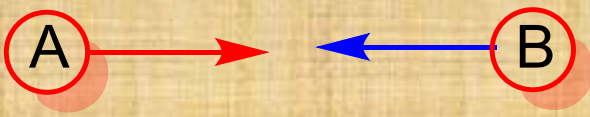


Chapter 9

FORCE AND LAWS OF MOTION

Newton III Law:

“For every action there is an equal and opposite reaction”.



In this case, force exerted by A and B is F_{AB} . Similarly force exerted by B on A is F_{BA} .

According to III law,

$$F_{AB} = - F_{BA}$$

$$\text{Action} = - \text{Reaction}$$

The forces are always constitute action – reaction pairs acting on two different bodies.

Example of III law:

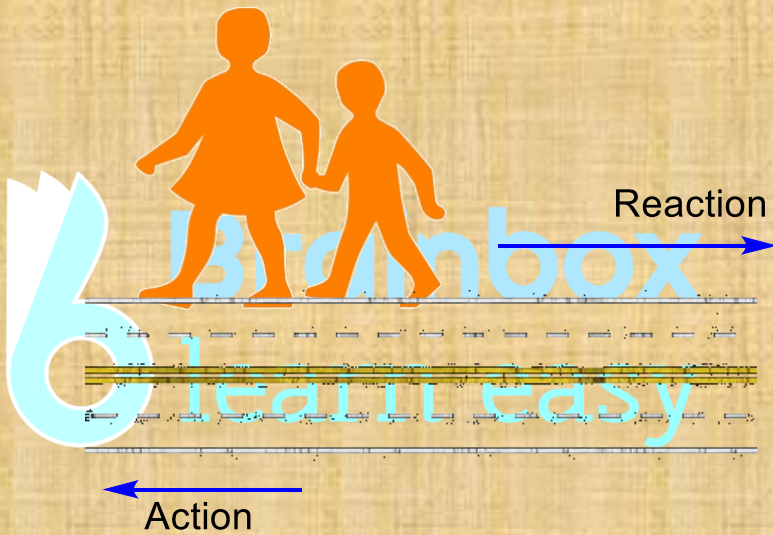
(1) Bullet fired from a gun:



(2) Rowing a boat:



(3) Walking on ground:



Other example includes,

Swimming, arrow from a bow etc.