West Side Science Club – Event #33 – "Building Robots II"

Original Presentation

Date: 14 June 2014
Time: 10 am to 12 pm
Site: West Side Science Club

Big Questions

- These questions are meant to frame the day's event and might be written on the chalkboard

  (1) What parts do you need to complete your robot?

Concepts

- Concepts to cover from the "Work of CCI Solar" Mind Map: Engineering- Devices: design, cost-effectiveness; Electricity- current, voltage, series/parallel; Energy- batteries, fuels, solar

Lesson Plan

Student Objectives

- See the possibilities of recycling items to make new things
- Learn about mechanics and functionality of their robot
- Engineer designs and overcome obstacles to make a working robot
- Complete a robot design

Schedule/Agenda

- Work on Robots (1 hr 50 min)
- Clean-up (10 min)

Materials

- Leftover supplies from a previous year's robot building activity
- Various motors, switches and electronics from Radio Shack
- Various art and building supplies from Michael's
- Supplies collected last week from the ReDiscover Center

Safety

- Be careful of burns using the glue gun
- Have a mentor assist with the soldering iron

Activity: Building Robots

Procedure

1. Finish building the robot as best you can in the remain 2 hours

Facilitation Questions and Concepts

- What might be another solution to any challenges you have?
- How might you best complete your robot given the time and parts you have?

Check for Understanding

- Do you have a better understanding robotics and the basic mechanisms behind it?
- Did your robot end up doing everything you wanted it to? Was it in the way you originally imagined?