Review last weeks lesson and challenge

-Sample Questions-

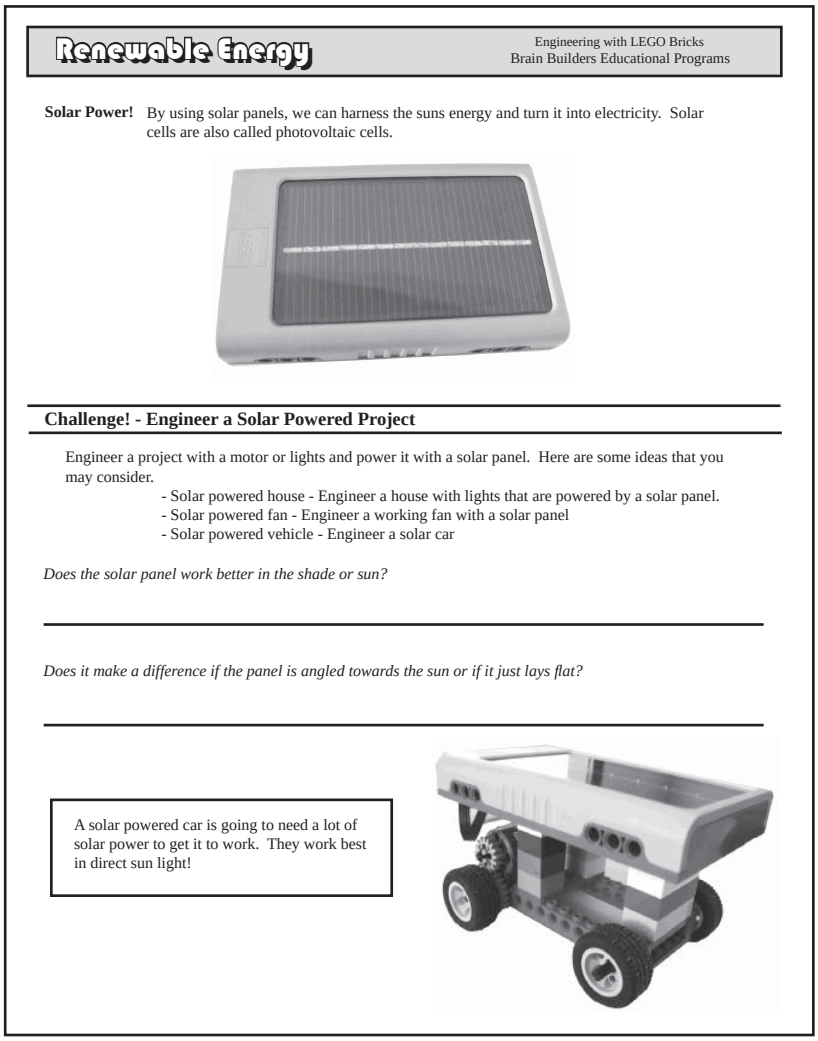
- Who was able to build a windmill?
- What happened with more windmill blades?
- What are types of renewable energy?

Pass out this weeks worksheet

-Go over and have students read through the worksheet in class.

Questions

- What is another name for sun energy? (solar energy)
- Has anyone ever seen a solar panel?



Renewable Energy

Engineering with LEGO Bricks
Brain Builders Educational Programs

Solar Power! By using solar panels, we can harness the suns energy and turn it into electricity. Solar cells are also called photovoltaic cells.

Challenge! - Engineer a Solar Powered Project

Engineer a project with a motor or lights and power it with a solar panel. Here are some ideas that you may consider.

- Solar powered house - Engineer a house with lights that are powered by a solar panel.
- Solar powered fan - Engineer a working fan with a solar panel
- Solar powered vehicle - Engineer a solar car

Does the solar panel work better in the shade or sun?

Does it make a difference if the panel is angled towards the sun or if it just lays flat?

A solar powered car is going to need a lot of solar power to get it to work. They work best in direct sun light!

Challenge 1 - Team Build, team of 2

- Engineer a solar powered house.
    - Build a house with a solar panel on the roof that powers the lights inside.

Challenge 2 - Team Build, team of 2

- Engineer a solar powered vehicle.

If the weather is nice, you may take the students outside to test their solar cars. But please make sure students are in your view! The motors will most likely only work in direct sunlight or very close to the lamp.

TEST AREA

- Place light high enough so students can test their projects.
- The light will simulate the sun.

-Do NOT let students touch the light.