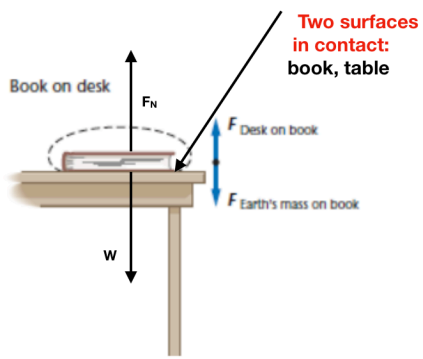
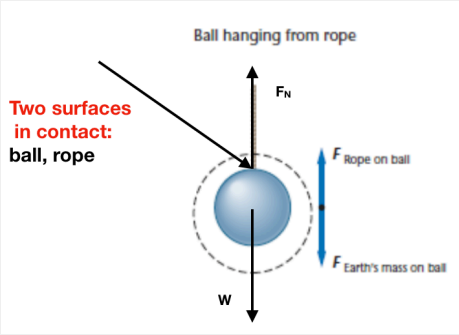
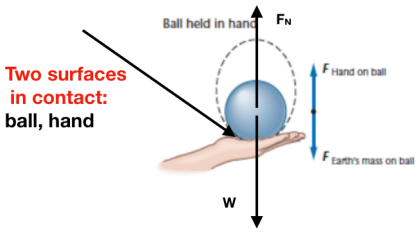
Situation	Normal Force (FN)	Weight (W)	Net Force (F net)	Equilibrium, Why?
Book on Desk 	Support force of desk on book	Force of Earth on book	$-F_N = W$ Net force: F net = $F_N + W =$ 0 N They cancel each other.	Equilibrium: yes Net force = 0N

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

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