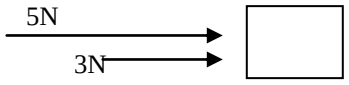
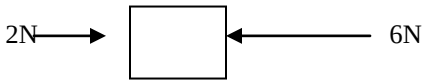
Physical Science Physics Final study guide 2015 Date
Ms. Toal Period
KJHS Name

1. MOTION and SPEED – **STUDY ALL SPEED WORKSHEETS AND LABS*****
   - **a.** Know reference point/frame of reference
   - **b.** Speed triangle – be able to calculate speed, distance and time.
   - **c.** How long? _____ units = _____
     ★How far? _____ units = _____ ★How fast? _____ units = _____
   - **d.** Velocity = _____ example of units? _____
   - **e.** Average speed – on a graph and given word problem
   - **f.** Speed graph problems, acceleration and speed graph trends
   - **g.** Interpret graphs for speed and acceleration

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=____N, 2.5 cm=____N

   a. Balanced forces: _____Unbalanced forces: _____
   b. Elastic forces? _____
   c. **know the forces notes**
      a. same direction _____,opposite direction _____, net force on a diagram
      direction of gravity, net force, normal force, frictional force of a car on a ramp

2. NEWTON'S LAWS
   - **a.** 1st law: (_____; _____) _____ The more _____ an object has, the more _____
   - **b.** 2nd law: (_____)_____
   - **c.** 3rd law: (_____)
   - **d.** Know units for Mass = _____ acceleration = _____ force = _____

3. VOCABULARY – Reference point, speed, constant speed, average speed, 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,

4. Momentum- formula _____
   - **a.** Transferred, lost, or gained?

5. Potential and Kinetic Energy
   - **a.** Potential energy: _____
   - **b.** Kinetic energy : _____

6. ElectroMagnetic Spectrum
   - **a.** 7 parts of EM Spectrum:
   - **b.** Uses of EM Spectrum:
   - **c.** Know photon and speed of light:
   - **d.** Vacuum, Transverse Wave, compressional wave,
   - **e.** Wavelength, amplitude, crest, trough (definition and diagram)

Labs to know: