GRADE 10

UNIT 04 NEWTON'S LAWS OF MOTION

S.UNIT 4.1 NATURE OF FORCE AND ITS EFFECTS

PREPARED BY:P.M.F.NAJEELA(SLPSIII)
KG/MW/AL AZHAR COLLEGE
HEMMATHAGAMA

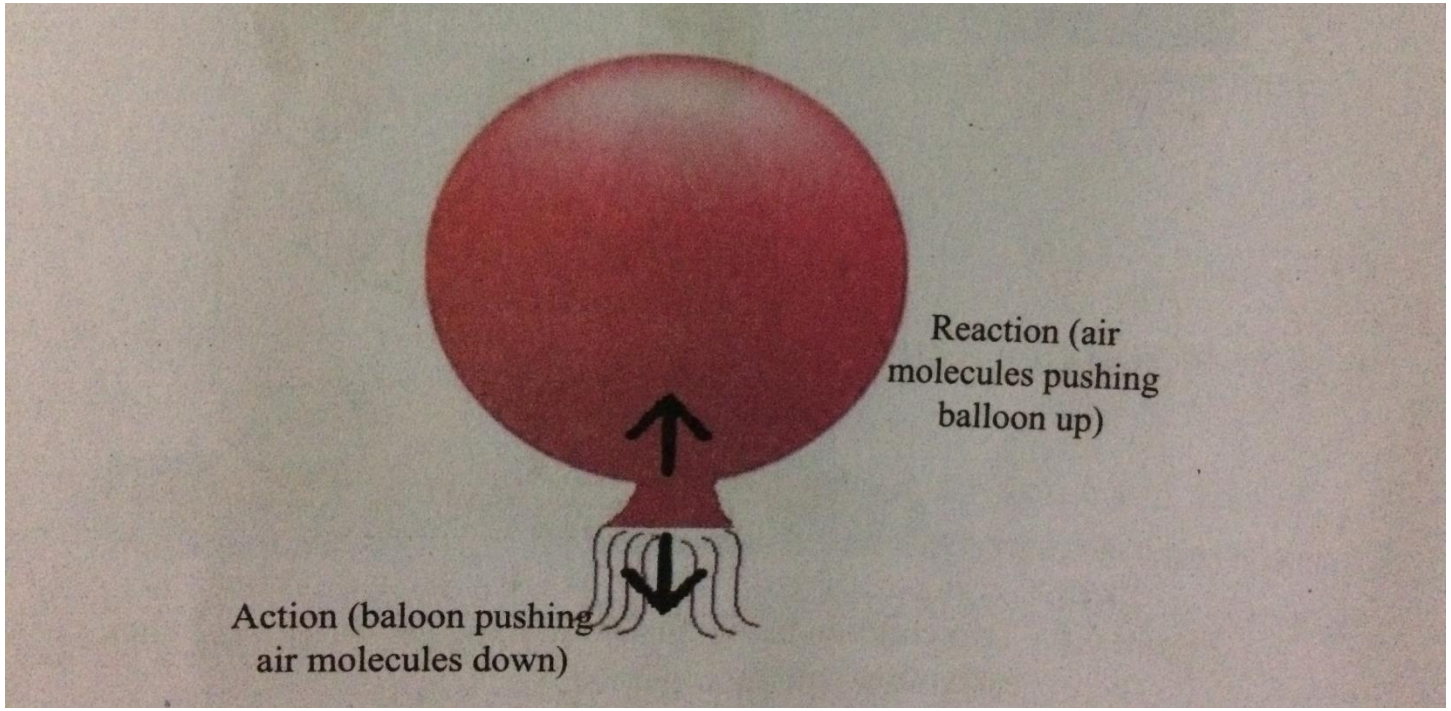
NEWTON'S THIRD LAW

- For every action, there is an **equal** and **opposite** reaction
  - **Action** – Force exerted by an object on another object
  - **Reaction** – Force exerted on the first object, by the second object

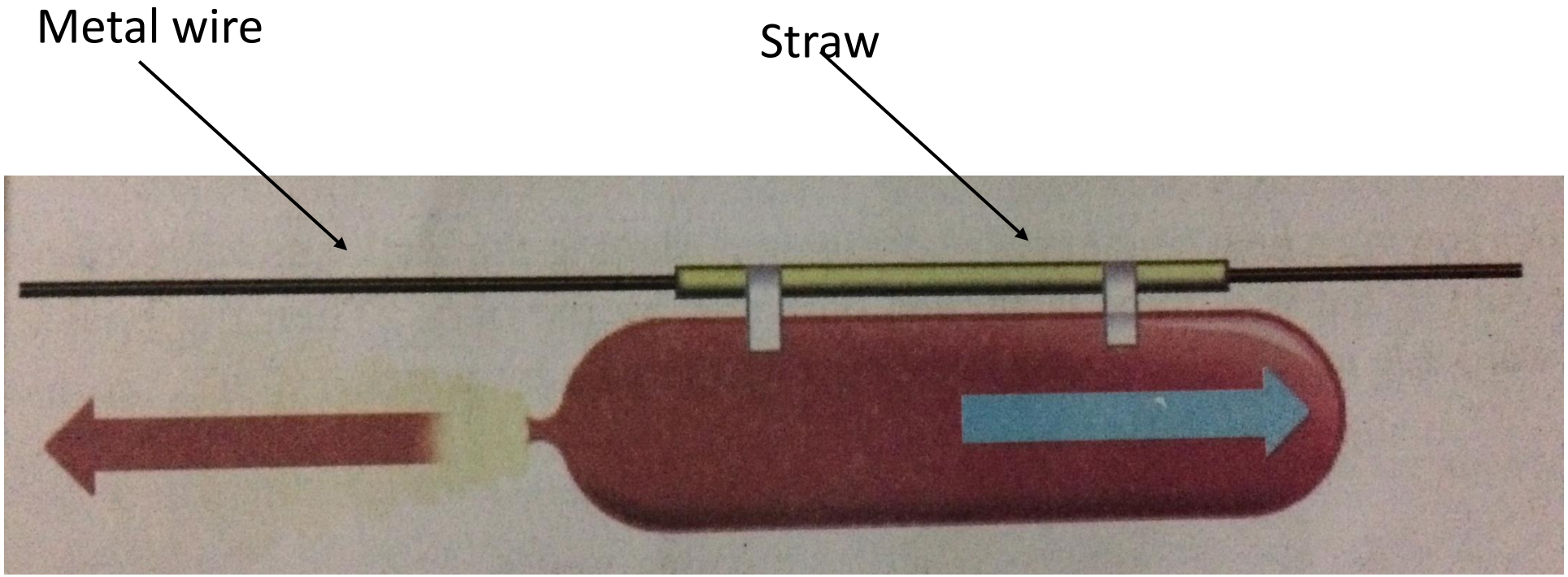
P.M.F.Najeela
KG/MW.Al Azhar.m.v
Hemmathagama

- **Examples**

1. Air inside the balloon leaving it and the balloon moving upwards.

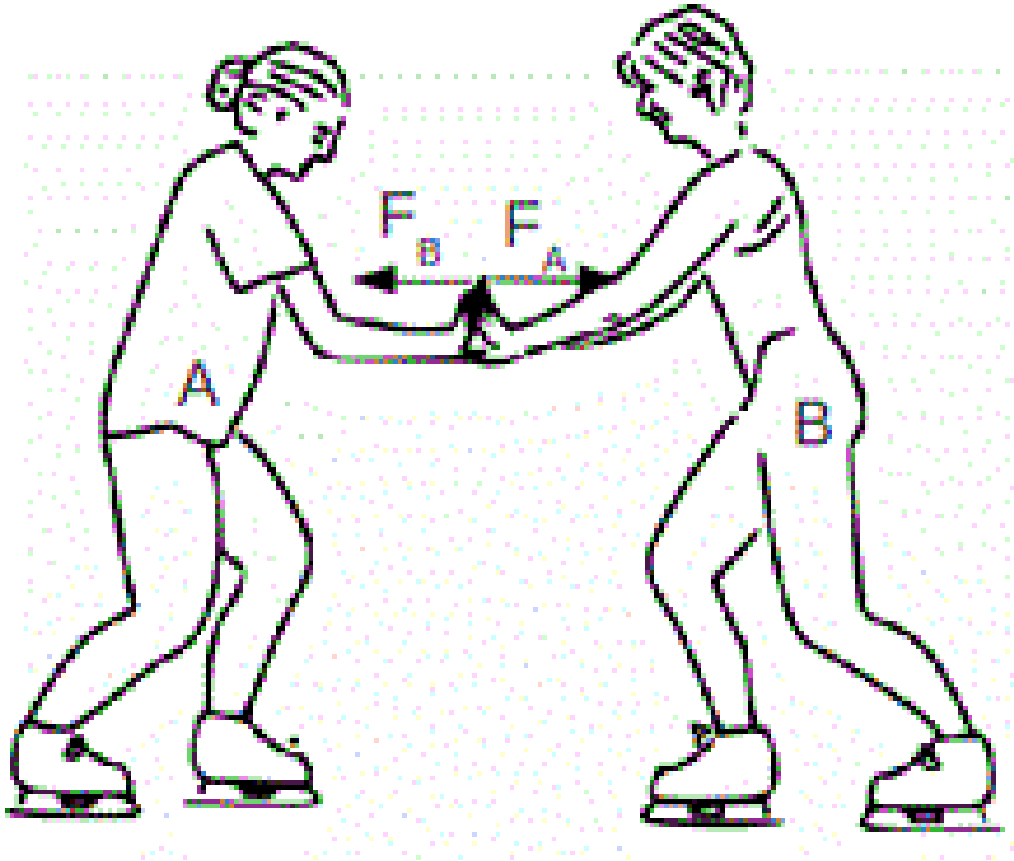


2. A balloon moving due to air leaving the balloon

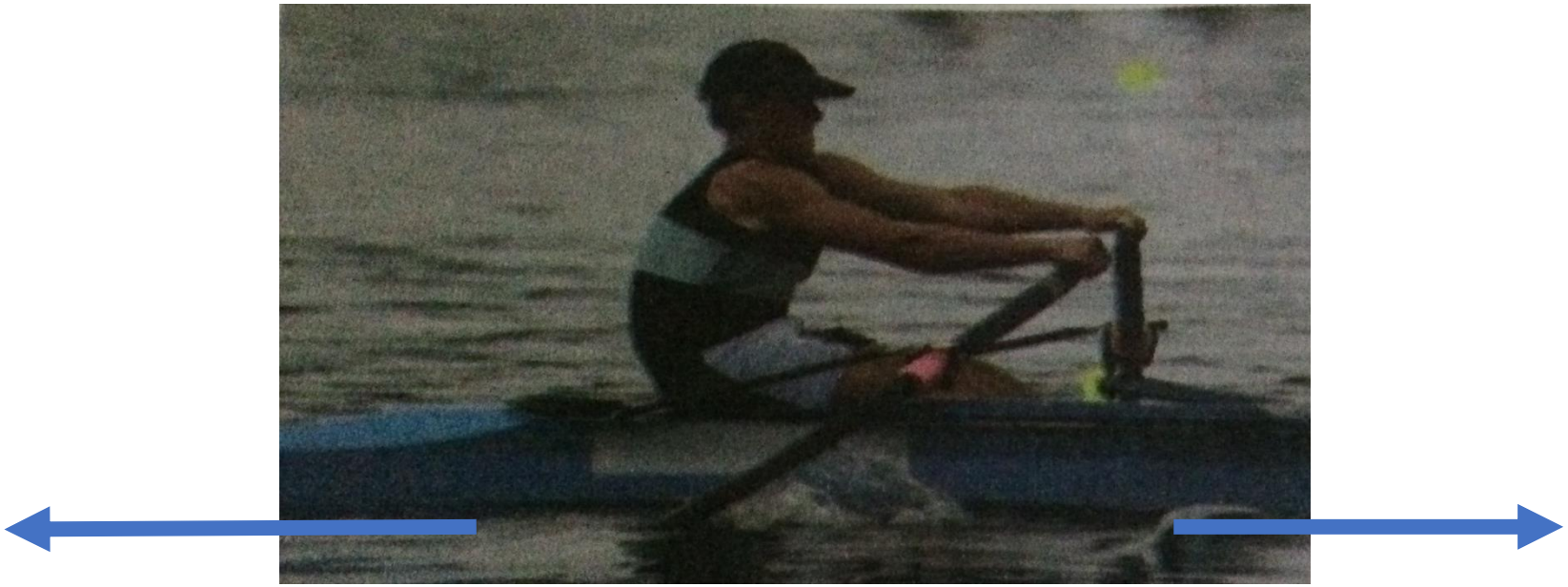


Observation- Metal wire moving in the direction opposite to that of the air leaving the balloon

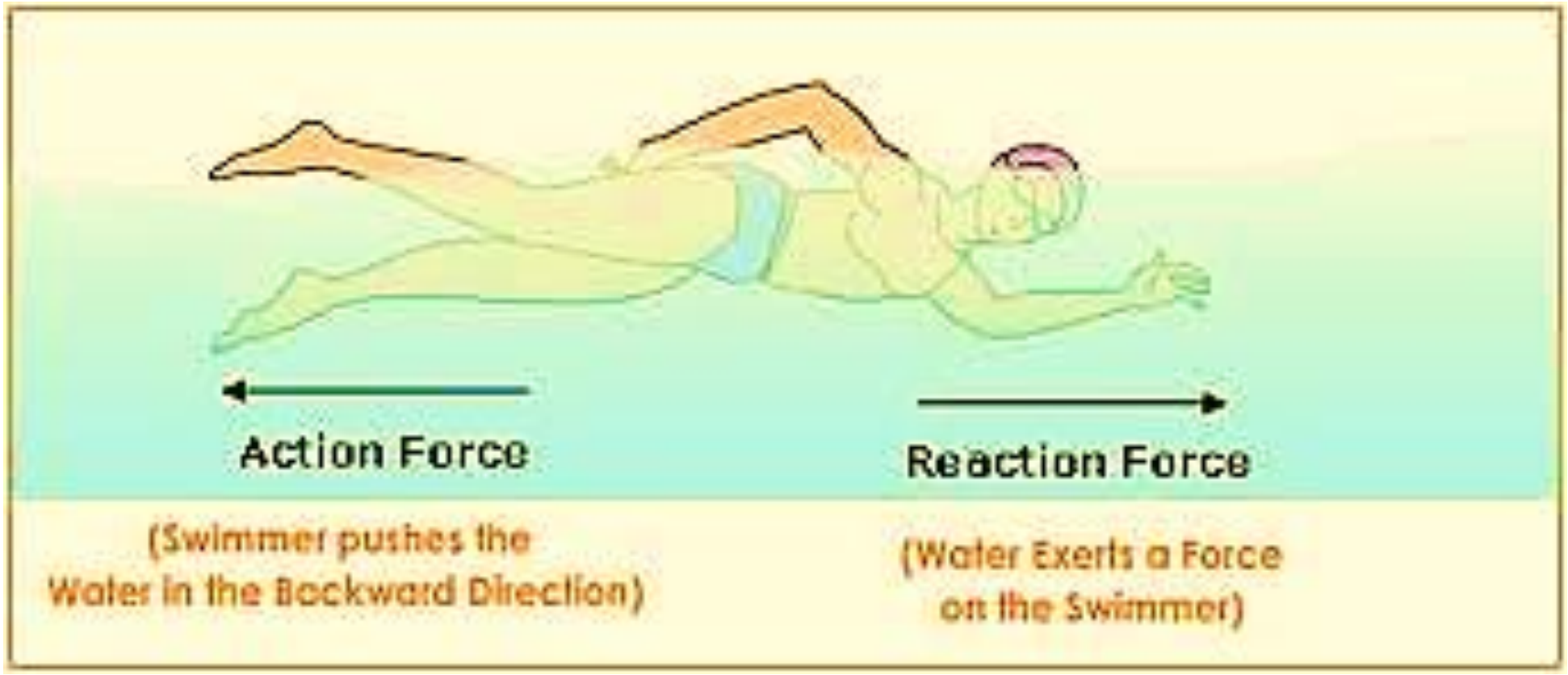
3.Two children being pushed in opposite direction when pushing each other with their palms



4.Forced applied on the water by the oars and the reaction force acting on the boat



5.Hands applying a force on water and an equal and opposite force exerted on the hands by water




Force on floor
from your foot
(you push backward)
Force on foot from the floo
(the floors "reaction"
to your push)