

Name _____

Date 10/28/19

Forces Notes

Science 7 (NOTES)

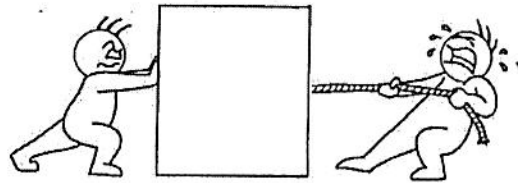
Aim: I can describe what causes objects to move or stay still.

Do Now:

Notes:

Force:

A force is a push or a pull on an object.



How are forces measured?

Forces are measured in a unit called Newtons (N)

Abbreviation for Newtons is (N)

An arrow is drawn to show both the strength and direction of the force applied.

Types of Forces:

Balanced Forces: Equal in strength and do not change an object's motion.

Unbalanced Forces: Not equal in strength and cause a change in the object's motion.

Balanced and Unbalanced Forces

300N
- 300N
= 0N
NO MOTION

400N
- 300N
= 100N

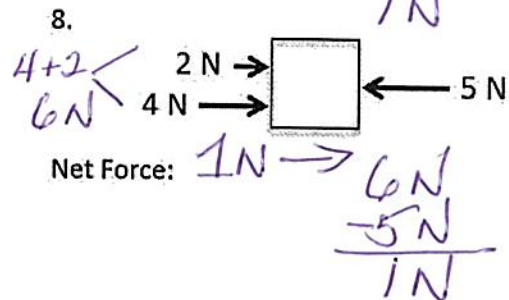
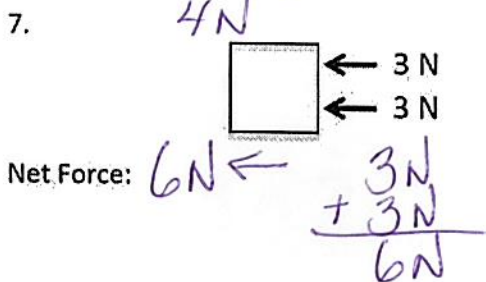
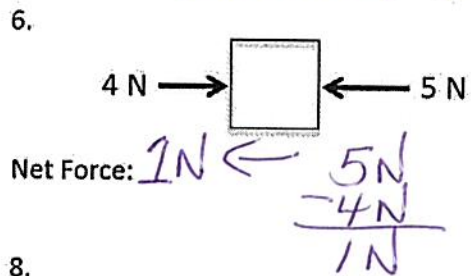
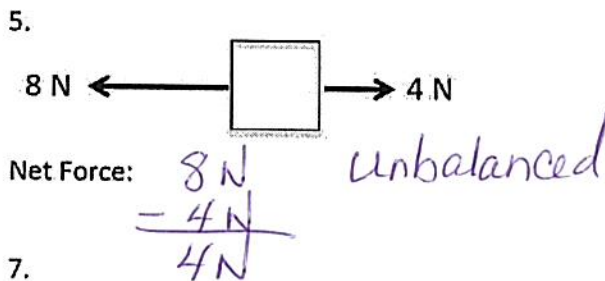
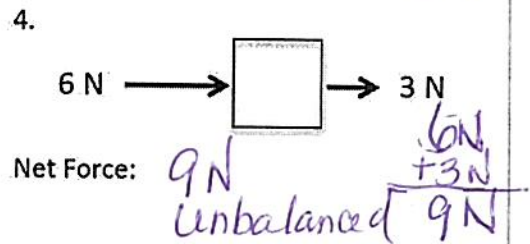
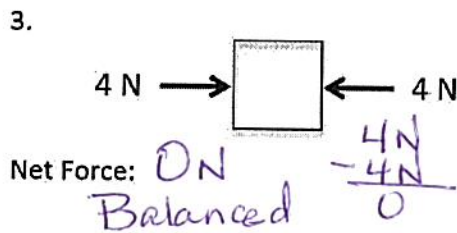
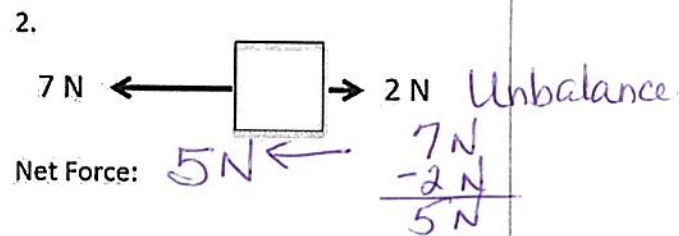
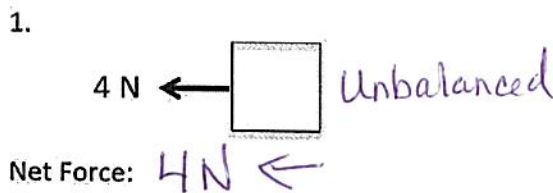
Stronger side

Equal forces (balanced)

Not equal force (unbalanced)

Rules for Calculating Net Force

- By calculating net force, you will determine the strength of the net force in Newtons and an arrow showing the direction of movement.
- When two forces are in the same direction, they are added together.
- When forces are in opposing directions, the smaller force is always subtracted from the larger force.



Big Idea Question:

What causes objects to move or stay still?

Open up PhET simulation "Net Force"