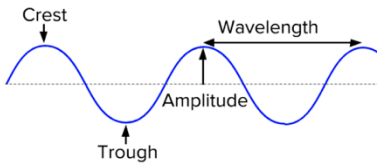
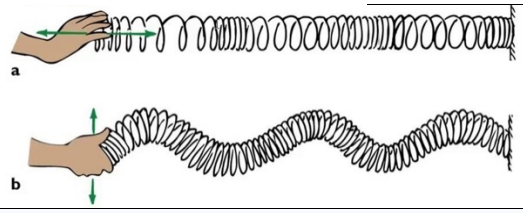
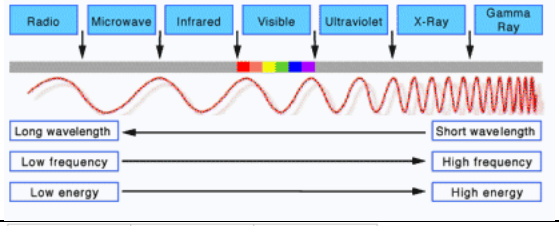
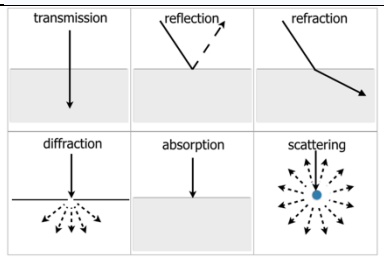
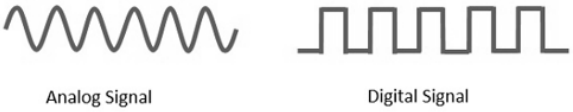
Physical Systems Study Guide

This guide will help you know what pages to study from your binder for the 8.2 Physical Systems final.

Concept	Details	Binder Pages
Kinetic Energy	Energy of Motion. More mass=more Kinetic Energy. $KE=.5mv^2$	74
Potential Energy	Stored Energy. Elastic, Chemical, Gravitational. GPE=mgh	78
Simple Machines		81
Law of Conservation of Energy	Energy cannot be created nor destroyed	83
Friction	Force that opposes motion	83
Energy Transfer	Highest Potential/Highest Kinetic	83
Waves- Amplitude Frequency Wavelength	 High Frequency=High Energy High Amplitude=High Energy Short Wavelength=High Energy	86
Type of Wave	 Longitudinal Transverse	86,87 Back of 72
Electromagnetic Spectrum		90
Behavior of Waves	 Reflection- bounces off smooth surface in one direction Refraction- bends when changes medium Diffraction- bends and spreads when passes through a slit Absorption- taken in and turned to heat Scattering- bounces off in all directions	93,94
Analog/Digital	 Analog- Whole Wave, continuous, infinite Digital- Pieces of wave, discrete, finite	96,97