



Solar Energy Badge

Description:

This badge is earned by youth who conduct experiments, research new ideas and explore innovative opportunities in the exciting fields of renewable energy. Youth who participate in a solar energy program learn about the field, how it works and different applications in it.

Criteria: (Recipient has done these specific things that demonstrate or as proof of the description)

This badge is awarded to youth that actively participated in a Solar Energy program. Youth receiving this badge learned and practiced the following:

- Youth met with industry representatives from power companies using solar energy. From these representatives, youth learned about how solar energy works, real-world applications for solar energy, and the future potential and growth of the field.
- Youth met with university students that use solar energy to race cars. From the students, the youth practiced taking measurements from a solar panel, modifying designs that use solar panels, and learned about racing full sized solar powered cars.
- Youth worked in teams to design, test, modify, and race small solar powered cars against other youth teams. Through this design and test challenge, youth practiced the scientific method while building teamwork, critical thinking, and decision making skills.

P2.1A Calculate the average speed of an object using the change of position and elapsed time.

P3.1A Identify the force(s) acting between objects in “direct contact” or at a distance.

P3.4A Predict the change in motion of an object acted on by several forces.

P3.4B Identify forces acting on objects moving with constant velocity (e.g., cars on a highway).

P4.9B Explain how various materials reflect, absorb, or transmit light in different ways.