

Newton's 3rd Law of Motion

- 3rd: For every action, there is an equal and opposite reaction. If Body A exerts a force on Body B, Body B exerts an equal and opposite force on Body A.

Ex: Tug of War

- The forces of pull are equal and opposite. The winner of the competition will be the athlete who generates the greater F_f
- Newton's 3rd Law is the reason only external forces cause acceleration. Any internal forces will have an equal, opposite reaction force which will cancel out.

Example:



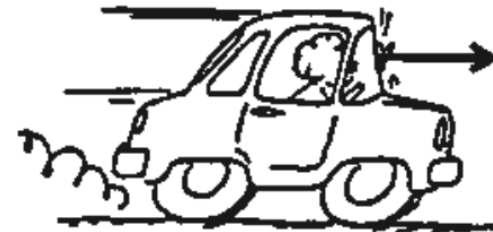
Fist hits wall

Wall hits fist



Head bumps ball

a. _____



Windshield hits bug

b. _____