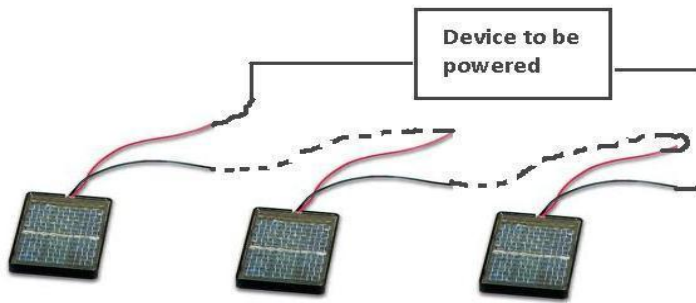


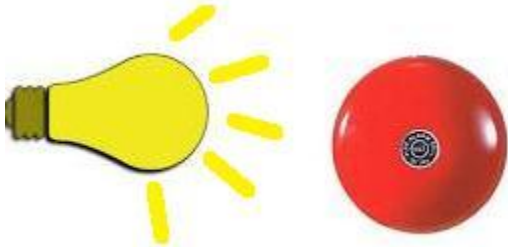
BATCH NO - 1

1) SOLAR CELL BATTERY RECHARGER



This project will teach how you can recharge batteries using solar cells. A solar cell is a device that takes energy from light and converts it into electricity. Solar cells, then, serve to harvest energy from light and convert it into electricity; the current they output then recharges the batteries.

2) LIGHT SENSITIVE ALARM



A light sensitive alarm is a device that can be used as a security device to safeguard personal items.

Here, we construct an alarm that goes on based on the intensity of light that reflects on it and how a light-dependent resistor (or photoresistor) works.

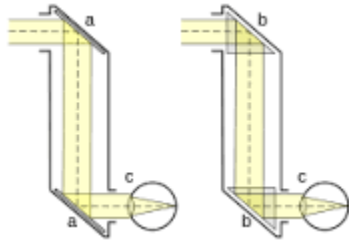
3) NEWTON'S COLOUR DISC



It is an experimental set up to study the composition of light. It has a disc with rainbow-colored segments. When the disc is rotated, the colors fade to white. This is due to the phenomenon called PERSISTENCE OF VISION.

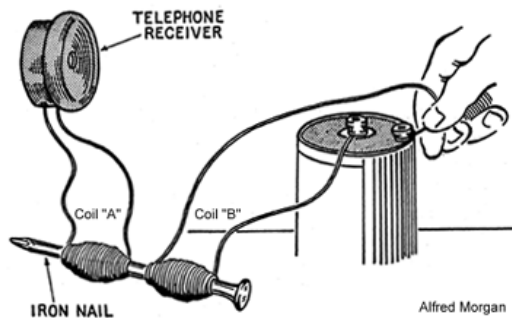
4) STUDY OF REFLECTION OF LIGHTS

Here we will make a periscope as well as a kaleidoscope which works on the principle of REFLECTION OF LIGHTS



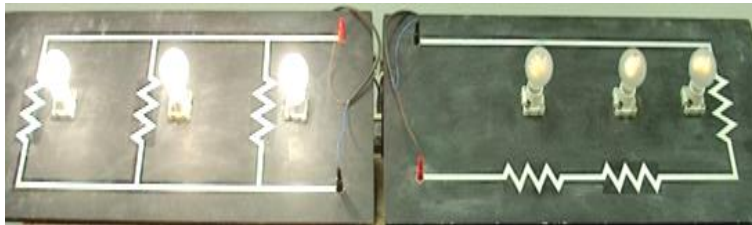
5) STUDY OF ELECTROMAGNETS

An iron nail is converted to an electromagnet using the principle of electromagnetic induction

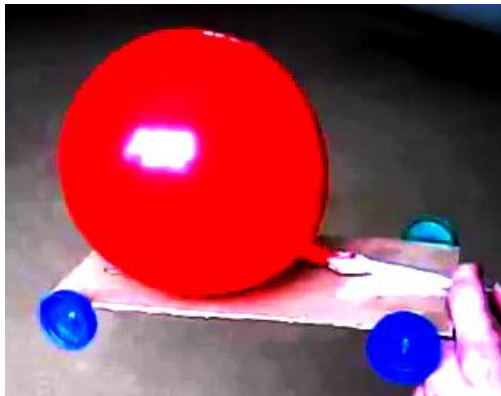


6) SERIES AND PARALLEL CONNECTIONS

Here we will have a hands-on study of basic electrical & electronics circuit



7) AIR POWERED CAR



We will build a car powered by pneumatics

8) BRISTLE BOT

A bristle is used to make an active BOT



9) MOSFET LIGHT DIMMER



Here we will design a lamp using MOSFET whose intensity can be varied.

10) FLASHING LED CIRCUIT



Here we will make LED flashers which have wide application to real-world life, including alarms that go off and on a repeated amount of times, sirens such as from a police car flashing on and off, and many other various units.

11) DC MOTOR SPEED CONTROLLER



Here we will make a variable-speed control circuit to run a DC motor and adjust its speed.

12) Automatic Night Light



Here we will make a lamp that turns ON automatically when it is dark

13) HYDRAULIC BRIDGE

We will construct a hydraulic powered bridge



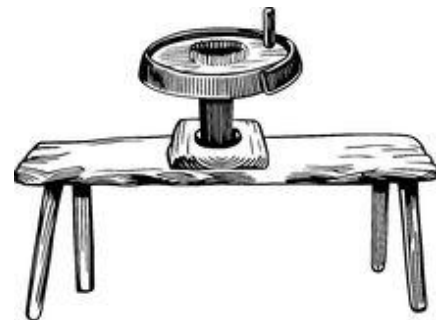
14) CATAPULT

Here a catapult is made which works on the principle of energy conversion

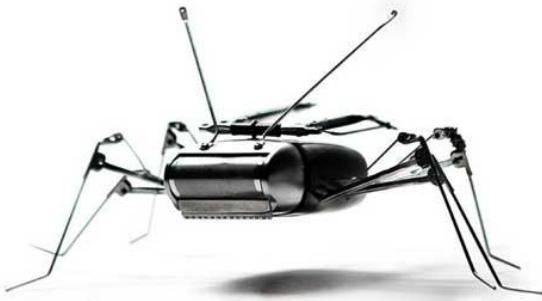


15) SOLAR POWERED FLOUR MILL

Constructing a traditional solar powered flour mill



16) ELECTRONIC INSECT



Moving insect is designed using vibration motors

17) QUILLING

Basic quilling techniques are being thought



18) CONTRAPTION

A brief study of various physical principles by making a contraption using junk

