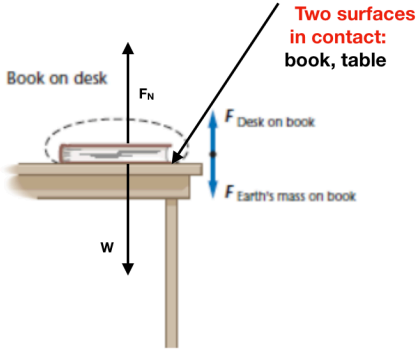
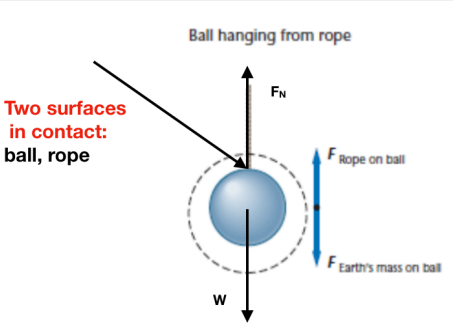
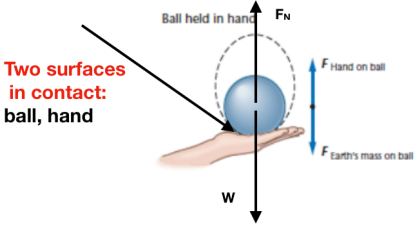


Situation	Normal Force (FN)	Weight (W)	Net Force (F net)	Equilibrium, Why?
<p>Book on Desk</p>  <p>The diagram shows a book on a desk. An upward arrow is labeled <math>F_N</math>. A downward arrow is labeled <math>w</math>. A blue upward arrow is labeled <math>F_{\text{Desk on book}}</math>. A blue downward arrow is labeled <math>F_{\text{Earth's mass on book}}</math>. A red note with an arrow pointing to the contact surface says "Two surfaces in contact: book, table".</p>	Support force of desk on book	Force of Earth on book	$- F_N = W$ Net force: $F_{\text{net}} = F_N + W = 0 \text{ N}$  They cancel each other.	Equilibrium: yes  Net force = 0N

Situation	Normal Force (F <sub>N</sub> )	Weight (W)	Net Force (F <sub>net</sub> )	Equilibrium, Why?
<p>Ball hanging from a rope</p> 	<p>Support Force of rope on ball = Normal / Tension force ( <b>F<sub>N</sub></b> )</p> <p>perpendicular to surface of contact;</p>	<p>Force of Earth on ball = Weight of ball ( <b>W</b> )</p>	<p>- F<sub>N</sub> = W (cancel each other)</p> <p>net force F<sub>net</sub> = F<sub>N</sub> + W = 0 N</p>	<p>Equilibrium: yes</p> <p>Net force = 0N</p>

Situation	Normal Force (F <sub>N</sub> )	Weight (W)	Net Force (F <sub>net</sub> )	Equilibrium, Why?
<p>Ball held in hand</p> 	<p>Support force of hand on ball = Normal force ( <b>F<sub>N</sub></b></p>	<p>Force of Earth on ball = Weight of the ball ( <b>W</b>)</p>	<p>- F<sub>N</sub> = W</p> <p>Net force : F<sub>net</sub> = F<sub>N</sub> + W = 0 N</p> <p>They cancel each other.</p>	<p>Equilibrium: yes</p> <p>Net force = 0N</p>