



## 2011-2012 Equipment List

This year the IT-Adventures program will not be able to provide computers to participating schools. All IT-Clubs are responsible for acquiring computers to run the software and learning materials we provide.

For Game Design and Robotics, this may mean you just have to ask the IT tech support person for your school to install the software in your school's lab(s) that run in a Windows environment.

For Cyber Defense, however, you need a dedicated set of machines that can be formatted and have different types of operating systems installed. These computers DO NOT need to be new! Used computers from a local company or the school will work.

The following is a list by venue of the educational materials, software, books and equipment we will provide, as well as the equipment that will need to be found from a willing donor or in your own school.

### Windows XP Licensure

Each school that participates in IT-Adventures may request one Windows XP licenses per venue it participates in. This request will also include one installation CD per school. Depending upon the number of venues, this means a school will be able to install Windows XP on 1, 2 or 3 computers that they acquire. There will be a sign-up page on the web site that will allow you to make this request.



# Cyber Defense

## Equipment/Software we provide

- CDs with open source operating systems such as FreeBSD, Ubuntu Server, Ubuntu Desktop, Fedora
- DVD lessons on
  - FreeBSD installation (you can use other operating systems)
  - Basic unix commands
  - Basic network concepts
  - Ports and protocols
  - Sendmail and DNS
  - Remote programming environment
  - POP/IMAP mail
  - Apache web server and PHP
  - Securing machines

## Equipment you have to acquire (all of this can be used)

- Computers (hardware dependent upon open source operating system selected to install)
  - Network card
- Hub (if you have problems acquiring send an email to [info@it-adventures.org](mailto:info@it-adventures.org) and we will try to help you with this.)
- Patch cables (if you have problems acquiring send an email to [info@it-adventures.org](mailto:info@it-adventures.org) and we will try to help you with this.)

# Game Design

## Equipment/Software we provide

- One "[Learning to Program with Alice](#)" book
- Alice software on a cd in back of book or download it at [www.alice.org](http://www.alice.org)
- Teacher materials on a cd for advisor

## Equipment you have to acquire

- Computers that run Windows XP (Remember to ask your IT Tech Support Person Alice can be installed in a lab at your school)
  - Intel Pentium II or equivalent processor
  - A VGA graphics card capable of high (16 bit) color and 1024x768 resolution
  - 512MB of RAM (1GB recommended)
  - A sound card and speakers

# Robotics

## Equipment/Software we provide

- [Lego Mindstorms NXT base education kit](#) (part # 979797),
- [Lego Mindstorms NXT education resource kit](#) (part # 979648)
- [Lego Mindstorms NXT v 2.0 software and User Guide](#)
- One copy of the book "[Building Robots with Lego Mindstorms NXT](#)"
- One each of the cds containing both the student and teacher versions of "[Robotics Engineering Vol. 1](#)" and "[Robotics Engineering Vol. 2](#)."

## Equipment you have to acquire

- Computers that run Windows XP (Remember to ask your IT Tech Support Person if Robotics software can be installed in a lab at your school)
  - Pentium processor, 1 GHz minimum (1.5 GHz or better recommended)
  - 256 MB RAM minimum (512 MB recommended)
  - Up to 300 MB of available hard-disk space
  - XGA display (1024 x 768)
  - One available USB port
  - Optional Bluetooth adapter if you wish to send your programs to the robot wirelessly (not required)