Friday, January 9/15
Physics 112/111

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1. Investigation 6A - Force and Spring Extension (Page 255)
              - Due: Dec. 15/14

2. Explosion Lab - Pass in Friday for Second Marking

3. Assessment - C7 -> ICA (2 problems) - Today

4. Parts of Waves

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5. Physical Quantities

6. Wave Behaviours
        -> Reflection
        -> Diffraction
        -> Refraction

Physics 112/111 - Final Exam

C2 and C3
-> SI base/derived units and prefixes
-> significant digits
-> rearranging equations
-> uniform/uniformly accelerated motion
-> types of quantities (scalar and vector)
-> resultant
     - minimum/maximum values
     - tip to tail/parallelogram methods
     - graphical/analytical methods
-> velocity-time graphs
     - time or velocity from the graph
     - maximum velocity/speed
     - acceleration/average acceleration
     - displacement/distance
     - time stopped/reversed direction
-> comparison of velocity and acceleration directions to
   determine if an object speeds up or slows down
-> kinematic problems
-> freely falling body problems } **L1 & L2**

C4
-> types of forces
-> FBDs
-> force problems (constant velocity)/rest

C5
-> Newton's Three Laws of Motion
     - inertia
     - net force and acceleration
     - action/reaction forces
-> force problems (acceleration)
-> momentum
-> impulse
-> impulse-momentum theorem
-> (Atwood's machine/Fletcher's trolley)

C6
-> work (done, not done, positive/negative)
-> types of energy (kinetic, gravitational, elastic)
-> reference line/zero line
-> Hooke's Law
-> (force vs extension graph (spring constant and elastic energy))
-> work-energy theorems
-> (power)
-> (efficiency)

C7
-> energy conservation } **L1 & L2**

C8 and C9
-> pulse/wave
-> types of waves
-> parts of a wave
-> physical quantities - measures of a wave
-> wave problems
-> wave behaviors
     - (boundary behaviors)
     - reflection
     - diffraction
     - refraction
         - index of refraction
         - speed of light in a medium
         - Snell's law
         - three cases
         - critical angle
         - total internal reflection

multiple choice = 35
problems = 12

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