

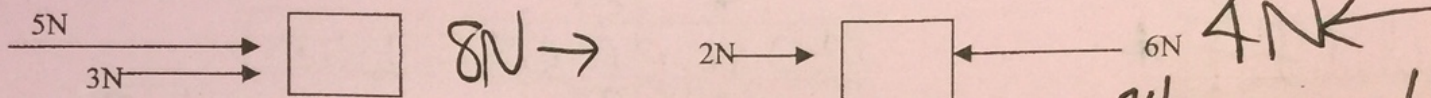
1. STUDY ALL ~~SPEED~~ WORKSHEETS AND LABS***

a. Velocity = Speed w/ direction

example of units? 10 m/s North

b. Car acceleration graph

2. FORCES - Be able to calculate net force, and direction of force by looking at a diagram



Be able to do a Spring scale conversion: if 1 cm = 6N, then 4 cm = 24 N, 2.5 cm = 15 N

a. Balanced forces: No change in motion Unbalanced forces: Cause a change in motion

b. Elastic forces? tensional v. Compression

c. know the forces notes

a. same direction add, opposite direction subtract, net force on a diagram

3. NEWTON'S LAWS

a. 1st law: Inertia; resists change in motion An object @ rest... The more MASS an object has, the more Inertia

b. 2nd law: $F = ma$. Accel. depends on force + mass.

c. 3rd law: (equal + opposite) "action-reaction"

d. Know units for Mass = g or Kg acceleration = m/s/s force = N

4. VOCABULARY - velocity, acceleration, Newton, Inertia, Force (and all the types of forces), balanced force, unbalanced force, tension, compression, gravity, weight friction, Newton's laws (1st 2nd 3rd), universal law of gravitation, fulcrum, normal force, forces for flight, terminal velocity, velocity

5. Momentum - formula mass x velocity

a. Transferred, lost, or gained?

6. Understand the four types of friction:

S Sliding, S Static, R Rolling, F Fluid

Which requires the most amount of force? Static least? Rolling

Labs to know:

SeeSaw Lab

Friction - static v rolling

Car Acceleration Lab

draw graph

1st Law Lab

Draw

Surface Board Lab

dir. of friction

cardboard v. sand paper

Be able to label these terms on a drawing of a car on a ramp: gravity, net force,

normal force, frictional force

Also be able to draw the vector (arrow showing direction) for each.

