

## **“SKILL EDUCATION”**

*Some of the important activities based on Electrical and Electronics Engineering were conducted in the classes from class 6th to 10th by Mr. Vikas Kumar Tejan, a Trained Graduate Teacher (work experience) of the school under "Skill Education" in Kendriya Vidyalaya Baddowal Cantonment, some of the important activities are as follows. :-*

**ACTIVITY(1)- Making switch board with the help of single switch and socket :-**

**Required equipment :-**

- (1) Wooden board,*
- (2) switch*
- (3) socket*
- (4) Copper wire*
- (5) Screw driver, etc.*

**Method:-** *In this, we first prepare a blueprint from a wooden board, then with the help of the drawing, connect the phase and neutral wires of the switch and socket, use red wire for phase and black wire for neutral. | A plug is fitted on the outer end of the cable.*





**Activity (2):- Using Line Tester –**

**Method:-** Line tester is used to check electricity in a circuit. For this, the pointed side of the tester is connected to the phase side of the socket and at the same time the upper side of the tester is pressed with the thumb, due to which the circuit is completed. The bulb inside the tester lights up when there is electricity, otherwise it does not.





**Activity (3):- Understanding the meaning and use of the technical word “Alternator”.**

**Method:- It is a huge electrical equipment, which is used to generate electricity in various electric power plants. It is a device in itself that produces electricity alone, provided it gets the rotational speed to the shaft.**



**Activity (4):- Connecting electronic components on an electronic bread board.**

**Required equipment :-**

(1) Bread board

- (2) Connecting lead
- (3) LED
- (4) Register
- (5) Capacitor
- (6) DC battery, etc.

Method:- First of all fix the bread board on the table. After that connect the positive negative terminals of the DC battery to the positive negative terminal of the board. The pins of the components are threaded into the holes of the board.



**Activity (5):- Connecting LEDs in series and parallel on electronic bread board.**

**Required equipment :-**

- (1) Bread board
- (2) LED as required
- (3) DC battery, etc.

Method: - First of all connect the positive and negative terminals of the DC battery to the terminals of the board, then connect the positive of the first LED to the negative of the last LED and connect the negative of the first LED to the positive of the second LED, and third and fourth respectively. LEDs are also connected in the same manner. Connections are made keeping in mind the horizontal and vertical hole lines of the board.



**Activity (6):- Running motor fan with the help of DC battery.**

**Required equipment :-**

- (1) DC battery
- (2) Fan
- (3) DC motor
- (4) Connecting leads, etc.

**Method:-** First of all, fit the fan on the soft side of the motor and then connect the positive negative terminals of the DC battery to the positive negative terminal of the DC motor. As soon as the battery switch is opened, current flows and the motor fan starts working.



**Activity (7):- Making motor bike models and other craft items from waste paper.**

Method:- Prepare solid rolls of waste paper, prepare bike wheels and other body parts, stick the solid rolls with the help of Fevicol. And leave it to dry, the bike is ready.

For craft items like making squares, making solid balls, making aeroplanes etc. all types of items can be made with the help of Fevicol and ice sticks.

