SOLAR STATION

DESCRIPTION

This project is a small scale solar garage made of cardboard. It works whith a solar panel that produces energy to turn on a small light bulb. It represents how solar energy can be used to generate light in a clean and eco friendly way.

STEP BY STEP

1. Draw a sketch of the garage and measure the pieces.

2. Cut and glue the cardbord walls, base, and roof.

3. Place the solar panel on the roof and fix it.

4. Connect the panel wires to the switch and the light holder.

5. secure the connections with tape and attach the light inside.

6. Test the system by putting the panel under sunlight and turning on the switch.

MATERIALS USED

Wires: Connect all the parts of the circuit. They carry electricity from the solar to the battery and then to the bulb.

Capacitor: Stores energy for a short time. It keeps the current steady nd prevents sudden changes, helping the circuit work better.

Bulb holder: The bulb holder keeps the bulb in place and connects it safely to the circuit. It makes sure the bulb gets electricity correctly.

Light bulb: The light bulb changes electrical energy into light. In the Project, it shows the result of the solar system by lighting up the garage.

Battery: The battery stores the energy made by the solar panel. It gives electricity to the system even when the sun is not shining.

Diode: Lets electricity flow in only one direction. In this project, it protects the battery by stopping current from going back into the solar panel at night.

Solar panel: The solar panel converts sunlight into electrical energy. I t is the main source of renewable energy in the project and charges the battery to later power the light bulb.

Switch: The switch controls the flow electricity in the circuit. It allows us to turn the light bulbo n and off without disconnecting the wholes system.

PROJECT DEFENSE

This project is important because it promotes a culture of clean energy and environmental awareness. It shows how solar power can be part of the future of technology and sustainability, hepling us créate a greener word.

PROJECT MEMBERS

KAREN TATIANA GOMEZ PORRA: PROJECT LEADER

Organized the group, coodinated the work, and made sure the project met its goals.

KELLY JOHANNA ANGARITA ORTEGA: DESIGNER

Created the sketch and planned the structure and measurements of the solar garage.

OSCAR STIVEN CARVAJAL GONZALES: BUILDER

Assembled the cardboard pieces and built the structure of the model.

MARIA DANIELA VANEGAS CARDENAS: ELECTRICAL TECHNICIAN

Installed the solar panel, connected the wires, switch, and bulb to make it work.

JENY CAROLINA TORRES CARVAJAL: PRESENTER

Explained the project, its purpose, and its importance for a sustainable future.







