

# Unit 1

## Vectors

Handout -> Vectors - Perpendicular Components

## Force Problems: Type I, II and III

Text: C5 - Page 174, PP #17

Page 208, PP #24 and 25

Page 209, PP #36

Handout - Type II Force Problems (Simple)

Type II Force Problems (More Complex) x 2

Text: C5 - Page 191, PP 24, 25

Page 194, PP 27, 28

Handout - Type I, II and III

## Boat Problems

Page 110 - #21, 22, 25, 27(a)

Page 117 - #23, 24, 29

**#25 (Level 1)**

Activity: Go With the Flow

Handouts (3) - Relative Velocity Problems

## Collisions

Handout - 1D

Experiment 9.1- Conservation of Momentum

Handout: 2D Collisions

Handout: Elastic and Inelastic Collisions

## Torque Problems

Handout - Torque

Textbook - Page 501 #31

Page 529 #27

Textbook - Page 501 #33 (a)

Page 529 #28 (a)

Handout - More Torque Problems

# Unit 2

## Circular Motion

Handout: Problems - Circular Motion

LEVEL 1 -> Packet (Banked and Unbanked Curves, Vertical Circular Motion)

## Universal Gravitation

Experiment 8.1 - Kepler's Laws - Page 49

Chapter 12 - Page 580, PP#1-7

Investigation 12-A, Page 581

Handouts (3) - Kepler's Laws, Value of "g", Speed and Period of a Satellite

## Simple Harmonic Motion

Text: Page 608, #1-4  
Page 623, #23-27, 30

Text: Page 614, #5-8  
Page 623, #28, 29

SHM - Pendulum Lab

Handout: SHM Problems

## Projectiles

Text: Page 536, PP #1-8

Text: Page 549, PP #13  
Page 570, Prob. #17, 19, 20 (omit graph)

# Unit 3

## Coulomb's Law

Textbook: Page 638, #4-5

Handout: Charge and Coulomb's Law

## Electric Field Strength

Textbook: Page 646, #11-14

Textbook: Page 655, #20-24

## Electric Potential Difference (Voltage)/Electric Current

Textbook: Page 696, #4-10

## Ohm's Law

Textbook: Page 714, #21-24

## Series Circuit

Textbook: Page 719, #27-31

## Parallel Circuit

Textbook: Page 724, #32-35

## Combination/Complex Circuits

Textbook: Page 728, #36-37

Textbook: Page 749, #33-34