**Integrated Sciences**

**Chapter 2**

**Energy transformations take place all the time. It is transformed into different types of energy all of the time.**

**In the following activities, you need to track any energy transformations that take place. You need to consider such transformations as kinetic, potential, light, thermal ect…**

**Labs p18-19**

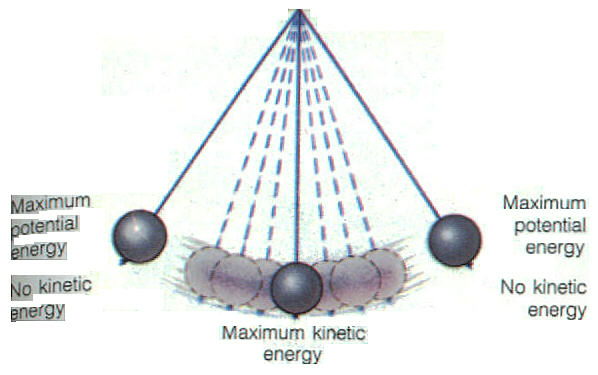
**Sliding book**

**Lab p21 top of page blowing up balloon**

**Pendulum**

**Consider driving your car and lighting a match-both contain stored chemical potential energy. The energy lies in the individual atoms that will react and release heat energy and sometimes sound energy. A car releases mechanical energy(kinetic energy**

**Pendulum**



**Why does the pendulum stop moving?**

**Giving an object energy**

**Work**

**Work-energy theorem**

**How does lifting a rock off the table work?**

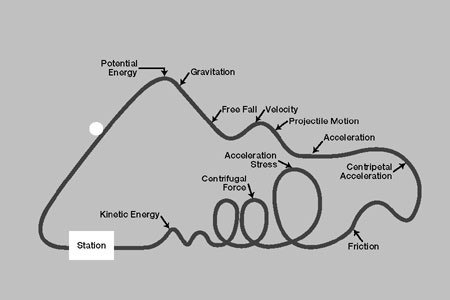
**System-**

**Conservation of energy-**

**Labs p35-35**

**What happens to the ball as it rolls down the twisted track?**

**Kinetic energy can be divided into translational kinetic energy and rotational kinetic energy. This concept is why you can have varied masses of people on a roller coaster. Conservation of energy is conserved.**



**Velocity lab**