy for Muscle Contraction

- Adenosin Triphosphate (ATP)
- Binds to myosin head
  - ATPase on myosin head enzyme
  - $ATP \rightarrow ADP + P_i + \text{energy}$
- Necessary for muscle contraction