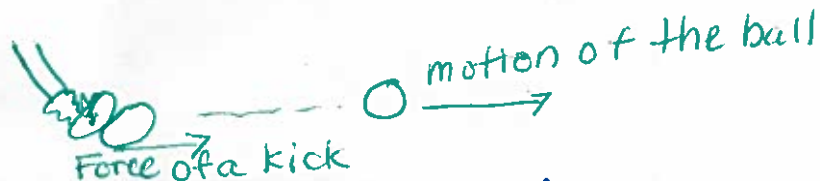
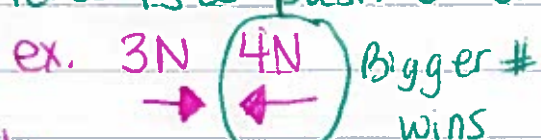


OQHTACC



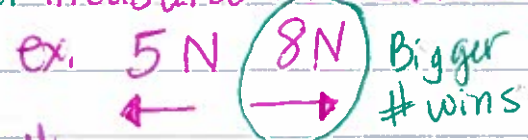
## Force and Motion cause WORK to happen

Force is a push or a pull measured in Newtons (N)



push

← 4N - 3N = 1N  
Net Force



pull

→ 8N - 5N = 3N  
Net Force

UNBALANCED FORCE

UNBALANCED FORCE

Tool:

Spring Scale



\* Balanced Forces do NOT move.

Greater force is needed to move objects with more mass.

Same Force



ball with less mass will move farther

### EXPERIMENTS

- ! Change/Test only 1 variable at a time
- ! Test your variable in three (3) TRIALS

### FORCES:

- gravity - pulls down
- friction - slows motion
- magnetism - attraction (pulls)

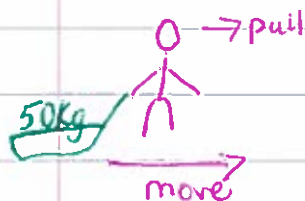
Work is done on an object whenever ---

5kg



- 1) a **FORCE** acts on the object,
- 2) the object **MOVES**, and
- 3) the direction of the force + motion

are parallel.



no movement  
NO WORK

