

LEGO® Mindstorms™ NXT Robotics - for use with the *FIRST* LEGO League Challenges

To purchase the NXT Robot, you have two primary options: 1) buy the Educational NXT Kit, or 2) the Consumer NXT Kit (there *are* differences).

The LEGO® MINDSTORMS® Education NXT Base Set (Part # 9797) is the preferred kit for *FIRST* Challenges (<http://www.legoeducation.com/store/detail.aspx?CategoryID=178&by=9&ID=1263&c=1&t=0&l=0>). It is the one available for purchase if you register a FLL team. It is also LEGO EDUCATION Part # W979797 and retails for \$260. There are usually no discounts available for this kit. This set includes 431 elements.

The LEGO® MINDSTORMS NXT (Part # 8527) is the consumer kit that retails for \$249 (<http://shop.lego.com/Product/?p=8527>). This kit contains the NXT Brick, and 519 specially selected LEGO TECHNIC elements. I recommend searching the net for coupons ("Discovery store coupon") to get up to 20% off the retail price if you order from an online retailer.

You may also find the need for more Technic parts. Two great sets for extra parts are:

- **Technology Resource Set** (LEGO EDUCATION Part # W979649, \$59.00
<http://www.legoeducation.com/store/detail.aspx?CategoryID=159&by=9&ID=340&c=1&t=0&l=0>)
- **Education Resource Set** LEGO EDUCATION Part # W979648, \$69.00 .
<http://www.legoeducation.com/store/detail.aspx?CategoryID=159&by=9&ID=1277&c=1&t=0&l=0>

Other resources for extra parts include E-bay auctions, and sites that sell "bulk LEGO's" and "LEGO spare parts".

In order to get the Challenge Mat, and LEGO Mission Models like they use at *FIRST* LEGO League competitions, you have to register as a competitive *FIRST* LEGO League Team with *FIRST*. This will cost you \$200 to register with *FIRST*, and then you must order and pay \$75 for the "Field Set Up Kit".

The following product should be considered for children that may be too young for the LEGO NXT:

LEGO® Education WeDo™ Robotics - (**NOT for use with the *FIRST* LEGO League Challenges**)

New product for students 7-11 years of age redefines classroom robotics, by enabling primary school students to build and program their own solutions. LEGO Education WeDo encourages teachers to issue curriculum-based challenges for students to solve. **The new product is will be available in the United States and Brazil beginning January 1, 2009.**

The complete LEGO WeDo package includes:

- 158 brightly colored LEGO elements, including gears and levers
- One LEGO USB Hub that connects directly to a Mac/PC laptop, desktop, computer to allow control of hardware input (tilt and motion sensors) and output (motor), thereby bringing models to life
- One motor, one motion sensor, and one tilt sensor
- Drag-and-drop icon-based software that provides an intuitive and easy-to-use programming environment suitable for beginners and experienced users.
- Activity pack CD-ROM that provides up to 24 hours of instruction and includes 12 activities.