## **Robotics Website and Resources 2008**

#### www.makezine.com

Also can be a magazine subscription, but website has many of the things you need. Cool projects that you can do in your classroom, also has podcasts and RSS feeds.

#### www.instructables.com

Huge amounts of fun things you can make both at home and your classroom. Has ratings, parts list and directions within the site. Claimed as the World's biggest show and tell.

### www.all-science-fair-projects.com

Step by step directions - Science fair projects for all levels. Hundreds of ideas for every science topic from Astronomy to Zoology.

#### www.engineeringk12.org

Website has effective engineering education resources available for K-12. Sponsored by the American Society for Engineering Education.

http://classroomrobotics.blogspot.com

News and videos about recent robotic developments around the world. This blog offers content for teachers and learners about the significance and context of robotics in our world. Is robotics the Perfect Platform for 21st Century Learning?

#### www.robothalloffame.org

The Robot Hall of Fame recognizes excellence in robotics technology worldwide and honors the fictional and real robots that have inspired and made breakthrough accomplishments in robotics. The Robot Hall of Fame was created by Carnegie Mellon University in April 2003 to call attention to the increasing contributions from robots to human society.

www.physicsbox.com/indexrobotprogen.htm

RobotProg Program a virtual robot with a flowchart; Drag and Drop

http://robocode.sourceforge.net/

RoboCode is a game designed to help you learn Java. The goal is to code a robot to compete against other robots in a battle area.

## http://www.solarbotics.com

Offers competition robot kits, solar-powered robots, electronic components, motors, and information on the field of BEAM Robotics.

# All of the following links from: <u>http://members.cox.net/eostler</u> (choose Miscellaneous Resources and then web links.

http://phet.colorado.edu/simulations/

Physics Education Technology – DC electronics using simulations. Fun, interactive, research-based simulations of physical phenomena from the PET project at University of Colorado.

http://www.sodaplay.com

Design and Build, Play and Experiment

http://nlvm.usu.edu/en/nav/vlibrary.html

National Library of Virtual Manipulatives - The National Library of Virtual Manipulatives (NLVM) is an NSF supported project that began in 1999 to develop a library of uniquely interactive, web-based virtual manipulatives or concept tutorials, mostly in the form of Java applets, for mathematics instruction (K-12 emphasis).

http://www.channel4.com/science/microsites/R/robots/constructor.html

Robot Design Game - Your mission is to construct robots that can successfully collect the precious golden cubes scattered about a variety of hostile zones.

http://www.cs.cmu.edu/~iba/misc/p3/index.html

Walking Robots - full of videos from HONDA demonstration.

http://www.paperrobots1999.com

Art paper folding robots

## From the Class:

http://www.teachengineering.com

Lots of K-12 lesson plans, The TeachEngineering digital library provides teachertested, standards-based engineering content for K-12 teachers engineering content for K12 teachers to use in science and math classrooms.

http://www.mos.org/sln/Leonardo/InventorsWorkshop.html

Museum of Science - Leonardo's Mysterious Machinery

http://staff.aist.go.jp/e.yoshida/test/index-e.htm http://unit.aist.go.jp/is/dsysd/mtran3/FlashMovie/mtran3/movie.htm

Website with modular robots to build - a novel self-reconfigurable modular robot called Modular Transformer (M-TRAN) \*. It has successfully realized multi-mode robotic motion by changing its shape smoothly from a crawler to a four-legged walking robot, which is a world-leading research result.