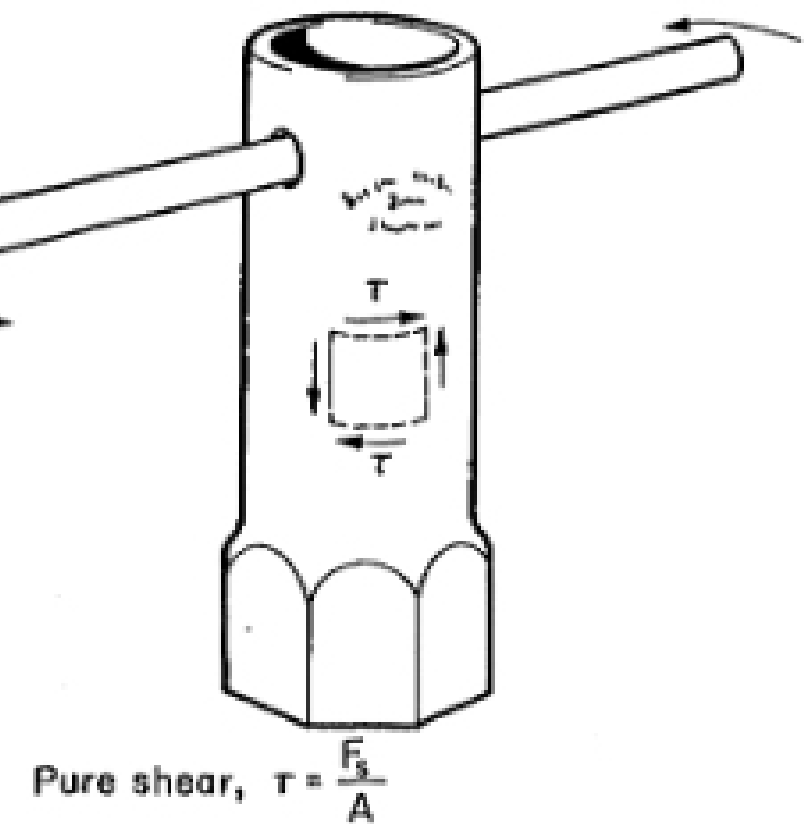
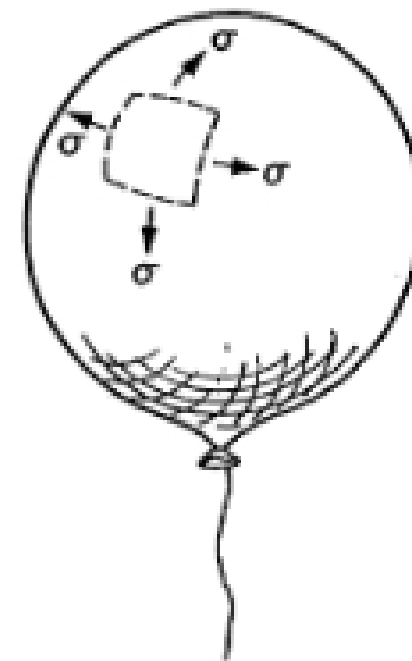
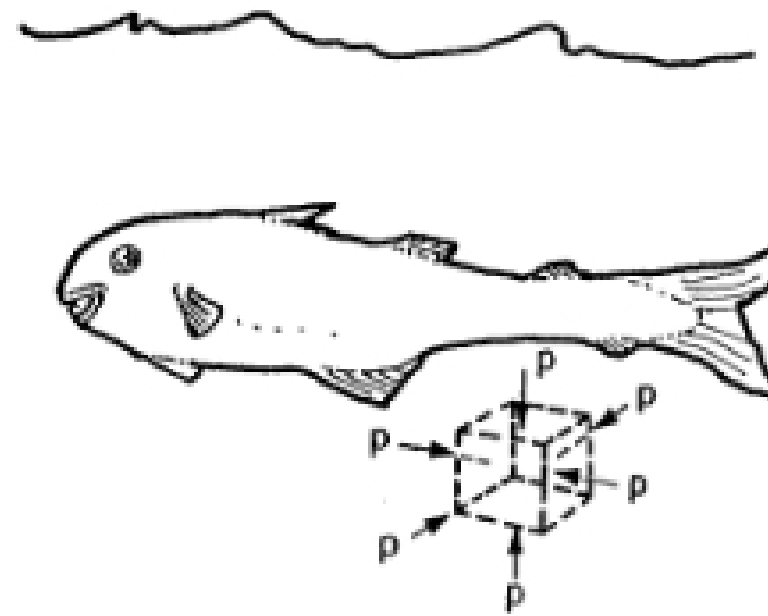
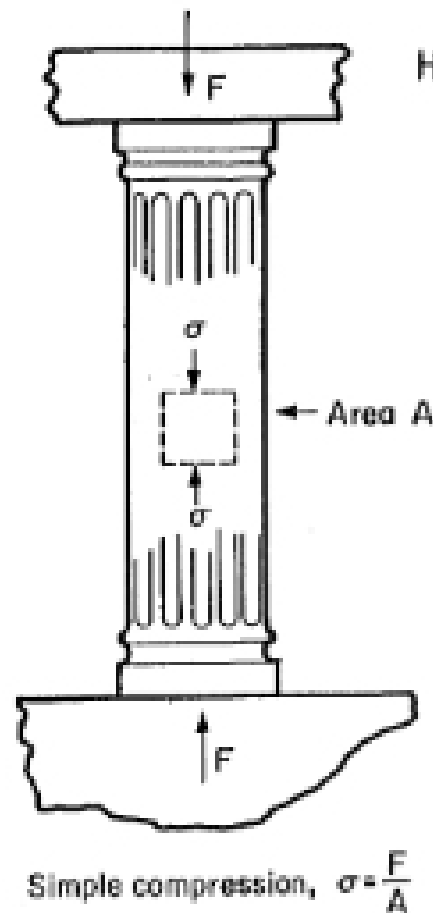
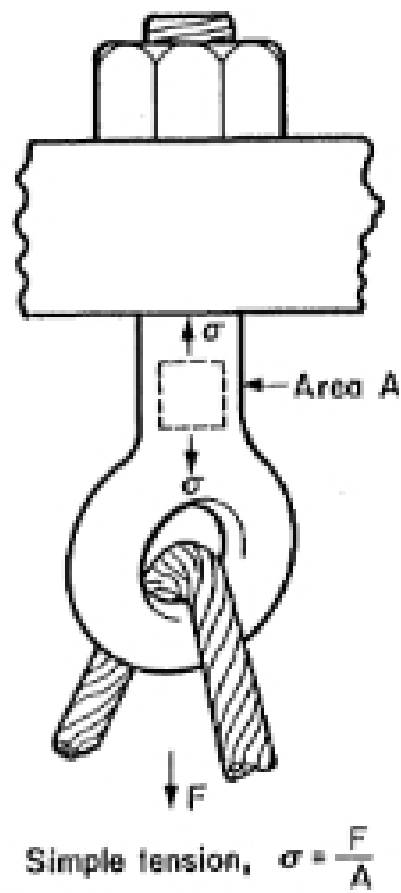
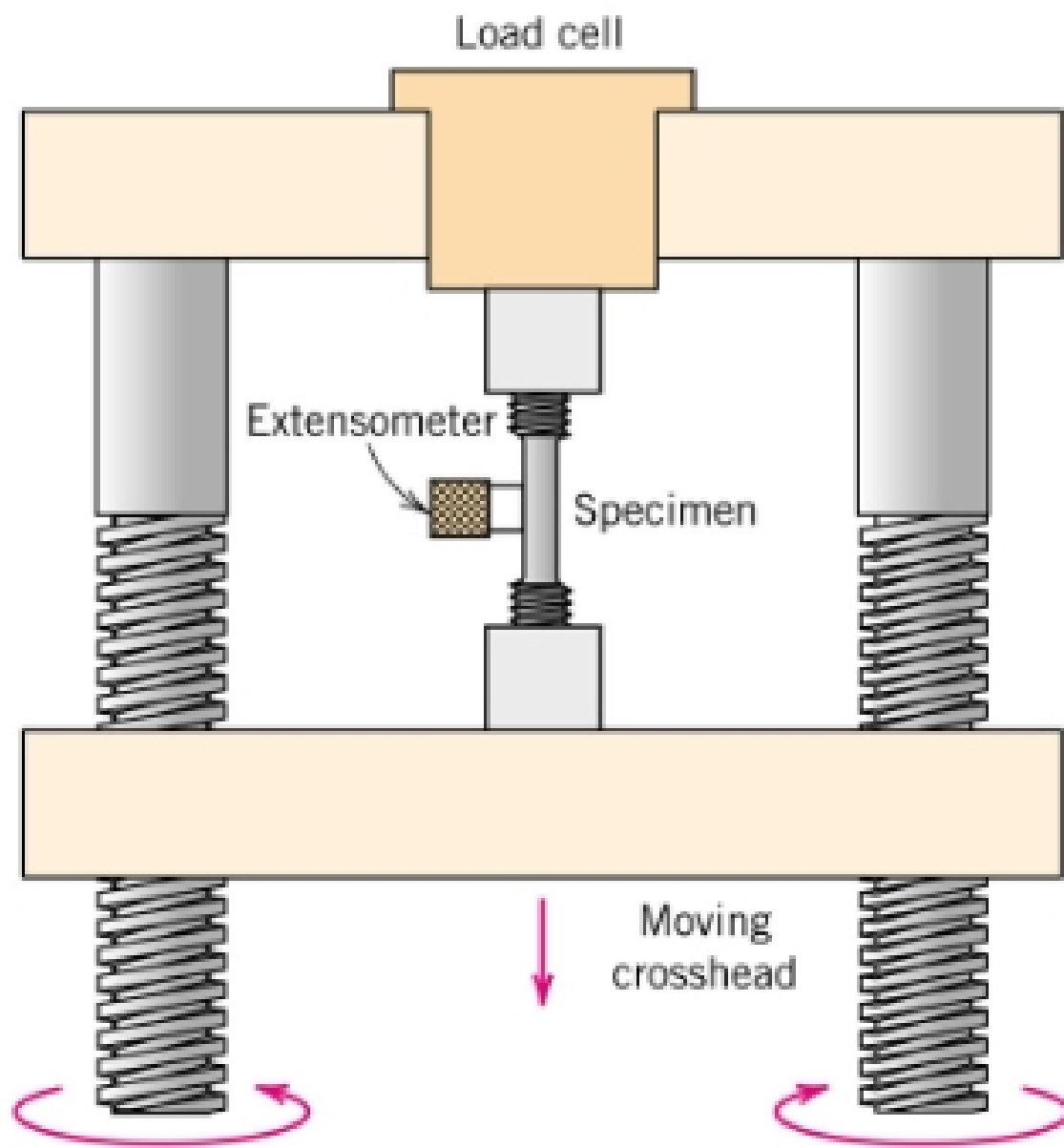


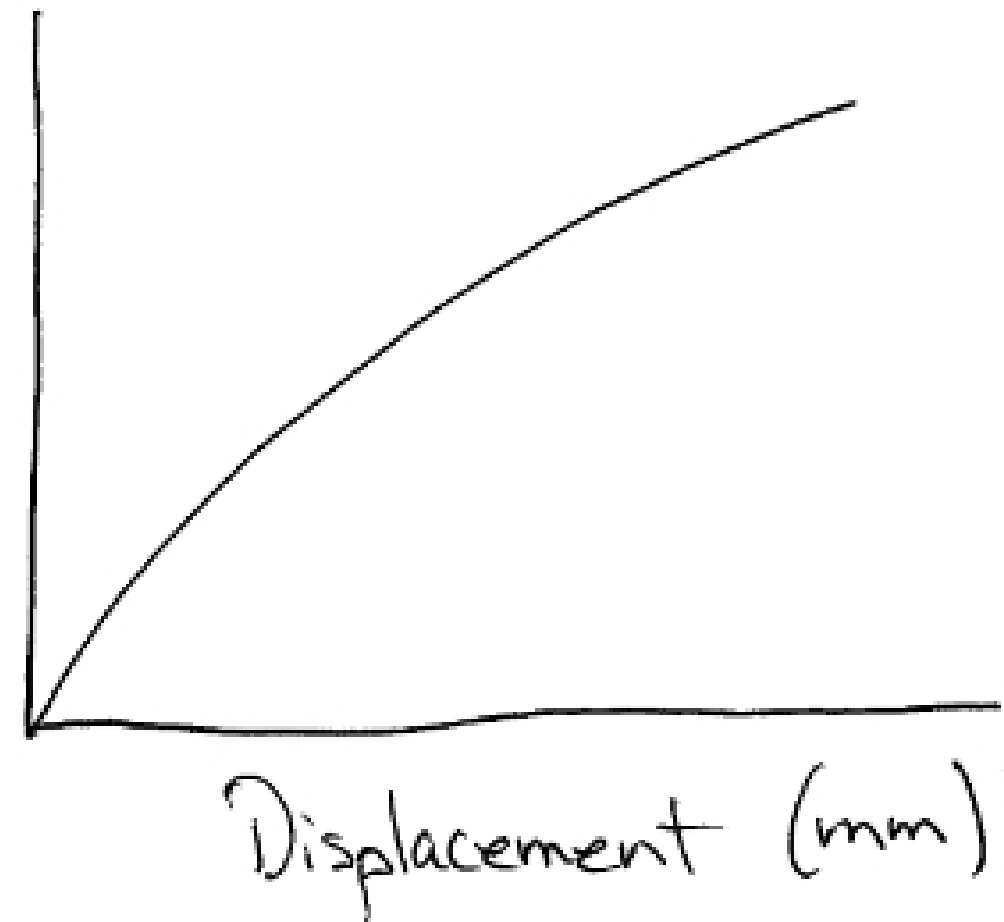
We will spend most of our time examining materials loaded in uniaxial tension, but there are many other applied stress modes.



Typical mechanical testing machine, the load cell measures force and the extensometer measures displacement.



Force  
(N)



The same material can exhibit varied force-displacement responses depending on the sample size. To make material property measurements independent of sample size we use the concepts of stress and strain.

