AP PHYSICS 1   MONTH 1

Texts: Packet Due **9-21-18**
        Physics (Cutnell & Johnson) 6th Edition)
        Openstax College Physics for AP Courses (Free electronic version)
        Edvantage Science AP Physics 1

1. **WRITE YOUR NAME**, first and last name, on top of this cover sheet.
2. **COMPLETE ALL THE WORK** as assigned.
3. **BOTH THE STUDENT AND A PARENT MUST SIGN** here before turning
   in the monthly work.
4. **COVER SHEET**: Put this cover sheet on top of the work when you turn it in.
5. **THE EXPECTATION IS THAT**: You will turn in your work in the order shown below.
6. **TURN IN THIS WORK ON TIME** to your supervising teacher.
7. **Students must submit at least two lab works/report for month 1.**

_____ _____   _____ _____
Student Signature   Date   Parent Signature   Date

1) Cutnell Ch. 1 - **Introduction and Mathematical Concepts**
    P. 19 Conceptual #1, 2, 9 – P. 20 Prob. #1, 2, 4, 14, 18, 32

2) Cutnell Ch. 2 – **Kinematics in One Dimension**
    P. 48 Conceptual #1-3, 5, – P. 49 Prob. #1, 4, 5a, 9*, 15, 22, 37, 39, 40, 41
    [*the answer is found online at the Companion Site under WWW Solutions.]

3) Edvantage AP Physics 1: **Introduction,** p. 27 #3, p. 28 #3, p. 30 #2, 3, p. 37 #2, p. 42 #8
4) Edvantage AP Physics 1: **Kinematics**, p. 55 #5, p. 56 #7, p. 61 #2, p. 65 #1, 2
                                    p. 71, #1, p. 83 #4, p. 85 #12

5) OpenStax Ch. 1 – **Introduction: The Nature of Science and Physics**
    Glossary: accuracy, classical physics, conversion factor, derived units, fundamental units, law,
        method of adding percents, modern physics, order of magnitude, percent uncertainty,
        physical quantity, physics, precision, quantum mechanics, relativity, significant figures,
        theory, uncertainty, units (and derived units) [p. 29]
6) Problems & Exercises p. 31, #4, 10, 15

7) OpenStax Ch. 2 – **Kinematics**
    Glossary: acceleration, average acceleration, deceleration, dependent variable, displacement,
        free-fall, independent variable, kinematics, scalar, slope, vector, y-intercept [pp. 82-83]
8) Problems & Exercises p. 89 #21, 41, 47, 59, 64 + Test Prep for AP p. 94 #1, 2, 4, 6, 7

9) Two **Laboratory Experiments/Exercises**
        a) 9/6/18 – Vector Review, Graphical Analysis: Motion Lab
        b) 9/13/18 – Measuring g, Exploring Free Fall Lab

10) Preliminary Independent Science Project Search Results:
    Possible question(s) that have the structure: What is the effect of _____
    (Independent Variable) on _____ (Dependent variable)?